| CONTENTS |
|-----------------|-----------------|
|             | Page |
| University Calendar       | 7     |
| Board of Trustees          | 8     |
| Committees of the Board   | 9     |
| Alumni Association Officers, Directory of Clubs | 10 |
| Alumnae Association, Officers | 12  |
| Administrative Officers and Faculty | 13 |
| Faculty Committees        | 20    |
| Origin and Development    | 21    |
| Historical Sketch         | 21    |
| Location                  | 22    |
| Organization Features     | 22    |
| Summer School             | 22    |
| Aims and Objectives       | 23    |
| Affiliations              | 24    |
| Campus Buildings and Equipment | 25 |
| Residences for Women      | 26    |

**GENERAL INFORMATION**

| Assemblies       | 27    |
| Class Periods    | 28    |
| Moral and Religious Culture | 28 |
| Women's Organizations | 28 |
| Round Table for Freshmen Women | 29 |
| Lectures and Concerts | 29 |
| Musical Organizations | 30 |
| Debating and Dramatics | 31 |
| Technical Organizations and Literary Clubs | 31 |
| Honorary Societies | 31 |
| Fraternities     | 32    |
| Student Publications | 32 |
| Athletics        | 33    |
| Health Service   | 33    |
| Endowed Scholarships | 33 |
| Loan Fund        | 34    |
| Alumnae Loan Fund | 34 |
| Self-Help        | 35    |
| General and Departmental Honors for Scholarship | 35 |
| Government       | 35    |
| Warning and Probation | 36 |
| Grade Marks and Quality Points | 36 |
| Eligibility      | 37    |

**EXPENSES**

| Tuition          | 37    |
| General Fee      | 37    |
| Summary of Tuition and Other Fees | 37 |
| Rooms and Board  | 39    |

**ADMINISTRATION**

| Admission       | 40    |
| Advisers        | 41    |
| Pre-Registration and Registration | 41 |
| Attendance      | 41    |
| Withdrawing a Course | 42 |
| Examinations    | 42    |
| Extension Courses | 43 |
| Departments of Instruction | 43 |
| Degrees         | 43    |
| Senior Honors   | 44    |

**COLLEGE OF LIBERAL ARTS**

| Admission      | 46    |
| Entrance Requirements | 46 |
| Divisions and Departments | 46 |
| Division Electives | 47 |
| Major and Minor   | 48    |
| Electives in Other Colleges of the University | 48 |
| Graduation       | 49    |
| General Regulations | 49 |
| Courses Open to Freshmen | 50 |
| Suggested Curricula for Several Academic and Pre-Professional Courses | 50 |
| Arts-Medicine    | 50    |
| Arts-Nursing     | 51    |
| Chemistry Majors | 52    |
| Economics and Business Administration | 53 |
| Business Administration and Law | 54 |
| Physics Majors   | 55    |
| Pre-Dental       | 56    |
| Arts-Dental      | 56    |
| Pre-Journalism   | 57    |
| Pre-Law          | 57    |
| Arts-Law         | 58    |
| Pre-Theological  | 58    |
| Secretarial      | 59    |
| Other Pre-Professional Curricula | 61 |

**DIVISIONS AND DEPARTMENTS OF INSTRUCTION**

**LANGUAGE, LITERATURE AND ARTS**

<p>| English Language, Literature and Speech | 62 |
| Composition                            | 63 |
| English Literature                     | 63 |
| Speech                                 | 65 |
| Foreign Languages and Literature       | 67 |
| French                                 | 67 |
| German                                 | 69 |
| Latin                                  | 69 |
| Music                                  | 70 |
| Theoretical Music                      | 73 |
| Applied Music                          | 75 |</p>
<table>
<thead>
<tr>
<th>Division II</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NATURAL SCIENCES</strong></td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>79</td>
</tr>
<tr>
<td>Chemistry</td>
<td>80</td>
</tr>
<tr>
<td>Mathematics</td>
<td>82</td>
</tr>
<tr>
<td>Physics</td>
<td>85</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Division III</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SOCIAL SCIENCES</strong></td>
<td></td>
</tr>
<tr>
<td>Economics and Business Administration</td>
<td>87</td>
</tr>
<tr>
<td>Economics</td>
<td>87</td>
</tr>
<tr>
<td>Business Administration</td>
<td>88</td>
</tr>
<tr>
<td>Secretarial Courses</td>
<td>90</td>
</tr>
<tr>
<td>Health and Physical Education</td>
<td>91</td>
</tr>
<tr>
<td>History and Political Science</td>
<td>96</td>
</tr>
<tr>
<td>History</td>
<td>96</td>
</tr>
<tr>
<td>Political Science</td>
<td>98</td>
</tr>
<tr>
<td>Psychology and Sociology</td>
<td>99</td>
</tr>
<tr>
<td>Psychology</td>
<td>99</td>
</tr>
<tr>
<td>Sociology</td>
<td>100</td>
</tr>
<tr>
<td>Religion and Philosophy</td>
<td>100</td>
</tr>
<tr>
<td>Biblical Literature</td>
<td>101</td>
</tr>
<tr>
<td>Philosophy</td>
<td>101</td>
</tr>
<tr>
<td>Religion</td>
<td>102</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Division IV</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TEACHER TRAINING</strong></td>
<td></td>
</tr>
<tr>
<td>Elementary Education</td>
<td>103</td>
</tr>
<tr>
<td>Three-Year Curriculum</td>
<td>104</td>
</tr>
<tr>
<td>Four-Year Curriculum</td>
<td>105</td>
</tr>
<tr>
<td>Secondary Education</td>
<td>106</td>
</tr>
<tr>
<td>General and Academic Requirements</td>
<td>106</td>
</tr>
<tr>
<td>Professional Requirements</td>
<td>107</td>
</tr>
<tr>
<td>Major and Minor Subjects</td>
<td>108</td>
</tr>
<tr>
<td>Major and Minor Requirements in Various Fields</td>
<td>108</td>
</tr>
<tr>
<td>Major and Minor Sequences</td>
<td>111</td>
</tr>
<tr>
<td>Commercial Education</td>
<td>114</td>
</tr>
<tr>
<td>Health and Physical Education</td>
<td>116</td>
</tr>
<tr>
<td>Industrial Arts Education</td>
<td>117</td>
</tr>
<tr>
<td>Public School Music</td>
<td>120</td>
</tr>
<tr>
<td>Description of Professional Courses</td>
<td>123</td>
</tr>
<tr>
<td>Educational Psychology</td>
<td>123</td>
</tr>
<tr>
<td>Principles and History of Education</td>
<td>123</td>
</tr>
<tr>
<td>School Administration and Organization</td>
<td>124</td>
</tr>
<tr>
<td>Professionalized Subject Matter Courses</td>
<td>124</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>College of Engineering</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>History and Purpose</td>
<td>130</td>
</tr>
<tr>
<td>Admission</td>
<td>130</td>
</tr>
<tr>
<td>Graduation and Degrees</td>
<td>131</td>
</tr>
<tr>
<td>Pre-Chemical Engineering</td>
<td>131</td>
</tr>
<tr>
<td>Pre-Aeronautical Engineering</td>
<td>132</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>133</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>134</td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>135</td>
</tr>
<tr>
<td>Technical Organizations</td>
<td>137</td>
</tr>
<tr>
<td>Description of Courses</td>
<td>138</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>138</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>140</td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>142</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>College of Pharmacy</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>History and Purpose</td>
<td>146</td>
</tr>
<tr>
<td>Laboratories and Equipment</td>
<td>146</td>
</tr>
<tr>
<td>Admission</td>
<td>147</td>
</tr>
<tr>
<td>Requirements for Graduation</td>
<td>148</td>
</tr>
<tr>
<td>The Four-Year Curriculum</td>
<td>148</td>
</tr>
<tr>
<td>Pre-Professional Course</td>
<td>151</td>
</tr>
<tr>
<td>Description of Courses</td>
<td>152</td>
</tr>
<tr>
<td>Biology</td>
<td>152</td>
</tr>
<tr>
<td>Chemistry</td>
<td>152</td>
</tr>
<tr>
<td>Pharmaceutical Chemistry</td>
<td>154</td>
</tr>
<tr>
<td>Economics and Business Administration</td>
<td>154</td>
</tr>
<tr>
<td>English</td>
<td>156</td>
</tr>
<tr>
<td>Health and Physical Education</td>
<td>156</td>
</tr>
<tr>
<td>Mathematics</td>
<td>158</td>
</tr>
<tr>
<td>Modern Foreign Language</td>
<td>159</td>
</tr>
<tr>
<td>Materia Medica</td>
<td>159</td>
</tr>
<tr>
<td>Pharmacognosy</td>
<td>159</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>161</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>160</td>
</tr>
<tr>
<td>Physics</td>
<td>164</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>College of Law</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>History and Purpose</td>
<td>166</td>
</tr>
<tr>
<td>Schools Represented</td>
<td>167</td>
</tr>
<tr>
<td>Library</td>
<td>167</td>
</tr>
<tr>
<td>Methods of Instruction</td>
<td>168</td>
</tr>
<tr>
<td>Admission</td>
<td>168</td>
</tr>
<tr>
<td>Pre-Law and Arts-Law</td>
<td>169</td>
</tr>
<tr>
<td>Requirements for Graduation</td>
<td>169</td>
</tr>
<tr>
<td>General Regulations</td>
<td>170</td>
</tr>
<tr>
<td>Summer School</td>
<td>170</td>
</tr>
<tr>
<td>Curriculum</td>
<td>171</td>
</tr>
<tr>
<td>Courses of Instruction</td>
<td>172</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Honors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prizes Awarded, 1939</td>
<td>177</td>
</tr>
</tbody>
</table>
GRADUATES OF 1939

Honorary Degrees ........................................ 178
College of Liberal Arts ................................ 178
College of Engineering .................................. 179
College of Law ........................................... 179
College of Pharmacy ..................................... 179
Summary of Class of 1939 ................................. 179

REGISTER OF STUDENTS

1938-1939

FRESHMEN

College of Liberal Arts .................................. 180
College of Engineering .................................. 181
College of Pharmacy .................................... 182

SOPHOMORES

College of Liberal Arts .................................. 182
College of Engineering .................................. 183
College of Pharmacy .................................... 184
College of Law (First Year) .............................. 184

JUNIORS

College of Liberal Arts .................................. 184
College of Engineering .................................. 185

SENIORS

College of Liberal Arts .................................. 186
College of Engineering .................................. 187
College of Pharmacy .................................... 187
College of Law ........................................... 187

SPECIAL STUDENTS

College of Liberal Arts .................................. 188
College of Engineering .................................. 188
College of Law ........................................... 188
College of Pharmacy .................................... 188
Summary 1938-39, September to June .................. 188

EXTENSION STUDENTS

College of Liberal Arts .................................. 188
Summary of Extension Students ......................... 189
Geographical Distribution ............................... 189

SUMMER STUDENTS, 1939

College of Liberal Arts .................................. 190
College of Law ........................................... 193
Summary of Summer Students, 1939 .................... 193
Summary of Students, 1938-1939 ....................... 193
Index ...................................................... 194
Admission Form .......................................... 197
CALENDAR, 1940-1941

FALL QUARTER, 1940

September 9, Monday .......... Freshman Preregistration and Payment of Fees
September 10, Tuesday .......... Upper Class Registration and Payment of Fees
September 11, Wednesday ........ Classes Begin
September 12, Thursday ......... First Convocation
October 19, Saturday .......... Homecoming Day
October 19, Saturday .......... Annual Meeting of the Board of Trustees
October 28, 29, 30, 31, November 1, 2, inclusive,

Monday to Saturday Noon .......... Preregistration
November 21, Thursday .......... Thanksgiving Day
November 25, 26, 27, 28, Monday to Thursday, inclusive

........................................ Final Examinations
November 28, Thursday (5:10 P. M.) .......... Fall Quarter Ends

WINTER QUARTER, 1940-1941

December 2, Monday ............ Registration and Payment of Fees
December 3, Tuesday ............ Classes Begin
December 20, Friday (5:10 P. M.) .... Christmas Vacation Begins
January 6, Monday .............. Classes Resume
February 3, 4, 5, 6, 7, 8, inclusive, Monday to Saturday Noon

........................................ Preregistration
March 4, 5, 6, 7, Tuesday to Friday, inclusive .......... Final Examinations
March 7, Friday (5:10 P. M.) .......... Winter Quarter Ends

SPRING QUARTER, 1941

March 17, Monday .............. Registration and Payment of Fees
March 18, Tuesday .............. Classes Begin
April 9, Wednesday .......... Founder's Day
April 19, Saturday .......... Semi-Annual Meeting of the Board of Trustees
May 5, 6, 7, 8, 9, 10, Monday to Saturday Noon, inclusive, Preregistration
May 30, Friday ................. Decoration Day
May 31, June 2, 3, 4, Saturday to Wednesday, inclusive

........................................ Final Examinations
June 7, Saturday .......... Alumni Day and Class Day
June 8, Sunday (2:00 P. M.) .......... Commencement Exercises

SUMMER SESSION, 1940

First Term, June 10, Monday to July 13, Saturday
Second Term, July 16, Tuesday to August 17, Saturday
BOARD OF TRUSTEES

ROBERT WILLIAMS, President of the University
(Ex-Officio)

MR. JOHN H. TAFT, President
MR. JOHN H. CLARK, Vice President
MR. E. J. BROOKHART, Secretary

ELECTED BY THE CONFERENCE

BISHOP H. LESTER SMITH
(Ex-Officio)

Initus Exitus
1919 MR. W. W. MORRAL Morral 1940
1939 MR. E. S. MATTHIAS, LL. D. Columbus 1940
1922 MR. E. C. EDWARDS Toledo 1941
1922 MR. E. E. MCAULPIN Ada 1941
1935 REV. W. P. CASTOE, PH. D. Lima 1942
1922 REV. E. L. MOTTER, D. D. Columbus 1942
1905 MR. JOHN H. CLARK, LL. B. Marion 1943
1924 REV. B. F. READING, D. D. Toledo 1943
1924 REV. D. F. HELMS, D. D. Lima 1944
1918 MR. E. J. BROOKHART, LL. B. Celina 1944

ELECTED BY THE NORTH EAST OHIO CONFERENCE

1936 REV. W. W. T. DUNCAN, D. D., LL. D. Lakewood 1941
1930 MR. JAY P. TAGGART, LL. B. Cleveland 1943
1938 REV. HOWARD W. PETERSON, D. D. Mansfield 1943

ELECTED BY THE ALUMNI

1935 MR. LLOYD H. GARDNER, C. E. Philadelphia, Pa. 1940
1936 MR. STANLEY S. STEWART, B. S. Columbus 1941
1937 MR. EARL F. BOYLE, C. E. Winnetka, Ill. 1942
1933 MR. CHARLES R. WILSON, PH. G. Ada 1943
1939 MR. HARRY R. MEREDEITH, LL. B. Lima 1944

AT LARGE, ELECTED BY THE TRUSTEES

1935 MR. JOHN H. TAFT, D. C. SC. Chicago, Ill. 1941
1935 MR. CHARLES H. LEWIS, LL. D. Harpster 1941
1935 MR. BENJAMIN F. FAIRLESS, D. ENG. Pittsburg, Pa. 1941
1937 MR. DONALD J. HOSKINS, LL. B. Columbus 1941
1934 MR. BEN R. CONNER Ada 1940
1934 MR. ALDEN M. ELLIOTT Chicago, Ill. 1940
1934 MR. JAMES J. PILLOID, E. E. New York, N. Y. 1940
COMMITTEES
of the
BOARD OF TRUSTEES
1939-1940

JOHN H. TAFT, President
JOHN H. CLARK, Vice President
E. J. BROOKHART, Secretary


DEGREES: E. J. Brookhart, Chairman; B. F. Reading, Howard Peterson, and Alden Elliott.

BUILDINGS AND GROUNDS: Earl F. Boyle, Chairman; Stanley S. Stewart, C. R. Wilson, W. P. Castoe, W. W. Morral, E. E. McAlpin, Lloyd Gardner, and Harry Meredith.
OFFICERS AND EXECUTIVE COMMITTEE

J. McLean Reed, President ........................................... 338 Garfield Avenue, Lima, Ohio
Lee N. Murlin, Vice President ................................. Judge of Municipal Court, Toledo, Ohio
Harry R. Meredith, Alumni Trustee ............................... 1127 Rice Avenue, Lima, Ohio
Harold E. Ryder, Member of Executive Committee ................ Fremont, Ohio

DIRECTORY OF ALUMNI CHAPTERS

Allen County—Pres., M. B. Jenkins, Lima, Ohio; Vice Pres., Mrs. Oscar Alstetter, Lima, Ohio; Secretary, Merle Mertz, Lima, Ohio.

Ashland County—Pres., A. Ross Silverling, 219 Pleasant St., Ashland, Ohio; Vice Pres., Judge C. C. Chapman, 303 E. Walnut Street, Ashland, Ohio; Secretary-Treasurer, Lawrence M. Smith, 303 Diamond Street, Ashland, Ohio.

Atlanta, Ga.—Pres., Josiah T. Rose, 22 Marietta Street Bldg., Atlanta, Ga.; Secretary, Miss Mae Neptune, 665 Ella Street, S. W.

Belleville, Ohio—Pres., Elmer Godwin; Secretary, Laura Young.

Belmont County—Pres., Thomas Jones, Martins Ferry, Ohio; Vice Pres., Willard McKelvey, Bellaire, Ohio; Secretary, Mrs. Irene McKelvey, St. Clairsville, Ohio.

Boston, Mass.—Pres., Frank J. Adler, 26 Humphrey Street, Greenwood.

Buffalo, N. Y.—Pres., Robert Carrier, Corfu, N. Y.; Vice Pres., L. P. Forness, 151 Hunt Avenue, Hamburg, N. Y.; Secretary-Treasurer, Leroy L. Runkle, 88 Ramona, Buffalo, N. Y.

Cincinnati, Ohio—Pres., Lawrence P. Lake, 3606-07 Carew Tower, Cincinnati, Ohio; Secretary, Miss Delores Dehus, The Roanoke Apts., 21359 Ludlow Avenue, Cincinnati, Ohio.

Clark County—Vice Pres., Rev. Paul Cramer, Tremont City, Ohio; Secretary, Mary Wilder, 301 South Shaffer Street, Springfield, Ohio.

Cleveland, Ohio—Pres., Dr. Harold D. Chaffee, 114 Harriman Street, Bedford, Ohio; Vice Pres., Roy F. MacMahon, Aurora, Ohio; Secretary-Treasurer, Walter Morgan, 162 Baker Street, Berea, Ohio.

Columbiana County—Pres., Felix P. Butch, 527 N. Washington St., Lisbon, Ohio; Vice Pres., Robert E. Hall, 527 South Washington Street, Lisbon, Ohio; Secretary-Treasurer, Jack Rutter, 219 North Market Street, Lisbon, Ohio.

Columbus, Ohio—Pres. E. L. Byrns, Columbus, Ohio; Secretary, Dorothy Sinkey, Upper Arlington, Ohio.

Crawford County—Pres., Arden Wisman, Bucyrus, Ohio; Vice Pres., George Davies, Galion Ohio; Secretary, Ann Charlton, Sulphur Springs, Ohio.
DELPHOS, OHIO—Pres., J. J. Apger, Delphos, Ohio; Secretary, Mrs. T. P. Critchfield, Delphos, Ohio.


FT. WAYNE, IND.—Pres., Nelle Yoh, 921 Anthony Blvd., Ft. Wayne, Ind.; Vice Pres., Mary Helen Ley, 2719 Fairfield Avenue, Ft. Wayne, Ind.; Secretary-Treasurer, Mrs. Charles H. Geake, 1003 Fulton Street, Ft. Wayne, Ind.

JEFFERSON COUNTY—Pres., Stuart B. Moreland, Steubenville, Ohio; Vice Pres., Oliver Probert, Steubenville, Ohio; Secretary, F. J. Mick, Steubenville, Ohio.

MAHONING AND SHENANGO VALLEY—Pres., T. J. Macejko, City Bank Building, Youngstown, Ohio; Secretary-Treasurer, Helen Pond, 1356 Elm Street, Youngstown, Ohio.

MONTGOMERY COUNTY—Pres., C. Stanley Miller, 2414 Oakland Avenue, Dayton, Ohio; Vice Pres., Robert M. Burke, 26 Edgewood Avenue, Dayton, Ohio; Secretary, Cecil E. Edwards, 1243 U. B. Bldg., Dayton, Ohio; Treasurer, Herman Brockerman, 212 Marathon Avenue, Dayton, Ohio.

MUSKINGUM COUNTY—Pres., Virgil E. Johnson, Prosecuting Attorney, First National Bank, Zanesville, Ohio; Secretary, Ralph Jones, Leffler's Drug Store, Corner Fifth and Main Streets, Zanesville, Ohio; Treasurer, Paul Bainter, Masonic Temple, Zanesville, Ohio.

NEW YORK CITY—Pres., W. B. Bedell, Box 210, Haworth, N. J.; Vice Pres., R. E. Lowe, 815 Shadowlawn Drive, Westfield, N. J.; Secretary, H. L. Frapwell, 646 Forest Avenue, Westfield, N. J.; Treasurer, L. D. Beatty, Room 2544, 32 Sixth Avenue, New York City.


PITTSBURGH, PA.—Pres., W. L. Keller, 1239 Oakmont Street, Crafton Post Office, Pittsburgh, Pa.; Vice Pres., J. H. Shoup, 1422 Fawcett Street, McKeesport, Pa.; Secretary, C. W. Holmes, 7340 Schoyer Avenue, Swissvale, Pa.

PORTLAND, OREGON—Pres., C. C. Hockley, N. W. Bank Bldg.; Vice Pres.-Secretary, E. R. Walsh, Lewis Bldg.

PUTNAM COUNTY, OHIO—Pres., C. W. Fawcett, Ottawa; Secretary, Mrs. H. L. Hoffman, Leipsic.

RICHLAND COUNTY—Pres., Harold C. Miller, 152 Rae Avenue, Mansfield, Ohio; Vice Pres., A. T. Sneeringer, 36 Huffman Avenue, Mansfield, Ohio; Secretary-Treasurer, R. D. Iden, 24 Wellington Avenue, Mansfield, Ohio.

SANDUSKY COUNTY—Pres., Alexander L. Hyzer, Fremont, Ohio.

SCHENECTADY, N. Y.—Secretary, E. R. Anderson, 2157 Grand Blvd., Schenectady, N. Y.

STARK COUNTY—Pres., C. R. Wingerd, Canton, Ohio; Vice Pres., Paul Van Nostran, Canton, Ohio; Secretary, Mrs. Clyde Augsberger, Canton, Ohio.
SENeca County—Pres., Harry F. Frick, Tiffin, Ohio; Vice Pres., A. A. Joseph, Tiffin, Ohio; Secretary, Eugene E. Mount, Tiffin, Ohio.

SUMMIT COUNTY—Pres., Roy Pugh, R. R. No. 2, Everett, Ohio; Vice Pres., B. J. Cleaverger, 1739 Sackett Avenue, Cuyahoga Falls, Ohio.

TOLEDO, OHIO—Pres., J. Parker Edwards, Toledo, Ohio; Vice Pres., Ralph Mertz, Toledo, Ohio; Secretary, Miss Merle Thompson, Toledo, Ohio.


VAN WERT COUNTY—Pres., Thane Spahr, Van Wert, Ohio; Vice Pres., Lester Kirchenbaum, Van Wert, Ohio; Secretary, Mrs. Charles Runser, Van Wert, Ohio.

WASHINGTON, D. C.—Secretary, Kahl K. Spriggs, Southern Bldg., Washington, D. C.

WAYNE COUNTY—Pres., I. W. Maibach, Sterling, Ohio; Secretary, S. M. Miller, 1634 Cleveland Road, Wooster, Ohio.

WYANDOT COUNTY—Pres., Morris Kuenzli, Nevada, Ohio; Secretary, Charles Nauss, Upper Sandusky, Ohio.

OHIO NORTHERN UNIVERSITY ALUMNAE ASSOCIATION

In the fall of 1929 the former women students of the University organized an alumnae association for the purpose of assisting in the development of women's interests on the campus. The meetings are held twice a year: at Homecoming and at Commencement. To date the association has contributed generously to the equippings of Alumnae Hall, and has also established a loan fund for women students.

OFFICERS, 1938-39

President—Mrs. Harry Judson ........................................... Ada, Ohio
Vice President—Mrs. Raymond Cookston ............................... Cleveland, Ohio
Secretary-Treasurer—Mrs. W. W. Runser ............................. Ada, Ohio
ADMINISTRATIVE OFFICERS AND FACULTY*

ROBERT WILLIAMS, M. A., D. D., LL. D.
President
B. A., Wesleyan University; M. A., Boston University; D. D., Albion College; LL. D., Ohio Wesleyan University.

ALBERT EDWIN SMITH, D. D., PH. D., LL. D.
President Emeritus
B. A., D. D., Ph. D., Ohio Wesleyan University; LL. D., Oglethorpe University; LL. D., Asbury College.

THOMAS JEFFERSON SMULL, C. E., M. E., ENG. D.
Business Manager
C. E., M. E., Ohio Northern University; Graduate Student, Lafayette College, one semester; University of Michigan, one semester; Eng. D., Oglethorpe University.

ZILLOH LAVERNE DARING, M. A.
Treasurer
B. S. in Bus. Adm., M. A., Ohio State University.

GERTRUDE MILLAR GLASSEY, M. A.
Registrar and Entrance Examiner
B. A., Hastings College; M. A., Columbia University.

AGNES AUTEN, B. A.
Librarian
B. A., Bluffton College; Drexel Institute School of Library Science.

HARVEY EVERT HUBER, M. A.
Dean of George Franklin and Sarah Catherine Getty
College of Liberal Arts and Professor of Biology
B. A., Ohio Northern University; M. A., Yale University; Yale University, one year; University of Wisconsin, one summer.

JOHN ALFRED NEEDY, M. S. IN M. E., M. E.
Dean of the College of Engineering and
Professor of Mechanical Engineering
B. S. in M. E., M. E., University of Kentucky; M. S. in M. E., Purdue University; Ohio State University, one summer.

RUDOLPH HENRY RAABE, PHAR. D.
Dean of the College of Pharmacy and
Professor of Pharmacy
B. S., Ph. G., Ph. C., Ohio Northern University; Phar. D., University of Havana.

*Professors and instructors arranged according to seniority.
Claude Westcoat Pettit, B. A., LL. M.

Dean of the College of Law and
Professor of Law

418 Union Street

B. A., Ohio State University; LL. B., Western Reserve University; LL. M., George Washington University; Old Trinity, Dublin, Ireland, one quarter.

John Austin Potter, B. S., B. D.

Dean of Men and
Professor of Biblical Literature

228 East North Avenue

B. S., Ohio Northern University; B. D., Garrett Biblical Institute; University of Chicago, two summers; Columbia University, one summer; Union Theological Seminary, one summer.

Audrey Kenyon Wilder, M. A.

Dean of Women and
Assistant Professor of English

625 Union Street

B. A., Albion College; M. A., Columbia University; Columbia University, one year and two summers; University of Chicago, one summer; Oxford University, England, one summer.

Frank Lewis Loy, M. A.

Director of the Division of Teacher Training and
Professor of Education

414 South Main Street

B. S. in Ed., Ohio Northern University; M. A., Columbia University; University of Chicago, one summer; Columbia University, one summer.

Clyde Albert Lamb, M. A.

Director of the Department of Health and Physical Education and
Professor of Health and Physical Education

805 South Simon Street

B. S., Coe College; M. A., Columbia University; Columbia University, two summers.

Alyce Elizabeth Warren

Secretary to the President

112 Turner Avenue

Helen Hagerty Salo, B. A.

Secretary to the Business Office

819 South Main Street

B. A., Findlay College.

Jeanne Fletcher

Secretary to Director of Teacher Training, Dean of Men and Dean of Women

Lima, Ohio

Ohio Wesleyan University, two years; Certificate from Katharine Gibbs Secretarial School.

Anna Frances Bentley

Secretary to the Registrar

245 West Buckeye Avenue

Ohio Northern University, two years; Office Training School, one year.
ILO RUTTER

Secretary in the Alumni Office
118 West Montford Avenue
Graduate in Stenography, Ohio Northern University; Actual Business College, one year.

CLIFFE DEMING, M. A.

Professor of Speech
601 South Main Street
B. O., B. A., M. A., Ohio Normal University; Emerson College of Oratory.

CHILDE HAROLD FREEMAN, B. S., Lit. D.

Professor of English Literature on the John Davison Chair of English Literature
317 West University Avenue
B. S., Ohio Normal University; Lit. D., Taylor University; University of Chicago, one summer.

FRANK LEWIS BERGER, M. S.

Professor of Physics
121 East Lehr Avenue
B. A., Ohio Northern University; B. S., University of Chicago; M. S., Ohio State University.

WILLIAM PETER LAMALE, M. A.

Professor of Piano and Organ
312 West Buckeye Avenue
Mus. B., Oberlin College Conservatory; Student with Tobias Matthay and Matilda Verme, London, one year; Student, Piano, Ernest Hutchison, Lake Chautauqua, one summer; Student in Conducting, Columbia University and Piano student with Edwin Hughes, two summers; Student in Piano with Scionti and Composition with Palmer, American Conservatory, one summer; M. A., Ohio State University.

WALTER GRAY, M. A.

Professor of Psychology
523 Union Street
B. S. in Ed., Ohio Northern University; M. A., Ohio State University; Ohio State University, one year and two summers.

WILFRED ELLSWORTH BINKLEY, Ph. D.

Professor of History and Political Science
803 Union Street
B. S., Ohio Northern University; B. A., Antioch College; M. A., Ph. D., Ohio State University.

JESSE RAYMOND HARROD, Ph. D.

Professor of Chemistry
115 South Johnson Street
B. S. in Ed., B. S., Ohio Northern University; M. S., Ph. D., Ohio State University.

EDWIN VERGON SMITH, B. A., LL. B.

Professor of Law
803 South Main Street
B. A., LL. B., Ohio Northern University; Columbia University, two summers.

JAMES ALBERT WHITTLED, M. A.

Professor of Mathematics
219 West Highland Avenue
Ph. B., M. A., Southwestern College; University of Chicago, one year and four summers; Columbia University, one summer.

*On leave of absence 1939-40.
ALEXANDER RAFFEN WEBB, M. S. E., C. E.

Professor of Civil Engineering
B. S. in C. E., Armour Institute of Technology; M. S. E., University of Michigan; C. E., Armour Institute of Technology.

316 South Johnson Street

WINONA PEARL GEETING, M. A.

Professor of Education
Normal Diploma, Teachers' College, Miami University; B. S. in Ed., Miami University; M. A., Ohio State University; Ohio State University, one summer.

706 South Main Street

LOUIS ROWELL HERRICK, PH. D.

Professor of Modern Languages
B. S., Amherst College; M. A., Ph. D., University of Wisconsin; University of Paris, one summer.

304 South Gilbert Street

HAYDN OWENS, M. MUS., M. A.

Professor of Voice
M. M., American Conservatory of Music, Chicago; B. S. in Ed., and M. A., New York University. Private work, Eduardo Sacedote, Chicago; Richard Hageman, New York; Albert Wolf, Paris (Operatic coaching and conducting); Michael Raucheison (German Lieder) and Arthur Rosenstein (Opera), Berlin, Germany; Conductor, Haydn Choral Society, Chicago; Assistant Conductor Boston Opera Company; Coach and accompanist with leading artists on tour.

718 South Main Street

GEORGE HORACE MCFADDEN, PH. D.

Professor of Pharmaceutical Chemistry
B. S., Muskingum College; B. S. in Phar., M. S., Ph. D., Ohio State University.

114 East College Avenue

RAYMOND ANSON DOBBINS, PH. D.

Assistant Professor of Biology
B. S., Ohio Northern University; B. A., M. S., Ph. D., Ohio State University.

620 Union Street

LAWRENCE FREEMAN, M. A.

Assistant Professor of English
B. A., Ohio Northern University; M. A., University of Michigan; University of Cambridge, England, one summer.

724 South Gilbert Street

HARRIS ARTHUR LAMB, M. A.

Assistant Professor of Health and Physical Education
B. A., Coe College; M. A., Columbia University.

809 South Simon Street

GEORGE WILLARD PATTON, M. A.

Assistant Professor of Economics and Business Administration
B. Ph., Emory University; M. A., University of Kentucky; Graduate Student and teaching fellow, five years, Northwestern University.

523½ South Main Street
Arthur Warren Phelps, M.A., LL.B.
Assistant Professor of Law
B.A., Washington and Lee University; M.A., Ohio State University; LL.B., University of Cincinnati.

Lewis Earl Miller, Ph.D.
Assistant Professor of Chemistry
307 Union Street
Diploma in Education, Muskingum College; B.A., M.S., Ohio State University; Ph.D., University of Pittsburgh; University of Michigan, two summers; Ohio State University, two summers; University of Illinois, one summer.

Walter Pingrey Rogers, Ph.D.
Assistant Professor of History
319 East Lincoln Avenue
B.A., M.A., Oberlin College; Ph.D., Cornell University.

Donald Stuart Pearson, B.S., M.S. in E.E.
Assistant Professor of Electrical Engineering
325 West University Avenue
B.S. and M.S. in E.E., Case School of Applied Science.

Armin Uhler, J.U.D., S.J.D.
Assistant Professor of Law
212 East Montford Avenue
J.U.D., University of Leipzig; S.J.D., University of Michigan.

Dawson Gerald Fulton, Ph.D.
Assistant Professor of Mathematics
805 South Main Street
B.A., Acadia University; M.Sc., Ph.D., University of Michigan; University of Michigan, one semester and one summer; Nova Scotia Summer School for Teachers, one summer.

Ella Irick
Instructor in Junior Music Department
521 South Gilbert Street
Music Student in Ohio Northern University; Lake Chautauqua, four summers with William Sherwood, Miss Georgia Kober, Miss Eliza Woods; Normal Training with Mrs. Tobey and Miss Woods; Course in Dunning System with Miss Eddy; one summer, American Conservatory, Chicago.

Alva Tolf, M.A.
Instructor in Health and Physical Education
307 South Gilbert Street
B.A., Coe College; M.A., University of Chicago.

Agnes Amstutz, M.A.
Instructor in Latin
Bluffton, Ohio
B.A., Bluffton College; M.A., Ohio State University; Ohio State University, one quarter; University of Michigan, one quarter.

* On leave of absence 1939-40.
Milton Louis Neuroth, B. S. in Phar.

Instructor in Pharmacy
327 West University Avenue
B. S. in Phar., Purdue University; Purdue University, three summers.

Elizabeth May Lewis, M. S.

Instructor in Economics and Business Administration
502 South Main Street
B. Ed., Illinois State Normal University; M. S., University of Illinois; University of Chicago, one summer.

Dorance Rex Lowman, M. A.

Instructor in Industrial Arts
307 Turner Avenue
B. Sc. in Ed., M. A., Ohio State University.

Donn Willard Watson, B. P. S. M., M. Sc. in Ed.

Instructor in Violin and Public School Music
718 South Johnson Street
B. P. S. M., M. Sc. in Ed., Indiana University. Private work, Violin Study with Emil Bare, Robert Perutz, and Jean ten Have at Cincinnati Conservatory. Principal Viola with Indianapolis Symphony, 1912-18 and 1932-34.

George Macdonald Hocking, M. S. in Phar.

Instructor in Materia Medica
528½ South Main Street
B. S. in Phar., University of Washington; M. S. in Phar., University of Florida; University of Florida, one year and two summers.

William Jereslaw Owen, B. A., LL. B.

Instructor in Law
216 South Gilbert Street
B. A., Virginia Military Institute; LL. B., University of Virginia.

Harold Gibson Davidson, M. A.

Instructor in Music
424½ South Main Street
Academic Diploma, Cincinnati Conservatory of Music; B. A., M. A., Ohio State University; Teachers College, Columbia University, one year.

Warren Stuart Hauser, M. B. A.

Instructor in Business Administration
915 South Main Street
B. A., M. B. A., Western Reserve University.

*Thomas Newell Ewing, Ph. D.

Instructor in Psychology
616 South Gilbert Street
B. A., DePauw University; M. A., Syracuse University; Ph. D., Duke University.

John Alan Kramer, M. D.

Physician in charge of Health Service and
Instructor in the Department of Health and Physical Education
201 East Montford Avenue
B. A., Miami University; M. D., Ohio State University.

*Ph. D. as of June, 1940.
HELEN MARIE ANSLEY, R. N.
Nurse
R. N., Lima Memorial Hospital.

MARY LOU GESLING, R. N.
Nurse
R. N., St. Luke's Hospital, Cleveland.

WALTER SCOTT JACKSON, B. A., LL. B.
Lecturer in Bankruptcy
B. A., Kenyon College; LL. B., Western Reserve University.

ROBERT O. BARR, B. S. IN E. E.
Assistant in the Department of Electrical Engineering
B. S. in E. E., University of Michigan.

J. D. MACCALLUM, B. S. IN C. E.
Assistant in the Department of Civil Engineering
B. S. in C. E., Ohio Northern University.

VINTON BRAME, B. A., B. S. IN C. E.
Assistant in the Department of Mechanical Engineering
B. A., B. S., in C. E., Ohio Northern University.

NETTIE MILLER
House Director, Turner Hall

412 Union Street

Lima, Ohio

208 South Main Street

311 South Gilbert Street
OHIO NORTHERN UNIVERSITY
FACULTY COMMITTEES
1939-1940

ACADEMIC COUNCIL: Huber, Pettit, Loy, Needy, Raabe, Wilder, Potter, Glassey

ADMISSION: Glassey, Huber, Raabe, Needy, Pettit.

ARTIST-LECTURE: Smull, Deming, Owens, Daring, Wilder.

CATALOGUE: C. H. Freeman, Huber, Smull, Watson, L. Freeman.

CHAPEL: Potter, Deming, Owens, Hauser.


COMMENCEMENT: Loy, Whitted, Deming, Watson, Owen.

DISCIPLINE: Binkley, Geeting, Smith, Deming, C. Lamb.

GENERAL ADVISERS: Huber, Pettit, Loy, Needy, Raabe.


INTER-COLLEGIATE DEBATE: Deming, Binkley, C. H. Freeman, Rogers, Uhler.

LOAN COMMITTEE: Daring, Wilder, Potter.

PLACEMENT BUREAU: Loy, Pettit, Huber, Needy, Raabe.

SECTIONS COMMITTEE: Harrod, Dobbins, L. Freeman, Miller, Fulton, Davidson.

STUDENT PROMOTION: Smull, Owens, H. Lamb.

STUDENT PUBLICATIONS: L. Freeman, Berger, Lamale, Neuroth, Smith, Daring.

STUDENT WELFARE AND SOCIAL CALENDAR: Potter, Wilder.

ORIGIN AND DEVELOPMENT

HISTORICAL SKETCH

On August 14, 1871, in a three-story building where the Lehr Memorial now stands, the Northwestern Ohio Normal School was formally opened. Henry Solomon Lehr, the founder and president, stated in his first catalogue that the purpose of the school was "the instruction and training of teachers in the science of education and the art of teaching and the best methods of governing schools." For many years the school was one of the outstanding private institutions offering professional training to elementary and high school teachers.

On May 19, 1885, the State of Ohio issued a charter to the institution under the name of the Ohio Normal University. In 1898, the Central Ohio (now the Ohio) Conference of the Methodist Episcopal Church purchased the school from Doctor Lehr and his associates. In 1904, the University was renamed the Ohio Northern University, and in December, 1907, the charter was amended. Throughout the years the institution continued to grow and to enlarge its field of activities.

In 1880 the Department of Civil Engineering was established and when the demand for engineers increased this department was organized as the College of Engineering with additional departments in chemical, electrical and mechanical engineering.

In 1884, the laws of Ohio required that all pharmacists should be registered. To meet the demand for trained and qualified pharmacists the Department of Pharmacy was established. Later this department was organized as the College of Pharmacy.

The College of Law was established in 1885. Not only have its graduates been successful as practitioners but they have also distinguished themselves in the field of public affairs; at the same time four of its graduates were members of the United States Senate—two from Ohio, one from Indiana, and one from Kentucky. Two of the graduates of the College of Law were members of the Ohio Supreme Court.
The College of Liberal Arts was reorganized in 1910. The College of Liberal Arts not only offers well organized curricula in pre-medicine, pre-law, pre-dentistry, and pre-theology but also through its various divisions (1) Language, Literature, and Art, (2) Natural Sciences, (3) Social Sciences, and (4) Teacher Training, it provides strong curricula leading to the degree of Bachelor of Science in Education or Bachelor of Arts.

LOCATION

Ohio Northern University is located in Ada, an attractive and enterprising town in Northwestern Ohio. Situated on the Pittsburgh, Fort Wayne and Chicago division of the Pennsylvania railroad, and on State Route 69, two miles north of the Harding Highway (Route 30S), and four miles south of the Lincoln Highway (Route 30N), and nine miles south of the Dixie Highway (Route 25), the University is easily accessible by railway or motor bus.

ORGANIZATION FEATURES

The University year is divided into three quarters of approximately equal length, designated as Fall, Winter and Spring. Early in the Fall quarter, the Freshman, Sophomore, Junior and Senior classes are formally organized under the direction of a member of the faculty. Student classification is based upon credit hours. Each student is required to present a certificate from the Registrar showing his eligibility to participate in class organization and honors.

SUMMER SCHOOL

Ohio Northern University has been one of the pioneer institutions in maintaining a summer session. The Summer Session is composed of two terms of five weeks each, six days a week. The first term of the 1940 Summer Session opens June 10 and closes July 13; the second term begins July 16 and closes August 17.

The purpose of the Summer Session is to provide opportunity for regular college students to work towards a college degree or other professional goals and thus shorten the time required for the completion of their program. Many teachers in public schools desire to take additional work in order to renew their certificates and to improve their professional standing or
to pursue regular collegiate courses leading to a degree, thus avoiding the necessity of withdrawing from their regular work.

All departments in the College of Liberal Arts offer academic courses for those desiring courses in their field of major interest. The Division of Teacher Training offers an extensive program of professional courses for elementary teachers, high school teachers, and teachers and supervisors of health and physical education, public school music, commerce, and industrial arts.

For many years the Summer Session has been popular with teachers who have come from all sections of the country to acquire information and knowledge essential to success and to gain inspiration for future service. The spirit that prevails on the campus throughout the Summer Session has proved a lasting influence in the lives of many teachers.

Aims and Objectives

The University has as its aims and objectives the development of curricula for professional training in the fields of Education, Engineering, Law, and Pharmacy, and for instruction in the Arts and Sciences. Each curriculum, as well as the institutional life, comprises activities of such scope, variety, and intensiveness, as will provide for the student:

(a) Adequate background courses in the major fields of human endeavor represented by the principal divisions of subject matter which constitute a liberal school education;

(b) Intensive preparation in the specific field in which the student plans to work;

(c) Opportunities contributing to good health, ethical insight, moral conduct, and fundamental Christian character;

(d) The efficient control and use of his mentality and the development of such scholarly interests as will stimulate life-long intellectual growth;

(e) Opportunities for participation in such activities as will strengthen the social and cultural equipment of the student;

(f) Such an understanding of the development and nature of modern society, that he may approach critically the solution of its problems.
OHIO NORTHERN UNIVERSITY

AFFILIATIONS

Ohio Northern University holds membership in the Ohio College Association. The College of Pharmacy belongs to the American Association of Colleges of Pharmacy. The College of Law is a member of the League of Ohio Law Schools and is provisionally approved by the American Bar Association. The University is on the approved list of the University Senate of the Methodist Episcopal Church.

CAMPUS BUILDINGS AND EQUIPMENT

The University owns over 100 acres of ground in and around Ada, providing ample room for expansion.

The Central Campus lies a few blocks south of the railroad. Here in this central quadrangle, easily accessible from any part of the village, are located the following buildings:

LEHR MEMORIAL, a modern three-story fire-proof building, housing the offices of the administration, the Lehr Auditorium, Young Women's Christian Association, Alumnae Hall, and the Northern Review office, is located in the center of the quadrangle. Lehr auditorium, with a seating capacity of 1,237, provides an ample lecture and concert hall. It is equipped with stage settings, a pipe organ, and moving picture booths. In this hall regular convocations of the student body are held. The building was erected in 1915 and dedicated to Henry Solomon Lehr, the founder of the University.

HILL MEMORIAL, a two-story fire-proof building, named in honor of John Wesley Hill, Sr., contains the College of Engineering and the laboratories for Electrical Engineering; the Department of Physics, and the Industrial Arts Department of the College of Liberal Arts.

DUKES MEMORIAL, located at the south end of the campus, contains the College of Pharmacy, and the Departments of Chemistry and Mathematics.

THE BROWN MEMORIAL LIBRARY, situated at the north end of the front campus, is admirably adapted to the work of a modern college. Spacious and well lighted, it is capable of accommodating two hundred students. There are also opportunities at private tables for advanced study and research.

The library at present possesses 22,000 live and well administered volumes, and affords opportunity for every student to find literature in his own and other fields for reference, reading and study.
The University subscribes to all the needed reviews, magazines and newspapers so that any student may keep abreast of current knowledge and thought.

An annual appropriation for binding and for the purchase of new volumes is made in conformity with the suggestions of the standardizing associations and in harmony with the best practice of the educational world.

The Power Plant in the rear of Hill Memorial is a unit of modern design, including a large, well-lighted laboratory for mechanical engineering students.

The College of Law named in honor of Warren G. Harding, occupies a splendid building north of the Central Campus on the corner of Main street and University avenue. It contains five class rooms, together with a library, study room, court room and offices. This building was erected and dedicated in 1925.

The Department of Biology occupies the hall at the corner of Gilbert street and College avenue. The building is a two-story structure suited for its purpose. Near the Department of Biology is an experimental greenhouse.

Presser Music Hall, erected in 1929, and bearing the name of Theodore H. Presser, is a thoroughly modern three-story structure with splendid auditorium, eighteen sound-proof practice rooms, choral room and studios, for the use of the Department of Music.

Taft Gymnasium, named in honor of John H. Taft, the principal donor, is a building with a frontage of 106 feet and a depth of 132 feet. It is an ideal physical education plant.

In the Taft Gymnasium there are twenty-six rooms. In addition to the main basketball court with its galleries and bleachers, having a seating capacity of 1,800, there are a volley ball court, two auxiliary playing courts, a fencing room with bleachers, examination rooms with first aid equipment, a running track, faculty club room, offices for coaches and members of the faculty of physical education, and the physical education classrooms. The cluster lights at the entrances are the memorial gift of the Class of 1928. The building is erected on ground purchased in part as a memorial gift by the Classes of 1926 and 1927.

Athletic Field

Adjacent to the Taft Gymnasium is the University Athletic Field, containing a well-drained and heavily sodded football gridiron, encircled by
a cinder running track with 120-yard straightaway. There are also two auxiliary gridirons, a baseball diamond, and nine tennis courts.

Laboratories

The various laboratories of the University have modern equipment. Special laboratories are located in the following buildings: Dukes Memorial, Hill Memorial, Biology Building and Power Plant.

Gift Cases

Through good will and generosity there has come into the possession of Ohio Northern University a private collection of geological specimens, the result of years of enthusiastic study and research on the part of the donor, Mr. E. R. Webber, of Kenton, Ohio. In the geological cases are found many of the common minerals and ores, together with many rare ones; meteorites, plant and animal fossils representing several of the chief orders of geological importance; the shells and skeletons of many molluscs and vertebrates.

A valuable collection of Chinese antiques and curios also belongs to the University, the generous gift of Dr. and Mrs. M. Ross Charles, former residents of Ada, and medical missionaries to China for twenty-five years.

The University is also indebted to Henry E. Neff, former instructor in the University, for a splendid collection of birds and fishes.

These collections have been placed in suitable display cases for the pleasure, convenience, and instruction of the public as well as the student body.

Residences for Women

All non-resident women students are required to live in Turner Hall. (This regulation does not apply to a woman who is commuting or to one who is doing work in exchange for her room.) If the Hall is filled, a list of Approved Residences will be furnished upon application to the Office of the Dean of Women. Freshmen women are required to live in Freshman Residences. No agreement between student and housemother is recognized by the University until arrangements have been approved by the Dean of Women.

Turner Hall

Turner Hall, a stately residence, rich in its university associations, is assigned to freshmen women. This home, which was built by Henry Solo-
mon Lehr, recently came into the possession of the University from Mr. and Mrs. Perry W. Turner, in whose honor it is named. Throughout it has been furnished so as to make an attractive, comfortable home, all equipment being selected to meet the social and intellectual needs of the students. The rooms are beautifully equipped with single day beds (three feet, three inches in width), inner-spring mattresses, pads, pillows, ample dressers with mirrors, individual desks, Windsor desk chairs, Windsor rockers, curtains, and rugs. The entire house has excellent hardwood floors. Each student furnishes and launders all of her bedding, towels, dresser scarfs, and other accessories. Each student should also bring her own desk lamp and waste basket. Radios are not permitted in the student rooms.

Residents are permitted light laundry privileges; built-in tubs, pressing boards, electric iron, and a drying room, compose the equipment. Certain kitchen privileges are also permitted under the supervision of the housemother. The Hall is closed for occupancy during all vacations. It will be opened for occupancy on the day before each Registration Day. Students wishing to arrive before this date should notify the office of the Dean of Women.

Two privately owned homes are also used in connection with Turner Hall for housing freshmen women. In these homes, arrangements for light-housekeeping may be made for a small fee. In all residences women are required to furnish their own linens.

Applications should be submitted promptly.

The fraternities for women rent their own residences and maintain them under the supervision of the Dean of Women and an approved resident housemother. Freshmen women are not permitted to live in the fraternity houses.

GENERAL INFORMATION

ASSEMBLIES

Convocations are held twice weekly, Tuesday and Thursday. The aim is not only to recognize the duty and privilege of regular devotions, but to foster a university spirit by bringing together in one assembly the students of the several departments to listen to practical addresses and talks from members of the faculty and others, and to be entertained by those connected with the Departments of Music and Speech. Attendance is compulsory.
## Class Periods

<table>
<thead>
<tr>
<th>Period</th>
<th>Number</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Period</td>
<td>(1)</td>
<td>7:50 to 8:40</td>
</tr>
<tr>
<td>Second Period</td>
<td>(2)</td>
<td>8:45 to 9:35</td>
</tr>
<tr>
<td>Third Period</td>
<td>(3)</td>
<td>9:40 to 10:30</td>
</tr>
<tr>
<td>Fourth Period</td>
<td>(4)</td>
<td>10:35 to 11:25</td>
</tr>
<tr>
<td>Chapel</td>
<td></td>
<td>11:30 to 12:00</td>
</tr>
<tr>
<td>Fifth Period</td>
<td>(5)</td>
<td>1:30 to 2:20</td>
</tr>
<tr>
<td>Sixth Period</td>
<td>(6)</td>
<td>2:25 to 3:15</td>
</tr>
<tr>
<td>Seventh Period</td>
<td>(7)</td>
<td>3:20 to 4:10</td>
</tr>
<tr>
<td>Eighth Period</td>
<td>(8)</td>
<td>4:15 to 5:05</td>
</tr>
</tbody>
</table>

Following the description of each course offered in the University the days and periods of class assemblies are indicated.

### Moral and Religious Culture

Much attention is given to awakening and fostering an aspiration to attain the highest type of Christian manhood and womanhood.

Although the University is the property of the Ohio Conference of the Methodist Episcopal Church, it is in no sense sectarian. Students of all religious denominations are received on equal terms and treated with equal consideration. They are urged to identify themselves with the work and participate regularly in the services of the church of their choice. The six churches of the city cordially welcome students to their religious and social meetings and Bible classes. The following denominations are represented: Methodist, Presbyterian, Lutheran, Church of Christ, Baptist and Roman Catholic.

The Department of Religion and Philosophy, mentioned elsewhere, gives opportunity to those who wish to take up the study of religious problems to fit themselves for life's work.

The Young Men's Christian Association has an enthusiastic organization in the University and wields a most wholesome influence on the lives and habits of the students.

### Women's Organizations

There are three organizations of special interest to all women.

The Association of Women Students. Under a grant of powers from the University Administration, the Association of Women Students was
organized to further social and intellectual cooperation among the women students. Each woman student is a member of the Association and is directly represented on House Council and Legislative Board by the president of her residence unit. The Executive Board endeavors to co-ordinate the activities of all women’s groups on the campus and to plan a constructive social program. The Dean of Women is adviser for A. W. S.

THE YOUNG WOMEN’S CHRISTIAN ASSOCIATION. It is the purpose of the Y. W. C. A. to strengthen and develop the spiritual life of its members and to furnish fellowship by a varied type of weekly meetings, by its social affairs, and by its contact with state and national conferences. Each fall the Y. W. C. A. arranges the details of the Big-Little Sister program during Freshman week. An Advisory Board, composed of faculty women and the Dean of Women, assists the organization with its program.

THE WOMEN’S ATHLETIC ASSOCIATION. For those women interested in constructive opportunity for organized sports, the Women’s Athletic Association offers a well-rounded and interesting program of intramural competition, sport clubs, and social affairs. The Director of Physical Education for Women is adviser to the group.

OMEGA PHI KAPPA. This group is sponsored by the World Fellowship Group of the Y. W. C. A. Its aim is “Every woman of the University world today a leader of the Church of Tomorrow.”

ROUND TABLE FOR FRESHMEN WOMEN

As an aid in adjustment to campus life a weekly Round Table for freshmen women is held under the direction of the Dean of Women. At these meetings various guest speakers talk informally on those problems of orientation most frequently presented to first-year women students.

LECTURES AND CONCERTS

It has been the aim of the University to secure the best talent in the lecture and music field and to present at least two numbers each quarter of the year.

LECTURES

Dr. John Neihardt
Dr. Rollin H. Walker
Dr. Dante Pigozzi
Dr. Donald H. Tippett
Dr. Charles Barker

Rabbi Abba Hillel Silver
Dr. D. L. Harvey
Prof. W. L. Everett
Dr. James B. Withrow
Mr. Louis Untermeyer
Mr. L. W. Rowe    Miss Ruth Rogers
Mr. R. A. Peterson Miss Molly Yard
Mr. S. A. Smullen  Rev. J. R. Schrambler
Mr. M. G. Meriam  Mr. A. M. Rose
Mr. Norman Hidden Mr. M. C. Fruehauf
Mr. F. E. Strouse  Mr. E. Clevenger

CONCERTS, RECITALS, ENTERTAINMENT

Phoenix Players     Alex Christensen
Shakespearean Players Freda Draper
Cecil Leeson        May Music Festival

MUSICAL ORGANIZATIONS

CHORAL SOCIETY. The Ohio Northern University Choral Society is made up of both University students and townspeople, and membership is open to all singers who love and appreciate good music. They present the *Messiah* every December.

A CAPPELLA CHOIR. A vested chorus of approximately sixty carefully selected and carefully trained men and women, singing the highest class of music, mostly of sacred character. Frequent appearances in the immediate vicinity of the University and one extended tour are made each year.

UNIVERSITY ORCHESTRA. A large orchestra is organized each year to take up standard works of the great composers, and to play at concerts of the Choral Society.

UNIVERSITY BAND. Ohio Northern has long been proud of its fine band, which is one of the oldest organizations on the campus. During the Fall quarter the band appears at all home football games and accompanies the team on one or two out-of-town trips. The annual concert is presented during the Winter quarter; for this only music of the highest quality is used.

A Music Festival, including leading choral and orchestral works, with well known vocal and instrumental soloists, is given each spring.

RECITALS. Faculty and student recitals are held each quarter. An Ar-
Debating and Dramatics

The Ohio Northern Debating Association is a member of the Ohio Intercollegiate Debate Conferences for both men and women. There are other intra and inter-state forensic contests for either men's or women's teams. Membership is open to any student interested in the object of the association. Teams are selected and assisted in their training by a faculty committee.

The Northern Players, a dramatic club sponsored by the Department of Speech, presents several plays each year. Enrollment in this club is open to all students of the University, except Freshmen, who pass the try-outs. The following major productions were given public presentation during the year, 1938-39:

Men Must Fight
Peg O'My Heart
The Night of January 16th

The Freshman Players is an organization composed of Freshmen serving to give preliminary training and experience in public presentations.

Technical Organizations and Literary Clubs

The following organizations have regular meetings. Topics pertaining to the several departments are discussed, and addresses are given by people prominent in their respective fields.

The American Institute of Electrical Engineers.
The American Society of Civil Engineers.
The American Society of Mechanical Engineers.
Biology Club.
Commercial Club.
Junior Bar Association.
The Pharmaceutical Association.
Student Affiliates of the American Chemical Society.
Among other clubs are the following: Radio, Press, and French Clubs, Toastmasters' Club, Onesa Club, and Boosters' Club.

Honorary Societies

Alpha Phi Gamma. Students who have shown ability in journalism
as evidenced by meritorious work on the student publications are eligible to membership in this national society.

**Theta Alpha Phi.** A national honorary dramatic organization to which students showing promise of histrionic ability are eligible.

**Kappa Kappa Psi.** A national honorary band organization to encourage study in this phase of musical endeavor. To those who have completed four years' service in the band a gold key is given, the award being made at the formal spring concert and presented by the president of the University.

**Sigma Kappa Pi.** An honorary foreign language society, open to superior students from all language fields, who have done very good work in the language in which they major and above average in all subjects, and who hold a standard of 1.75 quality points per hour.

**Phi Lambda Pi.** An honorary fraternity whose purpose is to create greater interest in the study of biology, and to promote high scholarship in this department.

**Nu Theta Kappa.** An honorary society for men in the College of Engineering. Students in the junior and senior years who have made 1.7 quality points per hour, and who stand well in class and campus activities, are eligible.

**Fraternities**

This group comprises seven national social fraternities, three national professional fraternities for men and four local fraternities for women.

The Panhellenic Association for Women and the Interfraternity Council for Men are composed of representatives from each fraternity. The purpose of these interfraternal groups is to coordinate the activities of their organizations, and to co-operate with the university.

A certificate of eligibility must be obtained from the Dean's office as a pre-requisite to initiation into any fraternity. One quarter in residence with a scholastic average of at least one quality point per credit hour is required of all candidates for initiation.

**Student Publications**

The *Northern*, the annual yearbook published by the students of the University, contains a record of student activities for the year. Each student receives a copy of the book at the close of the Spring quarter as a part of the University activity program.

The *Northern Review* is a biweekly newspaper published throughout the regular year by the students of the University. Positions on the staff of
the newspaper are open to all students on a competitive basis. Scholarships are awarded annually to the editor-in-chief and business manager.

The Northern Handbook is published annually by a staff comprised of members of the Y. M. C. A. and Y. W. C. A. and is the gift of these organizations to the freshman class.

All student publications are controlled by the Faculty Committee on Student Publications, and are under the direct supervision of the chairman of the committee.

Athletics

Ohio Northern is a member of the Ohio Athletic Conference and is represented by strong teams in football, basketball, baseball, and track. A well-rounded program of intramural sports is carried out, under proper direction, which aims to provide some form of activity for each student. The completion of the new Taft Gymnasium and recent additions to the athletic fields provide Ohio Northern with facilities for many forms of sports.

Health Service

The University employs the services of a full time resident physician and two registered nurses for the purpose of providing efficient health service to the student body. It also maintains its own infirmary and dispensary. Each student upon payment of the health fee is entitled to this health service which includes a yearly medical examination, office consultation and treatment by the physician, medicines from the University dispensary and the use of the infirmary in case of illness. Each student is entitled to ten days treatment in the infirmary without charge except for meals, special medicines and treatments. The Department of Health and Physical Education keeps an accurate record of the physical condition of each student and provides instruction in personal health care.

The Department of Health and Physical Education, in addition to being a service department for the entire University, is accredited by the State Department of Education for the training of teachers of physical education.

Endowed Scholarships

1. The Mr. and Mrs. Serge F. Edwards Scholarship ($2,500.00). The beneficiary to be chosen by the donors from the graduates of the Leipsic High School.

2. The Mrs. J. H. Edwards Scholarship ($2,500.00). The beneficiary to be a student preparing for the ministry or some other special work of the church.
3. The George Franklin Getty Scholarship ($1,000.00).
4. The James E. and Caroline Purvis Scholarship ($1,000.00).
5. The Ralph Parlette Scholarship ($1,000.00).
6. The Pleasant Hill Society of the Roundhead Circuit of the Methodist Church Scholarship ($1,000.00).
7. The Justin Brewer Scholarship ($1,000.00).
8. The Rutter-Taggart Scholarship ($2,000.00). Students who are in need of financial assistance, and who have attained scholastic standing in the upper third of their college class are eligible for the income from this scholarship. Preference in awarding this scholarship will be given to students in the College of Law.
9. The Ralph Sealand Scholarship, established by Mrs. Arabella Canfield Sealand, in memory of her son, of $2,415.20, the income of which may be awarded by the president of the University to any undergraduate beyond the freshman year in any college of the University on the basis of need, character, ability, promise of usefulness, and scholastic attainment.
10. The David and Catherine Kegerreis Albright Scholarship ($5,000.00).
11. The Fairchild Scholarship. This scholarship of $500 in cash is awarded annually after a competitive examination. It is open to graduates of the College of Pharmacy that are members of the American Association of Colleges of Pharmacy. The winner of this award must plan to enter graduate study during the year immediately following the award.
12. Presser Foundation Scholarship. A $250.00 scholarship is awarded annually by the Presser Music Foundation of Philadelphia, Pennsylvania. This scholarship is available for students who are interested in the profession of music.

Loan Fund

A limited number of worthy students who are members of the Methodist Church may secure loans from the Student Loan Fund administered by the Board of Education of that Church. Christian character, satisfactory scholarship, promise of usefulness, financial responsibility, and the recommendation of the church to which the applicant belongs are essential to a loan. Each borrower must sign an interest bearing promissory note.

Alumnae Loan Fund for Women

The National Alumnae Association in 1935 established a loan fund for women students. Senior women are given preference by the committee on awards. Details and blanks may be secured from the Dean of Women.
SELF-HELP

It is strongly recommended that every student entering the University should arrange to finance at least one quarter's expenses before entering. This will afford the student an opportunity to come in personal touch with the employers of Ada and provide ample time to begin his academic or professional work. For information concerning scholarships, loans, employment, etc., make application at the offices of the Dean of Men or the Dean of Women.

GENERAL AND DEPARTMENTAL HONORS FOR SCHOLARSHIPS

The names of recipients of general and departmental honors are announced publicly each year on University Recognition Day.

Lehn and Fink, Inc., New York, gives a gold medal to the pharmacy student accomplishing the most toward the advancement of pharmaceutical science.

Mrs. Avanell Stambaugh of Ada, Ohio, gives $20.00 a year for winners in the song contest.

Two prizes of $12.50 each are awarded to the man and woman who excel in scholarship, campus activities, and personal qualities.

Dr. Walter F. Rittman gives $25.00 to the senior engineer having the highest number of quality points.

Hon. Arthur D. Tudor gives $25.00 to the senior having the highest number of quality points in the College of Law.

A prize of $25.00 is awarded to the senior having the highest number of quality points in the College of Liberal Arts.

Mr. C. R. Wilson gives $25.00 to the senior having the highest number of quality points in the College of Pharmacy.

An endowment for a Pharmacognosy prize provides a medal to be awarded annually to the senior in the College of Pharmacy having the highest number of quality points in Pharmacognosy.

GOVERNMENT

Students of the University are expected to possess qualities of character and to maintain certain levels of scholarship. The rules and regulations of the University pertaining to conduct and scholarship are enforced. Students may be dismissed for moral delinquencies and for continued low scholarship. Students who obviously are at variance with the spirit and ideals of the institution may be dismissed for the good of the University, even though no specific offense be charged against them.
The opportunities and advantages of the University are offered to all sincerely desiring to develop the best in themselves, and aiming at a broad culture and a thorough preparation for useful service.

The University aims to develop a wholesome type of physical, social, intellectual, moral and religious life. It believes the best preparation for life is that which furnishes opportunity during college days for students to come in contact with men and women of high ideals, broad culture, and sympathetic understanding of life. All the activities of the University therefore are devoted to the development of men and women so that they may find places of real happiness and usefulness in the modern world.

With this objective in mind the University does not seek to impose burdensome restrictions, but it does seek and expect full cooperation on the part of the faculty and students in the achievement of these ideals.

**Warning and Probation**

It should be the aim of each student to maintain a scholarship rating equivalent to at least one quality point for each credit hour for which he is registered. This is the minimum graduation standard throughout the University.

The average scholarship rating in terms of quality points is found by dividing the total number of scheduled hours for which the student has registered into the total number of quality points earned. For example, 50 scheduled hours and 75 quality points indicate a scholarship rating of 1.5; 16 scheduled hours and 8 quality points indicate a scholarship rating of 0.5.

Freshmen making a scholarship rating of less than 0.5 quality points per scheduled hour, sophomores and juniors making less than 0.7 quality point per scheduled hour, and seniors making less than 1.0 quality point per scheduled hour during the quarter are sent a notice of warning from the office of the Dean. If the student should again fail to meet the standards in the quarter for which he is warned, he is placed on probation for the following quarter of residence, with the request that his scholarship be brought up to at least one quality point average for each hour scheduled. Failure to meet this academic requirement will subject the student to the action of the Academic Council.

**Grade Marks and Quality Points**

The credit value of a course is expressed in hours, an hour of credit being given for the satisfactory completion of work requiring one class exercise a week for one quarter. It is equivalent to two-thirds of a semester hour.
The following grade and points system is in effect: Grade A, Excellent, 3 points; B, Good, 2 points; C, Average, 1 point; D, Passing, 0 points; F, Failed, 0 points; I, Incomplete; X, absent from examination.

Eligibility

Students on probation for any cause shall not represent in a public manner, the University, their class, or any University organization in any extra-curricular activity.

To be eligible for the office of president or vice president of the Sophomore, Junior or Senior class, editor or business manager of the *Northern Review*, editor or business manager of the *University Annual*, president of the Y. M. C. A. or Y. W. C. A., the candidate must have a scholarship rating of at least one and one-half (1 1/2) quality points per hour.

Expenses

No matriculation or entrance fee is required to enter the University.

Tuition

Tuition for instruction in the University is $30.00 per quarter in the College of Liberal Arts, and the Division of Teacher Training; and $35.00 per quarter in Public School Music and in the Colleges of Law, Engineering, and Pharmacy.

General Fee

A general fee of $20.00 per quarter is charged for all colleges at the time tuition is paid. This fee is not refundable and includes in general all costs exclusive of instruction such as cost of administration, maintenance of plant, and such other expenses as are incidental to the operation of the University.

Summary of Tuition and Other Fees

*One Quarter—Twelve Weeks*

<table>
<thead>
<tr>
<th>Tuition</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberal Arts, 11 to 16 credit hours</td>
<td>$30.00</td>
</tr>
<tr>
<td>Education, 11 to 16 credit hours</td>
<td>30.00</td>
</tr>
<tr>
<td>Engineering, 11 to 19 credit hours</td>
<td>35.00</td>
</tr>
<tr>
<td>Law, 11 to 16 credit hours</td>
<td>35.00</td>
</tr>
<tr>
<td>Music, 11 to 16 credit hours</td>
<td>35.00</td>
</tr>
<tr>
<td>Pharmacy, 11 to 17 credit hours</td>
<td>35.00</td>
</tr>
<tr>
<td>Public School Music—B. S. in Education</td>
<td>35.00</td>
</tr>
</tbody>
</table>

Tuition for each credit hour above the maximum or below the minimum as indicated above ........................................... 5.00

General Fee in All Colleges ....................................... 20.00

Activity Fee .......................................................... 5.00
<table>
<thead>
<tr>
<th>Course Description</th>
<th>Non-Returnable</th>
<th>Subject to Refund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditing Course (per 3 credit hours)</td>
<td>$2.50</td>
<td></td>
</tr>
<tr>
<td>Biology 101, 102, 103, 106, 107, 108, 109, 218, 219</td>
<td>3.00</td>
<td></td>
</tr>
<tr>
<td>Biology 113</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td>Biology 222</td>
<td>3.50</td>
<td></td>
</tr>
<tr>
<td>Change of Schedule</td>
<td>$1.00</td>
<td></td>
</tr>
<tr>
<td>Chemistry 101, 102, 103, 1018, 102a, 103a</td>
<td>4.00</td>
<td>$5.00</td>
</tr>
<tr>
<td>Chemistry 104, 105, 106, 211a, 211b, 212</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Chemistry 206, 207, 208</td>
<td>5.00</td>
<td>7.00</td>
</tr>
<tr>
<td>Engineering Fees:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil Engineering 211, 213, 311, 321</td>
<td>3.50</td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineering 321, 322</td>
<td>4.00</td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineering 333</td>
<td>3.00</td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineering 442</td>
<td>3.50</td>
<td></td>
</tr>
<tr>
<td>Electrical Engineering 311, 312, 313, 411, 412, 413, 441, 442</td>
<td>4.00</td>
<td></td>
</tr>
<tr>
<td>General Library</td>
<td>3.00</td>
<td></td>
</tr>
<tr>
<td>Geography 155</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Graduation</td>
<td>10.00</td>
<td></td>
</tr>
<tr>
<td>Health Service</td>
<td>3.00</td>
<td></td>
</tr>
<tr>
<td>Industrial Arts 101</td>
<td>2.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Industrial Arts 115, 116, 117</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Industrial Arts 118</td>
<td>2.00</td>
<td></td>
</tr>
<tr>
<td>Industrial Arts 220, 210, 240</td>
<td>3.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Industrial Arts 235, 225</td>
<td>2.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Industrial Arts Special Problems (per credit hour)</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Late Registration</td>
<td>3.00</td>
<td></td>
</tr>
<tr>
<td>Law Library</td>
<td>5.00</td>
<td></td>
</tr>
</tbody>
</table>

*Music*

- Choir                                      | 1.00          |
- History and Appreciation 153, 154, 155      | 1.00          |
- Orchestral Instruments 220, 221, 222        | 3.00          |
- Organ Rent (one hour per day)               | 12.00         |
- Practice Room                              | 1.50          |
- Public School Music 124, 125, 126            | 1.00          |

**Private Lessons:**

- Voice, Piano, Organ, Violin, Reed, or Brass, two lessons per week | $35.00       |
- One lesson per week                                      | 20.00        |
- Single lesson                                             | 2.00         |
- Pharmacognosy 101, 102, 103, 151, 152, 153              | 1.00         | 2.00          |
- Pharmacognosy 275, Fee and deposit depend upon the nature of the investigation |           |
- Pharmacology 101, 102, 103, 201, 202, 203, 207, 208, 209 | 1.00         | 2.00          |
- Pharmacology 251                                         | 2.00         |
- Pharmacology 275, Fee and deposit depend upon the nature of the investigation |           |
- Pharmacy 151, 152, 153                                  | 3.00         | 5.00          |
- Pharmacy 201, 201a, 202                                | 2.00         |
- Pharmacy 204, 205, 206                                 | 3.00         |
- Pharmacy 207, 208, 209                                 | 4.00         |
- Pharmacy 249, 251, 252, 253                            | 2.00         |
- Pharmacy 275, Fee and deposit depend upon the nature of the investigation |           |
- Physical Education                                      | 2.00         |
Physics 104, 105, 106, 109a, 110a, 111a ........................................... 3.00
Physics 216, 217, 218 (per credit hour) ........................................... 1.00
Practice Teaching (6 credit hours) .............................................. 25.00
Speech:
   Private Lessons 150 (one lesson per week) ................................... 15.00
   Private Lessons 250 (for Speech majors only, one-half credit hour) .... 5.00
   Special Examination (3 hours) ................................................. 2.50
   Typewriting ........................................................................... 3.00

*Note: Private lesson costs do not apply to music majors whose private lessons are included in their tuition and general fees.

In addition to the non-returnable fees in Chemistry and Pharmacy, a breakage ticket costing $1.50 to $7.00 must be purchased to reimburse the department for broken apparatus and non-returnable chemicals and supplies. The unused portion of the ticket will be refunded to the student upon completion of the course.

High school students will be charged $20.00 per quarter for two lessons per week, and $12.00 per quarter for one lesson per week; single lesson, $1.25.

No diploma, certificate, transcript, letter of honorable dismissal or recommendation will be granted to students who have an unadjusted indebtedness to the University or to organizations connected in any way with the University.

A student suspended or dismissed from college, or withdrawing when under investigation for misconduct, is not entitled to any refund of tuition. Students failing to pay tuition on the assigned days will be charged $3.00. This does not apply to new registrants.

Refunds when allowed shall be made as follows:
   During the first two weeks ...................................................... 80%
   During the third and fourth weeks .......................................... 60%
   During the fifth and sixth weeks ........................................... 40%
No refunds are made on fees.
No refunds are made after six weeks. Written notice of withdrawal must be sent to the Treasurer’s Office; refunds are made as of date of receipt of notice.

Rooms and Board

Rooms are available in Ada at very reasonable prices, ranging from $1.50 to $3.00 per week. Board may be secured at prices from $4.00 to $6.00 per week.

In order to insure good, wholesome food and plenty of it at the very least possible cost to the student, board at the University restaurant, which
is operated under private management, is furnished at a remarkably low fee, by the day or week, average costs per week ranging from $4.00 to $5.00 for twenty-one meals.

Very many students when members of fraternities or sororities find comfortable rooms and good board in the various fraternity and sorority houses.

Rooms are obtainable in Turner Hall from $25.00 to $33.00 per quarter for each student, payable in advance. A deposit of $5.00 should be sent with application. The deposit will be kept as a fee to cover breakage until the end of the college year or until the expiration of residence. No room will be leased for less than one quarter.

NOTE: Immediately upon arrival, women should report to the Dean of Women and men to the Dean of Men for an official list of recognized householders.

ADMINISTRATION

Admission

Application for admission should be made on the blank which will be found at the back of this catalogue. This should be filled out in full and mailed to the office of the Registrar.

All necessary information not contained in this catalogue will be mailed to the prospective student.

Graduates of first grade high schools, approved academies, or preparatory schools, who present fifteen certified and properly distributed units will be admitted to any of the colleges of the University except the College of Law. (See individual college section for proper distribution of units and other entrance requirements.)

Only men and women of good moral character are admitted to the University. Students submitting transcripts from other colleges or universities must furnish evidence of honorable dismissal. Work from schools of lower rank will be evaluated by the Committee on Admissions. Students transferring from another school will not be granted admission in the absence of official transcript.

The credited statement of entrance units sent by the principal of the school directly to the University must be in the office of the University Entrance Examiner at least ten days prior to the opening of the quarter, to avoid delay in registration.
Students who are deficient in credits may take entrance examinations the first day of the quarter if they make application in advance.

Mature students not working for a degree may be admitted to the University provided they give satisfactory evidence that they are qualified to pursue the subjects in which they are interested. If such "special students" desire to become candidates for a degree they must qualify before the end of the first year's residence.

Advisers

Upon admission to the University each student is placed in charge of an adviser. The adviser, a member of the faculty, is appointed by the Dean of his college.

The duty of the adviser is to counsel the student in regard to the planning of courses, the selection of studies, and to aid him in the problems of his college life and work.

After completing 90 quarter hours the student must elect the department in which he desires to major, and the professor in charge of that department then becomes his adviser.

Pre-Registration and Registration

Pre-registration and registration days are indicated in the calendar. Pre-registration is devoted to conferences with advisers and making the student's schedule of classes for the following quarter. Registration day is given over to the payment of tuition. Failure to attend to these duties on the proper day will subject the student to an extra fee of $3.00 for late registration. This does not apply to new registrants. Students who register after registration day may find it necessary to reduce the number of credit hours. Reduction will be made in proportion to the time lost.

Attendance

Regular and prompt attendance at all class and laboratory exercises is expected of every student. The student is responsible to the instructor for all work missed on account of absence. Instructors make a daily report of all absences to the Dean of Men or the Dean of Women.

Requests for excuses must be presented in writing to the Dean of Men or the Dean of Women within 24 hours after class or laboratory work is resumed. All excuses for absence due to illness must be obtained from the University physician. Instructors are not authorized to grant excuses for absences from their classes.
For each unexcused absence from class or laboratory appointments, the total number of quality points earned during the quarter is reduced by one-half point. Absences the day before or the day after a regular college holiday or recess involve the deduction of one quality point for each absence.

Chapel attendance is required except when excused by the Dean of Men or Dean of Women. Three unexcused absences are allowed each quarter.

One-fifth hour credit is deducted from the student’s total credit for each convocation missed above three.

**Withdrawing a Course**

The student is held responsible for the work scheduled on the registration card. No course may be dropped or changed except by consent of the Dean and the student’s adviser. Withdrawal from a course without proper procedure shall be checked as a failure in the course.

In case a student wishes to drop or change a course, it must be done within the first week of the quarter. A charge of $1.00 is made for each withdrawal or addition of a course.

Any student wishing to withdraw from the College in which he is registered must notify the Dean of his intentions. Failure to do this will jeopardize the standing of the student.

**Examinations**

1. Mid-term examinations are held at the discretion of the instructor. Final examinations are held at the close of each quarter.

2. All students must be present at final examinations. Absence from any final examination, unless caused by sickness or other unavoidable conditions, will result in no credit for the course.

3. A student absent from examinations may on presenting a satisfactory excuse receive permission from the Dean to take the examination at a later time.

4. All “X” grades must be removed within the first eight weeks of the next quarter in attendance to obtain credit without repeating the work in class.

5. All required courses in which a grade of F is made must be taken again in the class the first quarter in which the subject is given after the failure occurs.

6. All incompletes must be removed within eight weeks of the beginning of the next quarter in attendance in order to obtain credit without
again taking the work in class. In case this matter is not attended to, the mark will lapse into a failure.

**Extension Courses**

In order to meet the needs of teachers in service and others the University maintains an Extension Department. Classes will be organized in centers where there is sufficient demand. Students enrolling in these courses are expected to do the regular college work. No courses are offered by correspondence.

Not more than one-fourth of any curriculum leading to a degree or diploma shall be taken in extension classes.

For information write the Director of Extension Courses.

**Departments of Instruction**

The organization of the departments of instruction in the University is as follows:

The George Franklin and Sarah Catherine Getty College of Liberal Arts, including the Division of Teacher Training.
The College of Engineering.
The Warren G. Harding College of Law.
The College of Pharmacy.

**Degrees**

The work of the University is entirely undergraduate.

In order to graduate in any course the student must have one quality point per scheduled hour.

No student who has not been in residence for at least three quarters may be a candidate for a degree.

Final credits offered toward graduation must be earned in residence, except for students completing arts-professional combination courses.

Application for senior rating and graduation must be made to the Registrar at the end of the junior year.

The appropriate bachelor's degree is given upon the completion of courses as outlined in the four colleges of the University.

A diploma is given in the three-year course in education.

As a condition for graduation the University insists upon a satisfactory use of English.
Degrees are conferred at the commencement exercises which are held at the close of the Spring quarter. Seniors who have finished their work at the close of any previous quarter are expected to be present at the commencement exercises. Those whose work will be finished by the close of the Summer School are entitled to the privileges of the senior class, but their diplomas are not issued until the requirements for graduation are fully met.

Senior Honors

Two classes of senior honors are recognized and conferred at graduation: honors with distinction granted to those who have a quality point average of 2.3 with no grade below D; and honors with high distinction granted to those who have a quality point average of 2.6 with no grade below C. These honors in scholarship are recorded on the diplomas, recognition is given at commencement, and the names of the recipients are printed in the catalogue. To receive senior honors a student must be in residence at Ohio Northern at least six quarters.
THE GEORGE FRANKLIN
AND SARAH CATHERINE GETTY
COLLEGE OF LIBERAL ARTS

Harvey Evert Huber
Dean
ADMISSION TO COLLEGE OF LIBERAL ARTS

Candidates of good moral character may apply for admission upon the following plans:

1. **Certificate.** Graduates from first grade high schools or accredited academies whose credits show proper distribution of units are admitted, without examination, on presentation of properly signed entrance certificates. Blanks for this purpose may be had by addressing the Registrar. Students deficient in some of the units for admission may be admitted upon examination.

2. **Advanced Standing.** An applicant from another college seeking advanced standing must present evidence of honorable dismissal, and an official transcript of his college record.

3. **Special Students.** Mature persons without special preparation not desiring to earn a degree may enter any department and pursue the studies they choose, if, on consultation, the head of the department is satisfied that they have sufficient preparation to pursue the work successfully. Such applicants are classified as special students.

**Entrance Requirements**

Fifteen units of high school work are required for unconditional admission to the college, ten units of which should be in the following groups of subjects:

(a) English Composition and English Literature.
(b) Foreign Language (classical or modern.)
(c) Natural Science.
(d) History and Social Science.
(e) Mathematics (algebra and geometry; 2 units.)

The remaining five units may be offered from the above groups or from any other subjects accepted toward graduation from the high school. If the student presents fifteen acceptable units for entrance but is deficient in certain of the prescribed units, the deficiencies as far as possible shall be made up as part of the regular work of the freshman year. Deficiencies must be made up outside the college schedule, necessitating a reduction of the number of college courses carried while making up entrance deficiencies.

**Divisions and Departments**

For purposes of administration, correlation and integration the departments of the college are organized into divisions as follows:
Division I—Language, Literature and Arts.
   (a) English Language, Literature and Speech.
   (b) Foreign Language and Literature.
   (c) Music.

Division II—Natural Sciences.
   (a) Biology.
   (b) Chemistry.
   (c) Mathematics.
   (d) Physics.

Division III—Social Sciences.
   (a) Economics and Business Administration; Secretarial.
   (b) Health and Physical Education.
   (c) History and Political Science.
   (d) Psychology and Sociology.
   (e) Religion and Philosophy.

Division IV—Teacher Training.
   (a) Elementary Education.
   (b) Secondary Education.
   (c) Commercial Education.
   (d) Health and Physical Education.
   (e) Industrial Arts Education.
   (f) Public School Music.

Under each division heading (pages 62, 79, 87, and 103) in the Liberal Arts section of this bulletin dealing with description of courses is found a general statement which is of great importance to the student. This statement calls attention to the courses that should be selected as a background preparation for advanced and intensive work in that particular division. Likewise, under the appropriate departmental heading there is a more detailed statement referring to the various courses that should be elected (some of them during freshman and sophomore years) to prepare the student for work in that department. The curriculum, therefore, will be shaped to meet as far as possible the needs, interests, and abilities of the individual student.

Division Electives

Freshmen and sophomores are given considerable freedom in the choice of courses. It is possible for the student to select such subjects for study as will serve his best interests and capacities.

In order that the curriculum may be interesting, broad and cultural,
yet flexible enough to allow preparation for the various professions and needs of life, the student during his first two years in college, is required to select two complete year courses in each of the first three divisions outlined above, the remainder of the work in these years being elective from any course open to a student of this rank. Ordinarily the first year schedule will include at least one year course from each division plus one or more electives.

The group electives are to be made as follows:

**FROM DIVISION I—LANGUAGE, LITERATURE AND ARTS**
Nine hours of English Composition must be scheduled during the freshman year. The remaining nine hours may be elected from English Literature or Speech. Minimum in this division is 18 hours.

**FROM DIVISION II—NATURAL SCIENCES**
Two complete year courses must be elected. Minimum in this division is 18 hours.

**FROM DIVISION III—SOCIAL SCIENCES**
Two complete year courses must be elected. Six hours of Bible are required and should be scheduled during sophomore or junior year. Bible can not be used toward satisfying the social science requirement unless nine hours are completed. Physical education is required of all students during the first six quarters in residence, with one hour of credit each quarter, but can not be used toward satisfying this division requirement. Minimum in this division is 18 hours.

**FROM DIVISION IV—TEACHER TRAINING**
Students preparing to teach in the public schools are required to meet the professional requirements in Education as indicated under this division in a later section (page 103) of this bulletin.

**MAJOR AND MINOR**

At the beginning of the third year the student is ready to choose, if he has not already done so, one division and the department or departments within this division in which he desires to complete his major or minor, or the field of concentration. For example, a prospective chemist would choose Division II—Natural Sciences, Department of Chemistry.

The candidate for a degree must complete in a logical sequence a major of not less than 36 quarter hours and a minor of not less than 24 quarter hours. The adviser will assist the student in planning the major and minor, or the field of concentration. Candidates for the Bachelor or Arts degree who expect to teach in the public schools must meet the requirements for the major and minors as specified in the Division of Teacher Training.

**ELECTIVES IN OTHER COLLEGES OF THE UNIVERSITY**

In the College of Engineering, the College of Pharmacy, and the College of Law there are many courses described, a limited number of which may be elected by students registered in the College of Liberal Arts, thus
enabling them more fully to prepare for specific vocational objectives. The student must have junior rank before electing courses in the College of Law. Students who have professional ends in view should not overlook the opportunity to elect some courses in the other colleges of the University.

GRADUATION

As a condition of graduation with the Bachelor's degree, a student must complete 186 quarter hours (including six hours of physical education), this being the equivalent of fifteen or sixteen class exercises a week for twelve quarters. The student must have an average scholarship rating of at least one quality point for each scheduled hour.

A residence period of three quarters and the completion of 45 quarter hours, elected largely from "200" courses, in the College of Liberal Arts of this University are minimum requirements for a student admitted on advanced standing.

Students of unusual ability may, with the consent of the faculty of the College of Liberal Arts, complete their work in less than twelve quarters. Applicants for this privilege must have an average of 2.6 quality points per hour.

**Note:** By continuing in residence during summers the entire college course may be completed in three years.

**General Regulations**

1. The student may not register for more than sixteen or seventeen hours of work unless he has received a rating of B or better in the preceding quarter. If the previous record of the student shows that he is able, the Dean may grant extra hours.

2. Candidates for the Bachelor of Arts degree must complete a minimum of six quarter hours of work in Bible.

3. The student must notify the Dean of his choice of a major before registering for the junior year. The Dean will then name an adviser for the student.

4. No course in which a student has received a grade of D is accepted toward a major.

5. Seniors taking certain freshman courses are not given full credit. Seniors electing freshman courses should consult the Dean.

6. Juniors and seniors are requested to schedule a majority of their courses from the "200" group.
7. Classification. The minimum requirements for sophomore standing are 38 credit hours and a point average of 0.5; for junior standing, 84 credit hours and a point average of 0.7; for senior standing, 130 credit hours and a point average of 0.9.

8. Not more than one-fourth of any curriculum leading to a degree or diploma shall be taken in extension classes.

9. Application for senior rating and graduation must be made to the Registrar at the end of the junior year.

Courses Open to Freshmen

Botany 107-109, 110
Business Organization 103-105
Chemistry 101a-103a; 101-103
Education: Primary and Intermediate
English 101, 102, 102a
French 101-103
French 104a-106a (as prepared)
German 101-103
German 104a-106a (as prepared)
Health Education 117
History 104-106
History 110-112
Hygiene 115

Industrial Arts 101
Latin 107-109 or 110-112
Mathematics 100, 101, 101a, 103, 103b, 105
Mathematics of Finance 121
Mechanical Drawing 111-113
Music: Theoretical and Applied
Physical Education 101-103
Physics 109-111, 109a-111a
Political Science 104-106
Speech 101-103
Stenography
Typewriting
Zoology 101-103

Suggested Curricula for Several Academic and Pre-professional Courses

Arts-Medicine Curriculum

Upon the completion of nine quarters of work in the College of Liberal Arts, prospective medical students may be granted a leave of absence for the senior year, and receive the Bachelor of Arts degree upon the successful completion of the first year of work in the medical school. This means a saving of at least one year of time. Pre-medical students are urged to give favorable consideration to the combination curriculum and receive both the Bachelor of Arts degree from this institution and the professional degree from the medical school.

At least 140 quarter hours, exclusive of physical education, are required, which must include the required and group elective courses for the Bachelor of Arts degree. A scholarship average of at least 1.5 points per hour is desired for recommendation to a medical school. At least 90 quarter hours must be completed in this institution.
A medical aptitude test, prepared under the auspices of the American Medical Association, is given during the college year to students who plan to enter medical schools the following autumn.

**First Year**

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 101</td>
<td>Physical Education 102</td>
<td>Physical Education 103</td>
</tr>
<tr>
<td>English 101</td>
<td>English 102</td>
<td>English 1022</td>
</tr>
<tr>
<td>French or German</td>
<td>French or German</td>
<td>French or German</td>
</tr>
<tr>
<td>Chemistry 101 or 1012</td>
<td>Chemistry 102 or 1022</td>
<td>Chemistry 103a or 103</td>
</tr>
<tr>
<td>Biology 101</td>
<td>Biology 102</td>
<td>Biology 103</td>
</tr>
<tr>
<td>Elective</td>
<td>Elective</td>
<td>Elective</td>
</tr>
</tbody>
</table>

**Second Year**

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 104</td>
<td>Physical Education 105</td>
<td>Physical Education 106</td>
</tr>
<tr>
<td>Chemistry 104</td>
<td>Chemistry 105</td>
<td>Chemistry 106</td>
</tr>
<tr>
<td>Psychology 101</td>
<td>Psychology 102</td>
<td>Psychology 104 or 210</td>
</tr>
<tr>
<td>Biology 106</td>
<td>Biology 113</td>
<td>English 108 or 1222</td>
</tr>
</tbody>
</table>

**Third Year**

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>English or Speech</td>
<td>English 211</td>
<td>Embryology 218</td>
</tr>
<tr>
<td>Physics 109 and 1092</td>
<td>Physics 110 and 1102</td>
<td>Physics 111 and 1112</td>
</tr>
<tr>
<td>Chemistry 206</td>
<td>Chemistry 207</td>
<td>Elective</td>
</tr>
<tr>
<td>Bible 151</td>
<td>Bible 152</td>
<td>Elective</td>
</tr>
</tbody>
</table>

**Arts-Nursing Curriculum**

Arrangements have been made for a combined curriculum in Liberal arts and Nursing with St. Luke's Hospital School of Nursing, Cleveland, Ohio. The plan calls for five years of study and can be completed in five calendar years. During the academic program of three years spent at Ohio Northern University, the student completes the course as outlined below. The professional course requires thirty months in residence at St. Luke's, consisting of twenty-seven and one-half months of instruction with ten weeks of vacation. The student has her first professional experience during the three summer months following her sophomore year. After the completion of the junior year in college she again enters St. Luke's for the summer and continues for the remainder of her professional work. The completion of the arts-nursing curriculum leads to the Bachelor of Arts degree and a diploma in nursing. Students who elect this combination curriculum will be expected to do better than average quality work while in college and to have those personal and social qualities which are so essential to success in the field of nursing.
Ohio Northern University

First Year

Winter Quarter
1 Physical Education 102
3 English 102
3 Biology 102
2 Political Science 105
2 Chemistry 102a or 102
Elective (Foreign Language or Mathematics)

Spring Quarter
1 Physical Education 103
3 English 102a
3 Biology 103
2 Hygiene 115
5 Chemistry 103a or 103
Elective (Foreign Language or Mathematics)

Second Year

Winter Quarter
1 Physical Education 105
5 Biology 113
5 Chemistry 207
5 Bacteriology 222

Spring Quarter
1 Physical Education 106
5 Biology 218
5 Bacteriology and Health 223
5 Bible 153
Elective

Third Year

Winter Quarter
3 Sociology 152
5 Psychology 102
3 English 211
3 Ethics 203
3 Elective

Spring Quarter
3 Sociology 211 or 212
5 Psychology 210
3 Biology 230
3 English 212
2 Elective

Chemistry Majors Curriculum

The teaching profession and the industries as well as the field of research offer many fine opportunities to persons who have good preparation in this and related divisions of learning. The curriculum herein recommended is intended to prepare the student, who is scientifically inclined, to avail himself of these opportunities, and to create in his mind the desire to continue advanced study in the graduate school or research laboratory. Adjustment of the curriculum, to accommodate the student who desires to qualify as a teacher of chemistry in the public schools, will be made, provided this desire is indicated prior to the beginning of the junior year.

First Year

Winter Quarter
1 Physical Education 102
5 Chemistry 102 or 102a
3 English 102
5 Mathematics 103 or 103b
4 Mechanical Drawing 112

Spring Quarter
1 Physical Education 103
5 Chemistry 103 or 103a
3 English 102a
5 Mathematics 105
Elective

Second Year

Winter Quarter
1 Physical Education 105
5 Chemistry 105
3 English 222
5 Mathematics 108
5 Physics 105

Spring Quarter
1 Physical Education 106
5 Chemistry 106
3 English 118
5 Mathematics 109
5 Physics 106

Fall Quarter
Physical Education 101
Chemistry 101 or 101a
English 101
Mathematics 100 or 101
Mechanical Drawing 111

Fall Quarter
Physical Education 104
Chemistry 104
Speech 101
Mathematics 107
Physics 104

Fall Quarter
Physical Education 104
Chemistry 104
Speech 101
Mathematics 107
Physics 104
### Third Year

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 206</td>
<td>5 Chemistry 207</td>
<td>5 Chemistry 208</td>
</tr>
<tr>
<td>Economics 121</td>
<td>3 Economics 122</td>
<td>3 Economics 123</td>
</tr>
<tr>
<td>Modern Language</td>
<td>3 Modern Language</td>
<td>3 Modern Language</td>
</tr>
<tr>
<td>Elective</td>
<td>5 Elective</td>
<td>5 Elective</td>
</tr>
</tbody>
</table>

### Fourth Year

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bible 151</td>
<td>3 Bible 152</td>
<td>3 Bible 153</td>
</tr>
<tr>
<td>Chemistry 211a</td>
<td>5 Chemistry 211b</td>
<td>5 Chemistry 212</td>
</tr>
<tr>
<td>Chemistry 215</td>
<td>3 Chemistry 216</td>
<td>3 Chemistry 217</td>
</tr>
<tr>
<td>Modern Language</td>
<td>3 Modern Language</td>
<td>3 Modern Language</td>
</tr>
<tr>
<td>Physics 216-217</td>
<td>3 Physics 217-218</td>
<td>3 Physics 214</td>
</tr>
</tbody>
</table>

Students who wish to major in chemistry, but who do not present chemistry for entrance will do courses 101a, 102a, and 103a. In addition non-credit courses 101b, 102b, and 103b will be required. This sequence then will be considered the equivalent of courses 101, 102, and 103.

German is advised and will generally be required to fulfill the modern language schedule.

Students who are specially interested in physical chemistry and who plan to do graduate work in the field should in the junior year elect advanced courses in mathematics; those who plan later to do work in biochemistry or agricultural chemistry would do well to elect courses in biology; and those who are preparing to teach chemistry should elect courses in education and psychology. In the senior year candidates for the Bachelor of Science in Education degree should omit Bible 151, 152, 153 and Physics 216, 217, 218, and 214, and elect appropriate courses in education instead. If a minor in physics is desired, Physics 220 should be elected.

### Economics and Business Administration Curriculum

With the increasing complexity of industry and commerce, the system of apprenticeship as a method of business training has become less satisfactory. Greater opportunity in business is therefore open to the college man with business training.

The following curriculum has been planned to meet the needs of students who expect to do graduate work in economics or business administration or who intend to enter industry after graduation from college.
First Year

**FALL QUARTER**
- Physical Education 101 1
- English 101 3
- Mathematics 100 or 101 5
- Natural Science 3-5
- Speech 101 or Political Science 104 2-3
- Business Organization 103 2

**WINTER QUARTER**
- Physical Education 102 1
- English 102 3
- Mathematics 103 or 103b 5
- Natural Science 3-5
- Speech 102 or Political Science 105 2-3
- Business Organization 104 2

**SPRING QUARTER**
- Physical Education 103 1
- English 102a 3
- Mathematics 112 or 121 3-5
- Natural Science 3-5
- Speech 103 or Political Science 106 2-3

Second Year

**FALL QUARTER**
- Physical Education 104 1
- Economics 121 3
- English or Speech or Natural Science 3-5
- Accounting 131 3
- Psychology 101 5
- Bible 151 3

**WINTER QUARTER**
- Physical Education 105 1
- Economics 122 3
- English or Speech or Natural Science 3-5
- Accounting 132 3
- Psychology 102 5
- Bible 152 3

**SPRING QUARTER**
- Physical Education 106 1
- Economics 123 3
- English or Speech or Natural Science 3-5
- Accounting 133 3
- Social Science 3
- Electives 3-5

Third Year

**FALL QUARTER**
- Economics or Business 204 or 251 3
- Economics and Business 214 3
- Accounting 231 5
- Electives 3-5

**WINTER QUARTER**
- Economics and Business 207 or 241 3
- Economics and Business 215 3
- Accounting 232 5
- Electives 3-5

**SPRING QUARTER**
- Economics and Business 208 or 242 3
- Economics and Business 217 3
- Accounting 233 3-5
- Electives 3-5

Fourth Year

**FALL QUARTER**
- Economics or Business 204 or 251 3
- Business Law 221 3
- Electives 9-10

**WINTER QUARTER**
- Economics and Business 207 or 241 3
- Business Law 222 3
- Electives 9-10

**SPRING QUARTER**
- Economics and Business 208 or 242 3
- Business Law 223 3
- Electives 9-10

The objective which the individual student seeks will determine electives chosen. For example, if accounting is the student's objective additional courses in this field will be elected. If the field is sales then electives should include: retailing, salesmanship, and advertising. If general business training is desired electives will be in the field of finance and management. In all cases electives chosen must have the approval of the adviser and Dean.

Curriculum in Business Administration and Law

This program is planned for students who plan to enter businesses which require in addition to a knowledge of the commercial world some training in legal subjects. This curriculum is so designed that the major in business administration can be completed in three years and the senior year can be devoted full-time to selected courses in the college of law which will be of great aid to the modern business man. This curriculum is open only to students of above average ability.
First Year

**Fall Quarter**
- Physical Education 101
- English 101
- Mathematics 100 or 101
- Natural Science 5
- Business Organization 103
- Political Science 104 or Speech 101
- 2-3

**Winter Quarter**
- Physical Education 102
- English 102
- Mathematics 103 or 103b
- Natural Science 3-5
- Business Organization 104
- Political Science 105 or Speech 102
- 2-3

**Spring Quarter**
- Physical Education 103
- English 102a
- Mathematics 121
- Natural Science 3-5
- Business Organization 105
- Political Science 106 or Speech 103
- 2-3

Second Year

**Fall Quarter**
- Physical Education 104
- Economics 121
- Political Science 101
- Psychology 101
- Accounting 131
- Bible 151
- 3

**Winter Quarter**
- Physical Education 105
- Economics 122
- Political Science 102
- Psychology 102
- Accounting 132
- Bible 152
- 3

**Spring Quarter**
- Physical Education 106
- Economics 123
- Political Science 103
- Business Writing 112
- Accounting 133
- Electives 3
- 3-5

Third Year

**Fall Quarter**
- Accounting 231
- Economics 204 or 251
- Economics 214
- English or Speech
- Electives 2-3

**Winter Quarter**
- Accounting 232
- Economics 207 or 241
- Economics 215
- English or Speech
- Electives 2-3

**Spring Quarter**
- Accounting 233
- Economics 208 or 242
- Economics 217
- Political Science 103
- English or Speech
- Electives 2-3

Fourth Year

**Fall Quarter**
- Contracts I
- Personal Property
- Torts I
- Business Organization I
- 3

**Winter Quarter**
- Contracts II
- Real Property I
- Torts II
- Suretyship or Taxation
- 3

**Spring Quarter**
- Real Property II
- Agency
- Negotiable Instruments
- 5

Physics Majors Curriculum

The curriculum as given is suggested for those expecting to do graduate work in physics. For those wishing to teach the physical sciences in the public schools, the curriculum may readily be modified if psychology is taken in the second year, and the professional courses in education during the junior and senior years.

First Year
### Ohio Northern University

#### Second Year

<table>
<thead>
<tr>
<th><strong>Fall Quarter</strong></th>
<th><strong>Winter Quarter</strong></th>
<th><strong>Spring Quarter</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 104</td>
<td>Physical Education 105</td>
<td>Physical Education 106</td>
</tr>
<tr>
<td>Physics 104</td>
<td>Physics 106</td>
<td>Physics 105</td>
</tr>
<tr>
<td>Mathematics 107</td>
<td>Mathematics 108</td>
<td>Mathematics 109</td>
</tr>
<tr>
<td>Modern Language</td>
<td>Modern Language</td>
<td>Modern Language</td>
</tr>
<tr>
<td>English 106</td>
<td>English 107</td>
<td>English 108</td>
</tr>
</tbody>
</table>

#### Third Year

<table>
<thead>
<tr>
<th><strong>Fall Quarter</strong></th>
<th><strong>Winter Quarter</strong></th>
<th><strong>Spring Quarter</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics 216</td>
<td>Physics 217</td>
<td>Physics 218</td>
</tr>
<tr>
<td>Mathematics 216</td>
<td>Mathematics 212</td>
<td>Mathematics 215</td>
</tr>
<tr>
<td>Chemistry 101 or 101a</td>
<td>Chemistry 102 or 102a</td>
<td>Chemistry 103 or 103a</td>
</tr>
<tr>
<td>Modern Language</td>
<td>Modern Language</td>
<td>Modern Language</td>
</tr>
</tbody>
</table>

#### Fourth Year

<table>
<thead>
<tr>
<th><strong>Fall Quarter</strong></th>
<th><strong>Winter Quarter</strong></th>
<th><strong>Spring Quarter</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics 213</td>
<td>Physics 220</td>
<td>Physics 214</td>
</tr>
<tr>
<td>Chemistry 206</td>
<td>Chemistry 207</td>
<td>Chemistry 208</td>
</tr>
<tr>
<td>Physics 216</td>
<td>Physics 217</td>
<td>Physics 218</td>
</tr>
<tr>
<td>Bible 151</td>
<td>Bible 152</td>
<td>Elective</td>
</tr>
</tbody>
</table>

#### Pre-Dental Curriculum

Dental schools require two years of collegiate work, consisting of at least 90 quarter hours (60 semester hours). The required courses are incorporated in the two-year curriculum outlined below. Suggested electives are political science, mathematics, English literature or speech, mechanical drawing, ethics, psychology, history, and foreign language.

#### First Year

<table>
<thead>
<tr>
<th><strong>Fall Quarter</strong></th>
<th><strong>Winter Quarter</strong></th>
<th><strong>Spring Quarter</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 101</td>
<td>Physical Education 102</td>
<td>Physical Education 103</td>
</tr>
<tr>
<td>English 101</td>
<td>English 102</td>
<td>English 102a</td>
</tr>
<tr>
<td>Chemistry 101</td>
<td>Chemistry 102</td>
<td>Chemistry 103</td>
</tr>
<tr>
<td>Biology 101</td>
<td>Biology 102</td>
<td>Biology 103</td>
</tr>
<tr>
<td>Electives</td>
<td>Electives</td>
<td>Electives</td>
</tr>
</tbody>
</table>

#### Second Year

<table>
<thead>
<tr>
<th><strong>Fall Quarter</strong></th>
<th><strong>Winter Quarter</strong></th>
<th><strong>Spring Quarter</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 104</td>
<td>Physical Education 105</td>
<td>Physical Education 106</td>
</tr>
<tr>
<td>Chemistry 206</td>
<td>Chemistry 207</td>
<td>Ethics 203</td>
</tr>
<tr>
<td>Physics 109 or 109a</td>
<td>Physics 110 or 110a</td>
<td>Physics 111 and 111a</td>
</tr>
<tr>
<td>Biology 106</td>
<td>Electives</td>
<td>Electives</td>
</tr>
</tbody>
</table>

#### Arts-Dental Curriculum

Upon completion of nine quarters of work in the College of Liberal Arts, the student may be granted a leave of absence for the senior year, and receive the Bachelor of Arts degree upon the successful completion of the
first year of work in the dental school. These nine quarters of work must total 140 hours, including the required and group elective courses.

The general regulations are the same as for the Arts-Medicine combination course.

**Pre-Journalism Curriculum**

Students who have completed at least two years of study in the College of Liberal Arts, and have satisfactorily met specific requirements may enter schools of journalism as regular students with advanced credit and complete work for the degree in journalism. The student should have a working knowledge of French or German, and should also possess some skill in typewriting.

Professional editorial courses in schools of journalism are offered on the assumption that the student has a broad foundation in the knowledge of liberal subjects calculated to enrich the mind. Other courses are offered as a preparation for work in special and critical fields (music, government, science, art, etc.) and newspaper management. The courses outlined serve as foundational work for professional courses in journalism.

**First Year**

**Fall Quarter**
- Physical Education 101 1
- English 101 3
- French or German 3
- Biology 101 or Chemistry 101a 3.5
- American History 113 3
- English 121 or Public Speaking 101 3

**Winter Quarter**
- Physical Education 102 1
- English 102 3
- French or German 3
- Biology 102 or Chemistry 102a 3.5
- American History 114 3
- English 122 or Public Speaking 102 3

**Spring Quarter**
- Physical Education 103 1
- English 102a 3
- French or German 3
- Biology 103 or Chemistry 103a 3.5
- American History 115 3
- English 122a 3

**Second Year**

**Fall Quarter**
- Physical Education 104 1
- English 103 3
- Economics 121 3
- American Government 101 3
- French or German 3
- General Psychology 101 5

**Winter Quarter**
- Physical Education 105 1
- English 104 3
- Economics 122 3
- American Government 102 3
- French or German 3
- Elective (Social Science) 3.4

**Spring Quarter**
- Physical Education 106 1
- English 105 3
- Economics 123 3
- American Government 103 3
- French or German 3
- Bible 153 3

**Pre-Law Curriculum**

For admission to standard law schools at least 90 quarter hours (60 semester hours), exclusive of physical education, are required. If there is a probability that the student may become a candidate for the Bachelor of Arts degree, it is recommended that the general schedule of prescribed and group elective courses be followed. Students who plan to take only two years
of pre-law work may omit some of the regularly prescribed courses in order to make possible the election of additional courses in history, political science, and economics.

First Year

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 101</td>
<td>Physical Education 102</td>
<td>Physical Education 103</td>
</tr>
<tr>
<td>English 101</td>
<td>English 102</td>
<td>English 102a</td>
</tr>
<tr>
<td>Mathematics 100 or 101</td>
<td>Mathematics 103a or 103</td>
<td>Mathematics 112</td>
</tr>
<tr>
<td>History 104</td>
<td>History 105</td>
<td>History 106</td>
</tr>
<tr>
<td>Electives</td>
<td>Electives</td>
<td>Electives</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

A year course in laboratory science (biology, chemistry or physics) may be elected instead of mathematics.

Second Year

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 104</td>
<td>Physical Education 105</td>
<td>Physical Education 106</td>
</tr>
<tr>
<td>Speech 110 or English 121</td>
<td>Speech 111 or English 122</td>
<td>Speech 111 or English 122</td>
</tr>
<tr>
<td>Political Science 101</td>
<td>Political Science 102</td>
<td>Political Science 103</td>
</tr>
<tr>
<td>Psychology 101</td>
<td>Psychology 102</td>
<td>Psychology 104</td>
</tr>
<tr>
<td>Economics 121</td>
<td>Economics 122</td>
<td>Economics 123</td>
</tr>
<tr>
<td>Elective</td>
<td>Elective</td>
<td>Elective</td>
</tr>
<tr>
<td></td>
<td>2-3</td>
<td>3</td>
</tr>
</tbody>
</table>

Alternates for either Economics 121, 122, 123 or History 113, 114, 115, or both, are History 104, 105, 106 and History 110, 111, 112.

Arts-Law Curriculum

It is strongly recommended that the student plan to take at least nine quarters of work in the College of Liberal Arts, completing a total of 140 quarter hours, exclusive of physical education, and covering the prescribed and group elective courses as well as a number of "200" courses in the social sciences. Many very desirable and highly important courses preliminary to a thorough legal training are offered. The fourth year is taken as the freshman year in a standard law school. Upon the successful completion of the freshman year in law with a quality point average of 1.0 or better the degree of Bachelor of Arts is granted. After two more years of successful work in the law school the degree of Bachelor of Laws is granted.

It should be noted that a student admitted upon advanced credit from another college must be in residence three quarters (the third year) and complete a minimum of 45 quarter hours in the College of Liberal Arts in this University.

Students entering upon the Arts-Law combination course must meet the regular entrance requirements and conform to the rules and regulations of the College of Liberal Arts.

Pre-Theological Curriculum

The suggested outline of pre-theological studies which follows will be
found to meet the entrance requirements of practically all theological schools. Most leading seminaries urge that the student have a thorough knowledge of the social sciences and include in their suggestions at least one natural science, such as biology or geology. This outline includes a broad and liberal course which will enable the student to appreciate his graduate studies to the fullest extent. The courses given plus the emphasis throughout upon Christian idealism will bring about a realization of the most important aim of this department which is to produce for the world well equipped, spiritually-minded young men who will minister to the needs of their communities in every possible way.

### First Year

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 101</td>
<td>Physical Education 102</td>
<td>Physical Education 103</td>
</tr>
<tr>
<td>English 101</td>
<td>English 102</td>
<td>English 102a</td>
</tr>
<tr>
<td>Biology 101</td>
<td>Biology 102</td>
<td>Biology 103</td>
</tr>
<tr>
<td>Speech 101</td>
<td>Speech 102</td>
<td>Speech 103</td>
</tr>
<tr>
<td>History 110</td>
<td>History 111</td>
<td>History 112</td>
</tr>
<tr>
<td>Elective</td>
<td>Elective</td>
<td>Elective</td>
</tr>
</tbody>
</table>

### Second Year

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 104</td>
<td>Physical Education 105</td>
<td>Physical Education 106</td>
</tr>
<tr>
<td>English 103 or 121</td>
<td>English 104 or 122</td>
<td>English 105 or 122a</td>
</tr>
<tr>
<td>Political Science 101</td>
<td>Political Science 102</td>
<td>Political Science 103</td>
</tr>
<tr>
<td>Psychology 101</td>
<td>Psychology 102</td>
<td>Psychology 104</td>
</tr>
<tr>
<td>Bible 151</td>
<td>Bible 152</td>
<td>Bible 153</td>
</tr>
<tr>
<td>Electives</td>
<td>Electives</td>
<td>Electives</td>
</tr>
</tbody>
</table>

### Third Year

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philosophy 201</td>
<td>Logic 202</td>
<td>Ethics 203</td>
</tr>
<tr>
<td>Sociology 151</td>
<td>Sociology 152</td>
<td>Sociology 153</td>
</tr>
<tr>
<td>Bible 232</td>
<td>Bible 233</td>
<td>Church History 203</td>
</tr>
<tr>
<td>Electives</td>
<td>Electives</td>
<td>Electives</td>
</tr>
</tbody>
</table>

### Fourth Year

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 214</td>
<td>English 215</td>
<td>English 216</td>
</tr>
<tr>
<td>Principles of Education 207</td>
<td>Principles of Education 208</td>
<td>History of Education 138</td>
</tr>
<tr>
<td>Electives</td>
<td>Electives</td>
<td>History of Religion 210</td>
</tr>
</tbody>
</table>

### Secretarial Curriculum

Professional achievement in secretarial work is more and more dependent upon a combination of academic education plus training in vocational and technical subjects, such as typewriting, stenography, accounting, business law, business writing, and office practice. The program herein offered
has a good balance between the academic and the vocational requirements of business.

The purpose of this course is to prepare men and women for the duties of private secretaries, office assistants, and other types of business positions. The program is arranged so that the student who finds it impossible to remain in continuous residence for four years, may withdraw at the close of the second or third year with sufficient training to meet the requirements of the ordinary business position, although it is obvious that the entire course should be completed to receive the maximum benefits. Graduates with the Bachelor’s degree are usually given preference by employers.

**First Year**

**FALL QUARTER**
- Physical Education 101
- English 101
- Business Organization 103
- Mathematics 100 or 101
- Stenography 110
- *Typewriting 101

**WINTER QUARTER**
- Physical Education 102
- English 102
- Business Organization 104
- Mathematics 103b or 103
- Stenography 111
- *Typewriting 102

**SPRING QUARTER**
- Physical Education 103
- English 102a
- Business Organization 105
- Mathematics of Finance 121
- Stenography 112
- *Typewriting 103

**Second Year**

**FALL QUARTER**
- Physical Education 104
- *Typewriting 107
- Economics 121
- Accounting 131
- Stenography 115
- Psychology 101

**WINTER QUARTER**
- Physical Education 105
- *Typewriting 108
- Economics 122
- Accounting 132
- Stenography 116
- Psychology 102

**SPRING QUARTER**
- Physical Education 106
- Business Writing 118
- Economics 123
- Accounting 133
- Stenography 117
- Statistical Methods 112
- Elective

**Third Year**

**FALL QUARTER**
- Labor Problems 204
- Accounting 231
- Bible 151
- Natural Science
- Political Science 101 or Geography 155

**WINTER QUARTER**
- Money and Banking 207
- Accounting 232
- Office Practice 130
- Natural Science
- Political Science 102 or Elective

**SPRING QUARTER**
- Money and Banking 208
- Accounting 233
- Bible 153
- Natural Science
- Political Science 103
- Elective

**Fourth Year**

**FALL QUARTER**
- Risks, Risk-Bearing and Insurance 251
- Business Law 221
- Marketing 241
- Business Finance 214
- Elective

**WINTER QUARTER**
- Marketing 241
- Business Law 222
- Business Finance 215
- Elective

**SPRING QUARTER**
- Public Finance 217
- Business Law 223
- Electives

* No credit toward the Bachelor of Arts degree.
OTHER PRE-PROFESSIONAL CURRICULA

There are many fields or professions which require liberal arts courses as a foundation, or include certain courses in the arts and sciences in their curricula. Many of these basic courses are offered at the Ohio Northern University. Students who desire the favorable advantages for study offered on this campus may plan to spend one or more years here, paralleling and completing some of the foundation courses, then transfer to a larger institution where the professional curriculum may be concluded.

Information on the number of credit hours that may be earned in any of the fields listed below may be had by writing to the Dean of the College of Liberal Arts.

Agriculture
Agricultural Engineering
Aviation
Entomology
Forestry
Home Economics

Horticulture
Laboratory Technician
Library Science
Optometry
Social Work
Veterinary Medicine
Divisions and Departments of Instruction

All courses in the "100" group are primarily for freshmen and sophomores. All courses in the "200" group are primarily for juniors and seniors. Courses may be withdrawn or other changes made at the discretion of the Board of Trustees and the Faculty.

Division I. Language, Literature and Arts
 LOUIS ROWELL HERRICK, Chairman

Students who expect to complete a major in any of the departments of this division other than English are advised to take a minimum of 18 hours in English or Speech, or both; to elect courses in history and philosophy; and to continue the study of foreign language as a preparation for advanced study.

ENGLISH LANGUAGE, LITERATURE AND SPEECH

The work is arranged with three chief ends in view: first, to provide the student with such skill in writing and speaking that, regardless of what field of business or what profession he may later enter, he may express his ideas clearly and adequately; second, to give the student a knowledge of two great literatures, the English and the American, so that he may, after he has finished his college work, read with some critical ability, understanding, and appreciation of literature as an art and as an interpretation of life; and third, to offer advanced work to those who are planning to specialize in the field of English or American Literature as teachers.

Students majoring in English are advised to minor in French, Latin, or German, and to elect a year of English history. A minor may be completed in history.

The department recommends the following sequence of courses for a major in English: English 103, 104, and 105 or English 121, 122, and 122a; English 210, 211, and 212; English 214, 215, 216, or English 217, 218, and 219. English 201, 205, and 225 are required of all students majoring in English. The student may offer not more than six hours of public speaking.

For a minor in English it is recommended that the student complete English 102a; English 103, 104, and 105; and English 121, 122, 122a. English 101 and 102 cannot be counted toward a teaching minor.
COMPOSITION

000. REMEDIAL ENGLISH
A review course in the fundamentals of spelling, punctuation, grammar, sentence structure, vocabulary, and expository writing, intended for students deficient in English. No college credit is given for this course. Hours to be arranged.

Mr. L. Freeman

101. COMPOSITION
Fall, Winter, 3 Hours
Winter, 3 Hours
Spring, 3 Hours

102a. COMPOSITION
These three courses constitute a year of work for freshmen. A thorough drill in the mechanics of written English, exposition and argumentation; description and narration. Considerable attention is given to the study of the structure of the short story. Daily themes. Students who show a high degree of proficiency in English, may elect English 122a or English 105 in the place of Composition 102a. Seven sections. M. W. F., 1, 2, 3, 4, 5, 6, 7.

Mr. L. Freeman, Miss Wilder

118. BUSINESS WRITING
A study of written communication in business, emphasizing the use of effective English and the technique of forms of communication. Sales, credit, collection, adjustment letters, business reports. Prerequisite: English 101, 102, 102a. M. W. F., 5.

Mr. L. Freeman

201. COLLEGE GRAMMAR

Mr. C. H. Freeman

205. EXPOSITORY WRITING

225. EXPOSITORY WRITING
A study of the various types of the essay and the writing of short themes together with longer fortnightly themes. Considerable attention is given to the familiar essay. In order to receive credit both courses must be completed. Open to all juniors and seniors. Required of all students who major in English. T. Th., 3.

Mr. L. Freeman

235. CREATIVE WRITING
Fall, Winter, Spring, 1-3 Hours

An honors course open to a limited number of advanced students who are seriously concerned with the problems of writing and who have shown a definite aptitude for writing essays, short stories, verse, or plays. Individual guidance is offered by any member of the English faculty with whom the student chooses to work. Amount of credit depends upon the quality of work done. Prerequisite: Upperclass rating and the consent of the instructor and the head of the department. Hours to be arranged.

Mr. C. H. Freeman, Mr. L. Freeman, Miss Wilder

ENGLISH LITERATURE

*103. FROM THE BEGINNING TO THE EIGHTEENTH CENTURY
Fall, 3 Hours

*104. FROM THE EIGHTEENTH CENTURY TO THE VICTORIAN ERA
Winter, 3 Hours

* Not given in 1940-1941
*105. FROM THE VICTORIAN ERA TO 1920
With the exception of the novel these three courses constitute a survey of English literature in which the works of the chief English writers are stressed. Attention is given to the political, social, and intellectual background of the various periods. Some emphasis is placed upon the types of poetry and prose and upon versification. M. W. F., 3.

SPRING, 3 Hours
Mr. C. H. Freeman

106. EIGHTEENTH CENTURY PROSE
FALL, 3 Hours

107. EIGHTEENTH CENTURY PROSE
WINTER, 3 Hours
In these courses a study is made of the prose of Defoe, Swift, Steele, Addison, Fielding, Burke, Gibbon, Johnson, Goldsmith, and Boswell. An attempt is made to interpret eighteenth century thought through the chief prose writers of the period. M. W. F., 2.

108. EIGHTEENTH CENTURY POETRY
SPRING, 3 Hours
The poetry of the Restoration and the Eighteenth Century. A study of the poetry of Dryden, Pope, Collins, Burns, Cowper, Blake, and Crabbe, together with some of the minor writers of the period. English 106 and 107 together with this course constitute a year's work in sophomore English. M. W. F., 2.

Mr. C. H. Freeman

*112. MODERN BRITISH AND AMERICAN POETS
Open to sophomores. M. W. F., 6.

Mr. C. H. Freeman

121. AMERICAN POETRY
FALL, 3 HRS.
A study chiefly of the nine great American poets of the nineteenth century, but attention is given to work of the recent and contemporary poets. An attempt is made to show what America has done in poetry, the greatest of the fine arts. M. W. F., 3.

Mr. C. H. Freeman, Mr. L. Freeman

122. AMERICAN PROSE
WINTER, 3 Hours
Some attention is paid to the prose of the Colonial period, but the following writers are stressed: Edwards, Franklin, Irving, Hawthorne, Poe, Thoreau, Lowell, Emerson, Holmes, Calhoun, Webster, and Lincoln. M. W. F., 3.

Mr. C. H. Freeman, Mr. L. Freeman

122a. AMERICAN PROSE
SPRING, 3 Hours
A continuation of English 122 with special emphasis on the development of the American novel. English 121, 122, and 122a constitute a year's work of sophomore rank. Prerequisite: English 101 and 102. M. W. F., 3.

Mr. C. H. Freeman, Mr. L. Freeman

210. SHAKESPEARE: HISTORIES
FALL, 3 Hours

211. SHAKESPEARE: TRAGEDIES
WINTER, 3 Hours

212. SHAKESPEARE: COMEDIES
SPRING, 3 Hours
In these courses Shakespeare is studied as a dramatist, poet, interpreter of his age and of human life. Attention is given to the technique of the Elizabethan drama. Open to juniors and seniors. M. W. F., 4.

Mr. C. H. Freeman

* Not given in 1940-41.
214. Nineteenth Century Poetry  Fall, 3 Hours

215. Nineteenth Century Poetry  Winter, 3 Hours
A study of the chief poems of Tennyson and Browning. Attention is given to the patriotic and social attitude of Tennyson and to Browning's ability to portray and to interpret character. M. W. F., 7.

216. Nineteenth Century Poetry  Spring, 3 Hours

Mr. C. H. Freeman

217. Nineteenth Century Essayists  Fall, 3 Hours
In English 217 the following essayists are studied: Coleridge, Lamb, Hazlitt, Landor, DeQuincey, Macaulay, Carlyle, Newman, Ruskin, Huxley, Pater, and Stevenson. M. W. F., 2

219. The Nineteenth Century English Novel  Winter, 3 Hours

219a. The Nineteenth Century English Novel  Spring, 3 Hours
Courses 219 and 219a constitute a survey of the English novel of the century. The masterpieces of the major novelists from Scott to Conrad are read and studied. Attention is given to the technique of the novel. Courses 217, 219, and 219a constitute a year's work for juniors and seniors.

Mr. C. H. Freeman

231. English Problems  Fall, Winter, Spring, 1-3 Hours
Minor investigation for qualified seniors who are majoring in English. Consult head of department. Total credit may not exceed three hours.

Mr. C. H. Freeman

SPEECH

Students who expect to major in speech will do well to observe the following sequence: First year, courses 101, 102, 103; 107. Second year, courses 110, 111, 112, 113. Third year, courses 220, 221, 222, 230. Fourth year, 231, 232.

101. Public Speaking  Fall, 3 Hours
The technical side of speech is emphasized; the fundamentals of voice production, action and platform deportment; speech construction, principles and practice; selection and arrangement of material; and the development of self-confidence in thinking while before an audience. M. W. F., 1, 5 and 6.

Mr. Deming

102. Public Speaking  Winter, 3 Hours

Mr. Deming

* Not given in 1940-41.
103. **Literary Interpretation**  
**Spring, 3 Hours**  
The analysis of literary selections for thought and emotion content; practice in the use of the voice to interpret mental and emotional states. The work of the course deepens the student's own literary appreciation and helps him to awaken others to a fuller sense of the beautiful in literature. M. W. F., 1 and 5.  

**Mr. Deming**

107. **Speech Improvement**  
**Winter, 3 Hours**  
A course dealing with the use of the speaking voice in social and professional situations; the development of pleasing and well modulated voice, distinct and acceptable pronunciation; and elimination of speech defects. Selection of poetry and prose, brief talks, reports and other speech activities are practiced. No prerequisite. M. W. F., 3.  

**Mr. Deming**

110. **Argumentation**  

111. **Argumentation**  
**Winter, 3 Hours**  
Two courses given to a detailed study of the principles of argumentation; practice in brief-making and debating. No credit is given unless both courses are completed. Prerequisite: English 101, 102. M. W. F., 6.  

**Mr. C. H. Freeman**

112. **Dramatic Technic**  
**Fall, 2 Hours**  

**Mr. Deming**

113. **Acting**  
**Winter, 2 Hours**  
A continuation of course 112, giving opportunity to put into practice in groups the principles studied. The students take part in scenes and short plays. T. Th., 7.  

**Mr. Deming**

150. **Private Speech**  
**1 Hour**  
Individual demands for which classroom work is inadequate are met, including platform work and speech correction. Open to all students by arrangement.  

**Mr. Deming**

220. **Interpretative Reading**  
**Fall, 3 Hours**  
The art of effective oral reading. Analysis of forms of literature; technical and psychic exercises and problems; modulations of voice; speech correction; and presentation of the intellectual and emotional content of the printed page. Each student is assigned literary selections for vocal interpretation. This course is especially recommended for those who expect to teach English. M. W. F., 2.  

**Mr. Deming**

221. **Play Directing**  
**Winter, 3 Hours**  
A laboratory course dealing with the problems of the actor of amateur plays. Practice in organizing players and presenting plays. It is expected that those who desire membership in the Northern Players will register for this course. Prerequisite: Speech 103, 220. T. W. Th., 7.  

**Mr. Deming**

222. **Extempore Speaking**  
**Spring, 2 Hours**  
This course for advanced students aims at developing facility in organization and presentation of various kinds of speech material, for example: Expository, after-dinner, pulpit, campaign, and commemorative. Platform etiquette and practice in speech are stressed. Prerequisite: Speech 101, 102. T. Th., 6.  

**Mr. Deming**
230. **INTERCOLLEGIATE DEBATE**
*FALL, 2-3 Hours*
Members of the debate teams are selected by competitive tryouts to which any student in good standing is eligible. Intensive study, investigation, and practice on intercollegiate questions. The work is carefully supervised and credited according to the quality and quantity of work done.

Mr. Deming

231. **SHAKESPEAREAN READING**
*WINTER, 3 Hours*
Plays are critically studied from standpoint of platform presentation; relation of personation and impersonation; plot, incident and character analysis. Expressional reading of selected speeches and scenes from the platform. Prerequisite: Speech 103. M. W. F., 2.

Mr. Deming

232. **HIGH SCHOOL DRAMATICS**
*SPRING, 2 Hours*
A careful study of the problems of amateur dramatics relating to the technique of acting and stagecraft as they affect the teacher who is called upon to direct high school plays. The director's responsibilities and opportunities in the public school and community. Prerequisite: Some training in the speech arts or by consent of the instructor. T. Th., 7.

Mr. Deming

250. **PRIVATE SPEECH**
*½ Hour*
Limited to speech majors.

Mr. Deming

---

**FOREIGN LANGUAGE AND LITERATURE**

The modern languages are designed to meet both cultural and practical needs. The advanced courses afford opportunity for students to major or minor in French. If a student expects to do graduate work or to specialize in science, he should have a working knowledge of French or German, or both.

Major in French. Requirements, three years of college French in addition to Elementary French or the equivalent and two quarters of French Phonetics, a total of 38 hours.

For a minor in French, the requirement is two years in addition to Elementary French.

Students majoring in this department should elect courses in English literature, history, Latin, and speech.

**FRENCH**

*Introductory Courses*

101. **ELEMENTARY FRENCH**
*FALL, 3 Hours*
The elements of pronunciation and phonetics, essentials of grammar and easy reading. Conversation suited to the needs and abilities of the class. M. W. F., 5.

Mr. Herrick

102. **ELEMENTARY FRENCH**
*WINTER, 3 Hours*

103. **ELEMENTARY FRENCH**
*SPRING, 3 Hours*
104a. Intermediate French  
Fall, 3 Hours

105a. Intermediate French  
Winter, 3 Hours

106a. Intermediate French  
Spring, 3 Hours

Further elements of grammar, practice in phonetics, pronunciation, dictation, conversation based on lantern slides and occasional illustrated lectures on salient points of French history, architecture, art, and civilization. Prerequisite: French 101-103. T. Th. F., 3.  
Mr. Herrick

Advanced Courses

*223. Modern Literature  
Fall, 3 Hours

*224. Modern Literature  
Winter, 3 Hours

*225. Modern Literature  
Spring, 3 Hours

The study of typical and selected texts, illustrative of modern literary movements, such as Romanticism, Realism, Naturalism, accompanied by illustrated lectures on French life, customs, architecture, art, etc., intended as a background for assigned readings. Prerequisite: French 104a-106a. In alternate years with French 231a-233a. M. W. F., 11:30.  
Mr. Herrick

206a. General Survey of French Literature  
Fall, 3 Hours

207a. General Survey of French Literature  
Winter, 3 Hours

208a. General Survey of French Literature  
Spring, 3 Hours

Mr. Herrick

225a. French Phonetics  
Winter, 1 Hour

226a. French Phonetics  
Spring, 1 Hour

The scientific study of French pronunciation based on texts like the "Passy-Rambaud" "Chrestomathie Francaise," and Nyrop's "Manuel du Francais Parle," accompanied by lectures on historical grammar. Especially designed for prospective teachers. Hour to be arranged. Prerequisite: French 101-103.  
Mr. Herrick

231a. Advanced Grammar Review, Prose Composition, Conversation  
Fall, 3 Hours

232a. Advanced Grammar Review, Prose Composition, Conversation  
Winter, 3 Hours

233a. Advanced Grammar Review, Prose Composition, Conversation  
Spring, 3 Hours

A thorough review of grammar, phonetics, prose composition, together with conversation and lectures based on lantern slides illustrative of French life, customs, architecture, etc. Given in alternate years with French 223-225. M. W. F., 11:30.  
Mr. Herrick

* Not given in 1940-41.
GERMAN

Introductory Courses

101. Elementary German  
102. Elementary German  
103. Elementary German  

Essentials of pronunciation, grammar and composition, verb drill, and easy graded texts for reading. M. W. F., 1.

104a. Intermediate German  
105a. Intermediate German  
106a. Intermediate German  

Grammar, pronunciation, and conversation with the reading of graded texts. Prerequisite: German 101-103, or the equivalent. T. W. Th., 2.

118. Scientific German  

The reading of scientific texts with particular emphasis on individual needs. Required of pre-medical students. Given on sufficient demand instead of 105a. Prerequisite: German 101-103. T. Th. F., 2.

MR. Herrick

LATIN

It is the aim to utilize as fully as possible the efficiency of Latin as an instrument of education and a means of culture. Each author is studied in historical and literary relation to his period. The works of any other author, of equal value, may be substituted for any course in the schedule at the wish of the class and with the approval of the Dean and instructor.

Students who major in Latin ordinarily should have a good working knowledge of a modern foreign language. English, French, and speech are suggested as minors. Certain courses in history are recommended, the title of the courses depending upon the aims and objectives of the student.

107. Third Year Latin  
108. Third Year Latin  
109. Third Year Latin  

Selections from Cicero's Orations and Essays, and from Vergil's Aeneid will be read during the year. The course includes a review of the principles of Latin grammar, as well as a study of Latin and English word formation, with a view to acquiring a larger vocabulary both in Latin and in English. Courses 107-109 are open to students who have presented two units of Latin for college entrance. T. Th. Hours to be arranged.

MISS AMSTUTZ

110. Cicero: De Senectute  
111. Horace; Catullus; Ovid  

Fall, 3 Hours
Winter, 3 Hours
Spring, 3 Hours
112. Terence
A play of Terence is read. This course is intended for those who present three or four units of Latin for entrance to college. The course will also include during the year a study of how Latin words were made into English. T. Th. Hours to be arranged.

Spring, 3 Hours
Miss Amstutz

115. Sallust: Cataline
Fall, 3 Hours

116. Plautus: Roman Comedy
Winter, 3 Hours

117. Pliny: Letters
Spring, 3 Hours
Miss Amstutz

Sallust's Cataline, a play of Plautus, and selections from Pliny's letters are read. One period in the Fall quarter is devoted to a study of Latin composition, with the aim of improving a student's functional use of both Latin and English. One period in the Spring quarter is given over to the study of Roman civilization. The course is intended for those who present three or four units of Latin for college entrance. T. Th. Hours to be arranged.

118. Teacher's Training Course
2 Hours
Miss Amstutz

This course is planned to meet the needs of students who are preparing to teach Latin in secondary schools. It includes a study of aims and methods of teaching, the contents of the course by years, and the textbooks and supplementary material available. Time to be arranged.

MUSIC

Aims

Instruction is provided for those who desire to become musicians, either as performers or as teachers, and an opportunity is afforded to those who wish to devote themselves to the literature of music. Because training in music should be based upon a broad and thorough general education, the curricula have been so constructed as to secure a symmetrical balance between musical and academic subjects.

Equipment

Presser Hall, the home of the Department of Music, built in memory of Theodore Presser, an early faculty member, cost nearly $145,000. It contains the Willis Auditorium, with a seating capacity of 500, a large stage, 7 fine studios, 18 practice rooms, 3 classrooms, and 14 upright pianos. In Lehr auditorium is a large organ and a grand piano.

Special Students

A student who desires to register for work in applied music or theoretical subjects without having graduation in view, may register as a special student. There are no requirements for registration as a special student.

* Not given in 1940-41.
other than evidence of talent and the ability to pursue a selected course with success.

**Junior Department**

The Applied Music Department is open to children of public school age without any restriction other than an interest and a willingness to study. In all teaching the ideal of musical feeling is sought in companionship with those of beautiful tone, and accurate intonation. Group playing is stressed as much as possible and students of orchestral instruments are encouraged to enter the local high school orchestra.

**Bachelor of Arts with Major in Music**

A major of 45 hours of music or a minor of 25 hours of music is accepted toward the Bachelor of Arts degree. The major consists of the following courses of Theoretical and Applied Music: Sight Singing and Ear Training, History of Music, Harmony, Musical Form, Applied Music and Ensemble Participation. Theoretical Music should constitute about 30 hours of this major.

The courses listed above are not inflexible and may be changed to meet the requirements of the individual by consulting the Dean and the Head of the Department.

**Public School Music Course**

This course is approved by the State Department of Education for the training of teachers and supervisors of Public School Music. The degree of Bachelor of Science in Education is granted to students completing the Public School Music curriculum, and such persons are granted the state four-year provisional certificate.

See curriculum under Division of Teacher Training.

**Graduate in Music**

Students who do not desire to do work toward a degree may follow a course in professional studies in music and earn a diploma as Graduate in Music. The course may be completed in about three years. A graduation recital must be given.

**Curriculum for the Bachelor of Music Degree**

The degree of Bachelor of Music is granted in piano, voice, violin, or organ when the student has completed the prescribed theoretical and academical work and has reached such a stage of advancement that he can ren-
nder in a finished manner a public recital consisting of representative works of the greatest composers.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Year</strong></td>
<td>Physical Education 101</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>English 101</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Sight Singing and Ear Training 101</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Harmony 111</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Applied Music</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>French 101</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Chorus</td>
<td>½</td>
</tr>
<tr>
<td></td>
<td>Band or Orchestra</td>
<td>½</td>
</tr>
<tr>
<td><strong>Second Year</strong></td>
<td>Physical Education 104</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Harmony 114</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>History and Appreciation 153</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Sight Singing and Ear Training 104</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Applied Music</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>German 101</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Ensemble</td>
<td>½</td>
</tr>
<tr>
<td><strong>Third Year</strong></td>
<td>Counterpoint 285</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Conducting 140</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Applied Music</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>History</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Ensemble</td>
<td>½</td>
</tr>
<tr>
<td><strong>Fourth Year</strong></td>
<td>General Psychology 101</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Double Counterpoint and Fugue 289</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Orchestral Instruments 220</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Applied Music</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Composition 293</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Ensemble</td>
<td>½</td>
</tr>
</tbody>
</table>

* Elective for Vocal Majors

**Note:** Major studies may be selected in piano, pipe organ, voice, violin or violincello. In selecting organ or voice as a major study, a different adjustment of practice hours for the major and minor branches is necessary. (All major studies require two lessons per week.)

**Note:** Minor studies can be taken in piano, voice, organ, violincello, or orchestral instruments.
THEORETICAL MUSIC

101. **Elementary Sight Singing and Ear Training**  
    M. W. F., 2.  
    **Fall, 2 Hours**  
    Mr. Davidson

102. **Elementary Sight Singing and Ear Training, Winter, 2 Hours**  
    Continuation of 101. M. W. F., 2.  
    Mr. Davidson

103. **Elementary Sight Singing and Ear Training**  
    Continuation of 102. M. W. F., 2.  
    **Spring, 2 Hours**  
    Mr. Davidson

104. **Advanced Sight Singing and Ear Training**  
    M. W. F., 2.  
    **Fall, 2 Hours**  
    Mr. Owens

105. **Advanced Sight Singing and Ear Training**  
    Continuation of 104. M. W. F., 2.  
    **Winter, 2 Hours**  
    Mr. Owens

106. **Advanced Sight Singing and Ear Training**  
    Continuation of 105. M. W. F., 2.  
    **Spring, 2 Hours**  
    Mr. Owens

111. **Elementary Harmony**  
    Prerequisite: The ability to play common hymns at sight on the piano. M. W. F., 4.  
    **Fall, 3 Hours**  
    Mr. Lamale

112. **Elementary Harmony**  
    **Winter, 3 Hours**  
    Mr. Lamale

113. **Elementary Harmony**  
    **Spring, 3 Hours**  
    Mr. Lamale

114. **Advanced Harmony**  
    **Fall, 3 Hours**  
    Mr. Lamale

115. **Keyboard Harmony**  
    A study in applied harmony to develop the student's ability to play figured bass at sight, to harmonize melodies and given basses, to transpose, to modulate, and to improvise. Prerequisite: at least one year of harmony. M. W. F., 6.  
    **Winter, 3 Hours**  
    Mr. Lamale

140. **Conducting**  
    Principles of conducting. Prerequisite: Harmony 113. T. Th., 2.  
    **Fall, 2 Hours**  
    Mr. Owens

141. **Conducting**  
    Continuation of 140. T. Th., 2.  
    **Winter, 2 Hours**  
    Mr. Owens

142. **Conducting**  
    Conducting full band and orchestra scores. T. Th., 2.  
    **Spring, 2 Hours**  
    Mr. Owens
153. **History and Appreciation**  
The origin and development of music, studied from an appreciative basis. M. W. F., 3.  
Mr. Davidson  
*Fall, 3 Hours*

154. **History and Appreciation**  
Continuation of 153. M. W. F., 3.  
Mr. Davidson  
*Winter, 3 Hours*

155. **History and Appreciation**  
Continuation of 154. M. W. F., 3.  
Mr. Davidson  
*Spring, 3 Hours*

202. **Primary Music Methods and Observation**  
Four observations each week are required. Prerequisite: Advanced Sight Singing 106; Harmony 114. M. W. F., 5.  
Mr. Watson  
*Fall, 4 Hours*

203. **Intermediate Music Methods and Observation**  
Materials and methods. Four observations each week are required. Prerequisite: Primary Methods 202. M. W. F., 5.  
Mr. Watson  
*Spring, 4 Hours*

204. **Junior and Senior High School Methods and Observation**  
The adolescent voice and its care. Four observations each week are required. Prerequisite: Intermediate Music Methods 203. M. W. F., 5.  
Mr. Watson  
*Winter, 4 Hours*

211. **Form and Analysis**  
The musical sentence, its subdivisions and extensions; double periods, two and three-part song forms. Prerequisite: Harmony 115. M. W. F., 3.  
Mr. Lamale  
*Spring, 3 Hours*

213. **Supervised Teaching in the Primary Grades, Winter, 3 Hours**  
Prerequisite: Primary Music Methods 202.  
Mr. Watson

214. **Supervised Teaching in the Intermediate Grades**  
Prerequisite: Intermediate Methods 203.  
Mr. Watson  
*Fall, 3 Hours*

215. **Supervised Teaching, Junior and Senior High School**  
Spring, 3 Hours  
Mr. Watson  
*Spring, 3 Hours*

220. **Orchestral Instruments**  
Stringed instruments. A preparation for conducting school orchestras. T. Th., 5.  
Mr. Watson  
*Fall, 2 Hours*

221. **Orchestral Instruments**  
Continuation of above. T. Th., 5.  
Mr. Watson  
*Winter, 2 Hours*
222. **Orchestral Instruments**
Brass and woodwind instruments. A preparation for conducting school orchestras and bands.
T, Th., 5.

251. **School Orchestration**
Prerequisites: Harmony 115; Advanced Sight Singing 106. M. W. F., 2.

252. **Advanced Orchestration**
A continuation of 251, with scoring for full band and orchestra. Prerequisite: School Orchestration 251. M. W. F., 2.

262. **Song Repertoire**
A study of the songs of the various schools of music. Time to be arranged.

285. **Counterpoint**

286. **Counterpoint**

287. **Counterpoint**
Courses in strict and free counterpoint; the art of combining melodies in the various species for two, three, and four voices. M. W. F., 4.

289. **Double Counterpoint and Fugue**

290. **Double Counterpoint and Fugue**

291. **Double Counterpoint and Fugue**
Advanced counterpoint: Invertible for two and three voices; strict and free canons; the art of fugal composition. Prerequisite: One year of counterpoint. T, Th., 3.

293. **Composition**

294. **Composition**

295. **Composition**
Original composition in the various forms: song, sonata, dance. Prerequisite: A thorough course in harmony and counterpoint and at least six months of piano instruction. T, Th., 3.

**APPLIED MUSIC**

A minimum of one period of practice per day is required for each hour of applied music.

**VOICE**

These courses aim primarily to establish correct principles of breathing, tone production, diction, style, and all those phases of the work essential to success in any branch of the art of singing. A considerable amount of
memorizing is required throughout the course. All vocal students are advised to study at least one modern language: French or German.

**VOICE 151, 152, 153**
Breathing. Tone production. Exercises. Easy songs in English and foreign languages.  
Mr. Owens

**VOICE 154, 155, 156**
Continuation of first year. Vocalises. Easier recitatives and arias from standard operas and oratorios. Songs in several languages.  
Mr. Owens

**VOICE 251, 252, 253**
Mr. Owens

**VOICE 254, 255, 256**
Mr. Owens

**PIANO**

Instruction in piano playing involves a special adaptation to the needs of the individual. A minute study of each student's deficiencies and previous habits of work is made and technical studies and selections best adapted to his needs are given him. Music is a means of intellectual culture and artistic enjoyment; the works of the best masters are therefore employed through all grades.

**PIANO 151, 152, 153**
Mr. Lamale

**PIANO 154, 155, 156**
Mr. Lamale

**PIANO 251, 252, 253**
Mr. Lamale

**PIANO 254, 255, 256**
Mr. Lamale
ORGAN

No student will be accepted who has not reached the fourth grade in piano.

The course of study provides for thorough training in preparation for church and concert work. The course has been arranged to give a knowledge of the French school of organ music through the study of the works of the best composers in this particular school.

**ORGAN 151, 152, 153**
*Mr. Lamale*

**ORGAN 154, 155, 156**
*Mr. Lamale*

**ORGAN 251, 252, 253**
*Mr. Lamale*

**ORGAN 254, 255, 256**
*Mr. Lamale*

**VIOLIN**

*Elementary Course*

*Mr. Watson*

*Intermediate Course*

Mazas Etudes, Books 1 and 2. Schradieck Technic Studies, Book 1. Sitt Scales in two and three Octaves. Solos by Dancla, Simonetti, Godard, Borowski, Bohm, and others.  
*Mr. Watson*

**VIOLIN 151, 152, 153**

*Mr. Watson*
VIOLIN 154, 155, 156

Mr. Watson

VIOLIN 251, 252, 253

Mr. Watson

VIOLIN 254, 255, 256

Mr. Watson

REED AND BRASS INSTRUMENTS

The course of instruction includes both private and class lessons, and daily band rehearsals. Private instruction on a solo instrument to be selected by the student, constitutes the major subject. Class instruction in which the student is given a playing knowledge of every band instrument is also included.

Mr. Davidson
Division II. Natural Sciences

Jesse Raymond Harrod, Chairman

A student who chooses one of the departments in this division for his major is advised to schedule two laboratory sciences during the freshman and sophomore years, and in most cases a course in mathematics, and to acquire a reading knowledge of a foreign language, if advanced work is anticipated.

BIOLOGY

The aims of this department are to enable the student to understand better the life world in which he lives, to prepare for the teaching field, to obtain a biological foundation for the study of medicine, dentistry, and nursing, and to qualify for admission to graduate work.

A student who plans to complete a major in biology is advised to include a course in chemistry, one in physics, an introduction to statistical methods, courses in psychology and sociology, and have a reading knowledge of German and French if he intends to enter upon graduate work. A course in philosophy is strongly recommended.

101. Zoology

Fall, 3 Hours

Winter, 3 Hours

Spring, 3 Hours

102. Zoology

103. Zoology

These courses are designed for students who desire a general acquaintance with some of the biological laws and theories evidenced by the animal world. A general survey of the animal kingdom based on classification, morphology, physiology, and ecology. Special attention is given to the problems of the organism, with emphasis on development, reproduction, genetics, and evolution. Section 1, M. W., 3; 4; F., 3. Section 2, T. Th., 3; 4; F., 4; Section 3, T. Th., 5; 6; F., 6.

Mr. Dobbins and Mr. Huber

106. Comparative Vertebrate Anatomy

Fall, 5 Hours

A comparative study of the anatomy of fishes and amphibians. Careful dissections are made of the different systems and the relationships noted. Recitations three hours; laboratory six hours. M. W. F., 2; T. Th., 2; 3; 4.

Mr. Huber

113. Mammalian Anatomy and Physiology

Winter, 5 Hours

A thorough dissection of a typical mammal with a careful correlation of structure and function. The course is designed especially for physical education and pre-medical students. Prerequisite: Comparative Vertebrate Anatomy. M. W. F., 2; T. Th., 2; 3; 4.

Mr. Huber

107. Botany

Fall, 3 Hours

Winter, 3 Hours

108. Botany
109. Botany
These courses are presented largely as cultural courses with emphasis on careful observation and logical conclusion. The processes, structure, classification, environmental relations, distribution, and evolution of plants are considered. M. W., 5, 6; F., 5; M. W., 7, 8; F., 7.
Mr. Dobins

110. Local Flora
A systematic study which acquaints the student with many of the native and introduced plants. A field course supplemented by greenhouse and herbarium studies. S., 1, 2, 3, 4; T. Th., 1.
Mr. Dobins

218. Vertebrate Embryology
This course is fundamentally important to students who expect to teach zoology, study medicine, or from a cultural standpoint wish to know something of the origin and development of the human body. Laboratory work is confined largely to the chick, with occasional reference to the pig. Prerequisite: Zoology 101, 102, 103. M. W. F., 2; T. Th., 2, 3, 4.
Mr. Huber

219. Histology and Technique
Methods of collecting, killing, preserving and preparing materials for demonstration and laboratory purposes are considered. A detailed microscopic study of various plant or animal tissues is made. Lecture and class work one hour, laboratory six to eight hours. Time schedule to be arranged. Open to seniors majoring in biology.
Mr. Dobins or Mr. Huber

220. Biological Problems
Minor investigations for qualified seniors who are taking a major or minor in biology. By arrangement any quarter. Fee depends on nature of work done. May be repeated.
Mr. Dobins or Mr. Huber

*222. Plant Physiology
This course consists of a critical study of some of the physiological processes of plants. Prerequisite: Botany 107, 108, 109. M. W., 3, 4; F., 3.
Mr. Dobins

230. Heredity
A study of the principles of inheritance in plants and animals. The inheritance of human traits is given considerable emphasis, and the problems of eugenics are considered. Laboratory exercises with plant and animal materials are included. Prerequisite: Zoology 101, 102, 103 or Botany 107, 108, 109. M. W. F., 1.
Mr. Dobins

*235. Evolution
A course dealing with the development of the organic world, and an examination of the evidences of evolution and of the theories attempting to explain the method of evolution. Prerequisite: A year course in biology. T. Th. F., 1.
Mr. Huber

Note: Courses in Bacteriology and Human Physiology are listed in the College of Pharmacy.

Chemistry
The aim is to lay the foundation for an understanding of this basic science. The four fundamental courses, general chemistry, quantitative analysis, organic chemistry, and physical chemistry studied in the order mentioned, together with allied courses in physical and social sciences, pre-

* Not given in 1940-1941.
pare the student for industrial work. In addition, by completing required courses in teacher training, preparation may be made for the teaching of chemistry in secondary schools. In anticipation of continued work in chemistry, courses in mathematics through calculus and a reading knowledge of German and French are required.

**101a. Introductory Chemistry**

**102a. Introductory Chemistry**

**103a. Introductory Qualitative Analysis**

A series of courses designed for students who do not present chemistry for entrance credit. Courses 101a and 102a consist of a careful study of the fundamental laws of chemistry and of the properties of common non-metallic elements and their compounds; course 103a is an introductory study in qualitative analysis of acids and metals, based upon the principles of ionization, mass action and chemical equilibrium. A brief study is made of the common metallic elements and their compounds. Lecture and quiz, M. W. F., 3; laboratory, M. W., 6, 7, 8; T. Th., 2, 3, 4 or 6, 7, 8.

**101b. Elementary Chemical Theory**

**102b. Elementary Chemical Theory**

**103b. Elementary Chemical Theory**

These courses supplementary to Chemistry 101a, 102a, 103a are required of students majoring in chemistry who do not present chemistry for entrance. T. Th., 3.

**101. General Chemistry**

**102. General Chemistry**

**103. Qualitative Analysis**

Basic courses in general chemistry. Prerequisite: One unit of high school chemistry. Lecture and quiz, M. W. F., 2; laboratory, M. W., 6, 7, 8; T. Th., 2, 3, 4 or 6, 7, 8.

**104. Quantitative Analysis**

**105. Quantitative Analysis**

**106. Quantitative Analysis**

These courses deal with the theory and practice of gravimetric and volumetric analysis. The use of the fundamental principles of modern theoretical chemistry, as well as the attainment of the ability to make quantitative separations and determinations, is emphasized. Prerequisite: Chemistry 103a or 103. Lecture, T. Th., 5; laboratory, M. W. F., 5, 6, 7.

**206. Organic Chemistry**

**207. Organic Chemistry**

**208. Organic Chemistry**

These courses consist of a fundamental study of the compounds of carbon. Careful attention is given to group structure, group relationship, group properties, isomerism and nomenclature. Prerequisite: Chemistry 103a or 103. Lecture and quiz, M. W. F., 5; laboratory, T. Th., 5, 6, 7.
209. INDUSTRIAL INORGANIC CHEMISTRY  
   Fall, 5 Hours

210a. INDUSTRIAL ORGANIC CHEMISTRY  
   Winter, 5 Hours

210b. INDUSTRIAL ORGANIC CHEMISTRY  
   Spring, 5 Hours

These courses in industrial chemistry are a descriptive survey of industrial chemical processes and their products. In addition to regular class work, visits at appropriate periods are made to industrial plants in neighboring cities. Prerequisite: Qualitative Analysis and Organic Chemistry. Daily. 1.

Mr. Harrod

211a. ADVANCED QUALITATIVE ANALYSIS  
   Fall, 5 Hours

211b. ADVANCED QUALITATIVE ANALYSIS  
   Winter, 5 Hours

212. INORGANIC PREPARATIONS  
   Spring, 5 Hours

The primary purpose of these courses is to teach inorganic chemistry. Courses 211a and 211b deal with systematic analysis on a semi-quantitative basis, and are more comprehensive than 103 in both theoretical consideration and number of elements studied. Course 212 consists of a preparation of pure inorganic compounds, and a study of the theoretical principles involved. In all these courses the Periodic Law is used as the basis for the classification of the elements and their compounds. Prerequisite: Chemistry 104 and 105. Lecture, T. Th., 4; laboratory, M. W. F., 5, 6, 7.

Mr. Miller

215. PHYSICAL CHEMISTRY  
   Fall, 3 Hours

216. PHYSICAL CHEMISTRY  
   Winter, 3 Hours

217. PHYSICAL CHEMISTRY  
   Spring, 3 Hours

A series of courses designed to develop a comprehensive conception of chemical change and the structure of matter. In the interest of the pre-medical student, special attention is given to osmosis, equilibrium, colloids, and hydrogen ion determination. Laboratory work designed for these courses is done in the Department of Physics, courses 216, 217, 218. Prerequisite: Quantitative Analysis, Organic Chemistry, General Physics and Mathematics 109. Lecture and quiz, M. W. F., 4.

Mr. Miller

231. CHEMISTRY PROBLEMS  
   Credit to be Arranged

Minor investigation in chemistry, may be elected any quarter in the senior year by any student who is qualified to carry it. Work may be started in the Fall quarter and continued through the year. Credit will be evaluated at the close of course. This is an honor course. Consult head of department.

Mr. Harrod, Mr. Miller

MATHEMATICS

The aim is to offer courses primarily as part of a liberal education, as requirements for engineering students and for prospective graduate students in mathematics and physics. In all courses the theory developed is followed by application to exercises and practical problems when possible.

Students majoring in mathematics are advised to follow the sequence of courses 101 to 109 inclusive and to complete at least five quarter hours from other offerings in this department. Those planning to do graduate work in this field should complete courses 212, 215, and 216 with enough
additional courses to bring the total to a minimum of forty-five hours. Physics is recommended as a minor. A reading knowledge of German or French is advised.

100. COLLEGE ALGEBRA
This course covers much of the material of the traditional course in algebra with emphasis upon number theory, quadratic forms, functions and their graphs, and the theory of determinants as applied to the solution of simple sets of equations. Prerequisite: Plane geometry and one unit of high school algebra. Daily, 2.

Mr. Fulton

101. COLLEGE ALGEBRA
This course covers much of the material of the traditional course in algebra with emphasis upon number theory, quadratic forms, functions and their graphs, and the theory of determinants as applied to the solution of simple sets of equations. Prerequisite: Plane geometry and one and one-half units of high school algebra. Daily, 3 or 5.

Mr. Fulton, Mr. Whitted

1012. FRESHMAN MATHEMATICS

1023. FRESHMAN MATHEMATICS

A survey course built around high school mathematics, acquainting the student with the meaning, practical uses and the possibilities in the general field of mathematics. Course continues through the year and may be elected as an alternative for science. Prerequisite: One unit of algebra and one unit of geometry. M. W. F., 4.

Mr. Fulton

103. TRIGONOMETRY
The fundamental principles of the subject are developed and applied to trigonometric reductions and to the solutions of triangles. Numerous exercises in the field of geometry, physics, and mechanics are studied. Prerequisite: Plane geometry and one and one-half units of high school algebra. Daily 3 or 5.

Mr. Fulton, Mr. Whitted

103b. TRIGONOMETRY
The fundamental principles of the subject are developed and applied to trigonometric reductions and to the solutions of triangles. Numerous exercises in the field of geometry, physics and mechanics are studied. Prerequisite: Plane geometry and one unit of high school algebra. Daily, 2 or 4.

Mr. Fulton

105. ANALYTICAL GEOMETRY
The purpose of this course is to acquaint the student with analytical methods of investigation and to make him more skillful in the use of algebraic processes as applied to geometric loci. Special attention is given to the equations of the right line, circle, conic sections, and the higher plane curves. Prerequisite: Mathematics 103 or 103b. Daily, 3, 4 or 5.

Mr. Fulton, Mr. Whitted

106. ANALYTICAL GEOMETRY OF SPACE
This offering is planned to give the student a good working knowledge of coordinate geometry in three dimensional space. Equations of the first and second degree of two and three unknowns are stressed. Prerequisite: Mathematics 105. M. W. F., 6.

Mr. Whitted

*Not given in 1940-1941.
107. Calculus: Differential  Fall, 5 Hours
The fundamental theorems for the differentiation of algebraic, trigonometric, logarithmic, and exponential functions are taken up with numerous applications to problems in geometry, mechanics, and physics. Prerequisite: Mathematics 105. Daily, 4.
Mr. Whitted

108. Calculus: Differential and Integral  Winter, 5 Hours
This course is a continuation of Mathematics 107, but giving a more extended use of differentiation to analytical functions of two or more variables with an introduction to the indefinite integral. Prerequisite: Mathematics 107. Daily, 3 or 4.
Mr. Whitted

109. Calculus: Integral  Spring, 5 Hours
This is a continuation of Mathematics 108, but giving a more detailed account of methods of integration by the aid of substitution, parts and reduction formulae. Integration as a summation and the definite integral with its application to problems in surfaces, volumes, moments of inertia, center of gravity and fluid pressure is studied. Prerequisite: Mathematics 108. Daily, 3 or 4.
Mr. Whitted

111A. Practical Astronomy  3 Hours
This course covers spherical trigonometry with numerous applications to the fields of geodesy and astronomy. Prerequisite: College algebra and plane geometry. M. W. F., 6.
Mr. Whitted or Mr. Fulton

112. Statistical Methods  Spring, 3 Hours
This is an elementary survey of statistical methods designed to meet the needs of students in education, economics, sociology, and science. It includes sampling, tabulation, graphs, averages, probability and error, dispersion, trends, cycles, correlation, and index numbers. Prerequisite: Mathematics 100 or 101. M. W. F., 6.
Mr. Whitted

121. Mathematics of Finance  Spring, 5 Hours
This course is designed to meet the needs of students in economics and commerce. It treats of both simple and compound interest, and true and bank discount. Applications are made to annuities, amortization, sinking funds, depreciation, valuation of bonds, building and loan associations and insurance. Prerequisite: College algebra 100 or 101, Plane trigonometry 103b or 103. Daily, 2.
Mr. Fulton

212. Differential Equations  Winter, 3 Hours
This is a study of the more common types of ordinary differential equations, especially those of the first and second orders, with emphasis on geometrical interpretations and applications to geometry, elementary mechanics and physics. Prerequisite: Mathematics 109. M. W. F., 6.
Mr. Whitted

213. College Geometry  Winter, 3 Hours
This course is designed to meet the needs of those who expect to teach mathematics in the public schools. General methods leading to the solution and construction of geometric problems are studied. Open to juniors and seniors. M. W. F., by arrangement.
Mr. Whitted

215. Vector Analysis  Spring, 3 Hours
This is an account of the methods of elementary vector analysis in two and three dimensional space, followed by simple applications to geometry and physics. Prerequisite: Mathematics 109. M. W. F., 6.
Mr. Fulton
216. Calculus: Advanced Integral

This course takes up plane areas by means of double integration; volume by triple integration; moment of inertia; center of gravity; fluid pressure; centroid of solids and hyperbolic functions. Prerequisites: Mathematics 108, 109. M. T. W. Th., 6.

Mr. Whitted

217. Theory of Equations and Determinants

Winter, 3 Hours

The theory of equations is necessary in subsequent mathematical courses and furnishes light upon certain algebraic and analytical functions. Prerequisite: Mathematics 105, 107. M. W. F., 6.

Mr. Whitted or Mr. Fulton

PHYSICS

The primary aim of this department is to train the student to reason from fundamental experimental facts in solving the problems of physics. In conjunction with this the department aims to give a training sufficiently broad to appreciate the physics of popular scientific articles, to teach physics in the public schools, to apply physics in engineering, medicine and other sciences, and to pursue graduate work to the best advantage.

The physics major must include courses 213, 214, and 220. A year of general chemistry should be completed. A year of economics is recommended.

For those contemplating graduate work in physics 45 hours each of physics and mathematics should be completed. An introductory course in philosophy and a reading knowledge of German are strongly recommended.

104. General Physics

Fall, 5 Hours

105. General Physics

Winter, 5 Hours

106. General Physics

Spring, 5 Hours

For engineers and science majors. Prerequisite: High school physics and Analytic. M. T. W. Th. 2. One three-hour laboratory period on M. T. W. Th. or F., 5, 6, 7, or 6, 7, 8.

Mr. Berger

109. General Physics

Fall, 3 Hours

110. General Physics

Winter, 3 Hours

111. General Physics

Spring, 3 Hours

Open to freshmen. Prerequisites: One year each of high school algebra and plane geometry. M. W. F., 4.

Mr. Berger

109a. General Physics

2 Hours

110a. General Physics

2 Hours

* Not given in 1940-1941.
111A. **General Physics**  
Laboratory to precede or accompany 109, 110, 111. Any quarter. Two 2-hour laboratory periods on T. or Th., at 5, 6, or 7, 8.  

Mr. Berger

213. **Mechanics**  
A course in mechanics problems. Prerequisite: Physics 106 or 111 and calculus. Daily, 3.  

Mr. Berger

214. **Mathematics of Physics**  
Spring, 5 Hours  
A course dealing with the application of mathematics to physics and related sciences. Prerequisite: Physics 105 or 111 and calculus. Daily, 1.  

Mr. Berger

216. **Advanced Laboratory: Mechanics**  
1-6 Hours

217. **Advanced Laboratory: Light, Heat, Sound**  
1-6 Hours

218. **Advanced Laboratory: Electricity**  
1-6 Hours  
Credit is given in courses 216, 217, and 218 according to the amount of work done. A quiz is given on assigned readings for each experiment. Not more than 6 hours of credit may be earned in any one of the three courses. Offered every quarter. Prerequisite: Physics 106 or 111 and Mathematics 109. Two three-hour laboratory periods and one class period each week for three hours credit.  

Mr. Berger

220. **Modern Physics**  
Winter, 3 Hours  
A lecture and quiz course involving fundamental questions on the nature of things, such as atomic structure, electron theory, quantum theory, and the theory of relativity. Prerequisites: General chemistry and general physics. M. W. F., 1.  

Mr. Berger
Division III. Social Science

Wilfred E. Binkley, Chairman

A student who plans to make his major elections from a department in this group should complete at least two year courses in the social sciences during the freshman and sophomore years. Proficiency in English is indispensable. A course in statistical methods will prove useful, and a reading knowledge of French or German is essential if graduate work is anticipated.

ECONOMICS AND BUSINESS ADMINISTRATION

The aim is to help the student acquire a sympathetic understanding of the origin and functions of our business institutions. Aside from its cultural value, such an understanding should enable the student to adjust himself intelligently to his industrial environment, and to prepare himself for the wise performance of the duties of a citizen in an industrial democracy.

It is recommended that the course in Principles of Economics be completed during the first two college years. Students majoring in this department are expected to take courses in history, political science, and sociology, especially such courses as coordinate with the field of economics. An acquaintance with the physical sciences is also required.

Secretarial courses are designed to serve those persons who plan to become secretaries and assistants to executives or who are looking toward administrative positions in keeping with their training and experience. Students preparing to teach commercial subjects will find these courses suited to their needs. Under the Division of Teacher-Training a four-year course in commercial education is outlined.

ECONOMICS

121. Principles of Economics  Fall, 3 Hours
122. Principles of Economics  Winter, 3 Hours
123. Principles of Economics  Spring, 3 Hours

Wants, scarcity, and economy; economic history; organization of production; value and price; monopoly and its control; financial organization; distribution of wealth and income; inequality and social reform; public finance; and international trade. Not open to freshmen. M. W. F., 1 and 5.

Mr. Patton
125. Economics for Engineers  
This course is designed to acquaint the student with the fundamental principles underlying our economic system. The material is presented from the point of view of the engineer. Not open to freshmen. Daily, 3.  
Mr. Patton

204. Labor Problems  
The Industrial Revolution and the workers; wages; standard of living; population and immigration; hours of labor; unemployment; the aged worker; labor organization; employers' associations; industrial disputes; arbitration and conciliation; scientific management; personnel administration; and programs of reconstruction. Prerequisite: Economics 121, 122, and 123. M. W. F., 6.  
Mr. Patton

207. Money and Banking  
Winter, 3 Hours  
208. Money and Banking  
Spring, 3 Hours  
Nature and functions of money and credit; banking operations; development of banking; Federal Reserve System; clearing and collection; foreign exchange; financing foreign trade; business cycle; trust companies; investment banking; savings banks; investment trusts; agricultural credit institutions; and recent tendencies in banking. Prerequisite: Economics 121, 122, and 123. M. W. F., 6.  
Mr. Patton

*214. Business Finance  
Fall, 3 Hours

*215 Business Finance  
Winter, 3 Hours  
Stocks and bonds; promotion; capitalization plan; marketing of securities; short-term borrowing; budgeting; financial forecasting; tests of successful operation; treatment of earnings; expansion; and failure and reorganization. Prerequisite: Economics 121, 122, and 123. T. Th. F., 6.  
Mr. Patton

*217. Public Finance  
Spring, 3 Hours  
Public expenditures in nation, state and municipality; causes of increasing expenditures and the means of controlling them; meaning and development of taxation; means of escape from taxation; some requisites of a sound tax system; redemption, refunding and conversion of debt; financial administration and legislation; the budget. Prerequisites: Economics 121, 122, 123. T. Th. F., 6.  
Mr. Patton

BUSINESS ADMINISTRATION

103. Business Organization and Management  
Fall, 2 Hours  
104. Business Organization and Management  
Winter, 2 Hours  
105. Business Organization and Management  
Spring, 2 Hours  
In these courses some of the problems which confront the business man are treated in the manner in which they are presented, discussed, and disposed of by the executive. The student is introduced to the principles of organization, operation, and control of business enterprise. Open to freshmen. T. Th., 2 or 3.  
Mr. Hauser, Mr. Patton

131. Principles of Accounting  
Fall, 3 Hours

* Not given in 1940-1941.
132. **Principles of Accounting**  
133. **Principles of Accounting**

Principles of the double entry system; asset and equity accounts; journal and ledger; expense and revenue accounts; periodic adjustment of accounts; working sheets; income statements; balance sheets; valuation and income determination; trading and manufacturing accounts; and partnership and corporate accounting. M. W. Th. F., 3.

**Miss Lewis**

221. **Business Law**

222. **Business Law**

223. **Business Law**

Three courses in general elementary law: legal divisions and terminology, definitions of rights, wrongs, and remedies. Study of contracts; agency; sales; bailments; negotiable paper; partnerships and corporations; trusts and monopolies. Open to majors in business administration. Prerequisite: Junior standing. M. W. F., 7.

**Mr. Hauser**

231. **Advanced Accounting**

232. **Advanced Accounting**

A comprehensive survey of the field of advanced accounting dealing specifically with analysis of statements; partnerships, liquidations and sale of same; accounting for insolvent concerns; corporations; trusts as business companies; controlling accounts; agencies and branches; venture accounts; statements of affairs; realization and liquidation of accounts and statements; statement of application of funds; statement accounting for consolidations; actuarial science. M. W. F., 1; laboratory, T. Th., 1, 2.

**Mr. Hauser**

*233. Cost Accounting*

Elementary cost accounting. Departmental, process and job lot costs; cost records and procedures; control of materials and labor; disposition of overhead. T. Th. F., 4.

**Mr. Hauser**

234. **Analysis of Financial Statements**

The course presents the general principles of statement analysis. Emphasis is placed upon how statements are to be read, and deals with particular types of statements. The course lays the foundation for advanced study of financial statements. Alternates with course in Cost Accounting. Prerequisites: Accounting 231, 232. T. Th. F., 4.

**Mr. Hauser**

*235. Federal Income Tax Accounting*

A course in the fundamentals of federal taxes. Particular emphasis is laid on the current law and the preparation of income tax returns for individuals, partnerships, corporations, estates and trusts. Prerequisite: Economics 121, 122, 123; Accounting 231, 232. M. W. F., 1; laboratory, T. Th., 1, 2.

**Mr. Hauser**

236. **Auditing**

This course deals with both theory and practice of auditing, discussion being supplemented with problems, questions, and specimen working papers applicable to balance sheet audits. Prerequisite: Economics 121, 122, 123; Accounting 231, 232. M. W. F., 5.

**Mr. Hauser**

* Not given in 1940-1941.
237. **C. P. A. Problems**  
Spring, 3 Hours  
Classroom practice and preparation for the certified public accountant examination. Practical accounting problems, auditing and theory of accounts, analysis and discussion are some features of the course. Open only to qualified seniors in business administration. Prerequisite: Accounting 231, 232, 233, and Federal Income Tax Accounting, Auditing, and Business Law. M. W. F., 5.

241. **Marketing**  
242. **Marketing**  
242. **Marketing**  
Fall, 3 Hours  
Winter, 3 Hours  
Marketing functions and institutions; consumers' buying motives and demand; methods and costs of marketing; and marketing problems of the farmer, manufacturer, wholesaler, retailer, and other middlemen. Required of all majors. Courses 241 and 242 alternate with courses 214 and 215. Prerequisite: Economics 121, 122, 123. T. Th. F., 4.

*245. **Principles of Advertising**  
Fall, 3 Hours  
This course is designed for general business students who seek an understanding of advertising in the present business, social, and economic environment. The material covers advertising principles for the retailer and national advertiser. Problems are presented for solution and discussion by students. Prerequisite: Marketing 241 and 242; Psychology 101. T. Th. F., 4.

246. **Salesmanship**  
Spring, 3 Hours  
This course presents an analysis of the technique of personal selling as a part of marketing. Demonstrations sales are conducted in which students participate. The aims of the course are to develop the capacity for personal persuasion and to provide a broad view of modern selling activity. Prerequisite: Marketing 241 and 242; Psychology 101. T. Th F., 4.

*247. **Retailing**  
Winter, 3 Hours  
This course is devoted to the study and analysis of the fundamental principles underlying the operation of retail stores—department stores, chain stores, and single line—or independent unit stores. Among topics treated are: the present status of retailing in the United States; store location, arrangement, and merchandise classification; types of store organization; personnel; controlling of inventories; publicity; operating activities; and control. Prerequisite: Marketing 241 and 242. T. Th F., 4.

251. **Risk, Risk-Bearing, and Insurance**  
Fall, 3 Hours  
The theory of risk; methods and institutions of risk-bearing, including insurance; kinds of insurance; types of policies; reserves; investment of funds; buying and selling insurance; and state regulation. Required of all majors. Prerequisite: Economics 121, 122, 123. T. Th. F., 3.

**SECRETARIAL COURSES**

101. **Typewriting**  
Fall, 2 Hours  
102. **Typewriting**  
Winter, 2 Hours  
103. **Typewriting**  
Spring, 2 Hours  
These constitute a series of courses in typewriting designed to give the student a practical working knowledge of the typewriter and skill in operation. Credit not counted toward B. A. degree. Daily, 6.

* Not given in 1940-1941.

**Mr. Hauser**

**Mr. Hauser**

**Mr. Hauser**

**Mr. Hauser**

**Mr. Patton**

**Miss Lewis**
107. Typewriting  
108. Typewriting  
109. Typewriting  
More advanced courses in typewriting whose purpose is to develop speed in writing, to give opportunity for office practice work, such as filing, mimeographing, writing business papers, etc. Credit not counted toward B. A. degree. T. Th. F., 2.

Miss Lewis  
Fall, 2 Hours  
Winter, 2 Hours  
Spring, 2 Hours

110. Stenography  
111. Stenography  
112. Stenography  
These are first year courses in shorthand offered for students who are planning to prepare themselves for teaching or secretarial work. Typing should be taken previously or concurrently. Daily, 5.

Miss Lewis  
Fall, 3 Hours  
Winter, 3 Hours  
Spring, 3 Hours

115. Stenography  
116. Stenography  
117. Stenography  
Advanced courses with increased speed in writing and reading. Writing for dictation and transcribing on typewriter. Student must pass high efficiency tests. Daily, 7.

Miss Lewis  
Fall, 3 Hours  
Winter, 3 Hours  
Spring, 3 Hours

121. Mathematics of Finance  
Designed to acquaint the student with the mathematical tools of business. Prerequisite: College Algebra 100 or 101 and Trigonometry 103b or 103. Daily 2. (See Department of Mathematics.)

Miss Lewis  
Spring, 5 Hours

130. Office Practice  
Theory and practice in office work. Students are assigned to offices on the campus, thus securing actual experience. By arrangement.

Miss Lewis  
Spring, 3 Hours

230. Special Methods in Teaching Commercial Subjects  
A study of the methods and technique of teaching commercial subjects in the high school. Required for commercial teachers. Time to be arranged.

Miss Lewis  
Fall, 3 Hours

240. Supervised Teaching in Commercial Education  
Prerequisite: Special Methods 230. Given each quarter.

Miss Lewis  
6 Hours

245. Problems in Commercial Teaching  
Open to properly qualified seniors. By arrangement.

Miss Lewis  
2-5 Hours

HEALTH AND PHYSICAL EDUCATION

Some form of physical activity is required of all students during their first two years in the University. The nature and amount of work to be tak-
en depends upon physical condition as revealed by a careful examination and by efficiency tests given at the beginning of the school year. A varied program of elective and required activities is provided, which aims to secure and maintain the highest degree of individual and social efficiency both during and after college life.

The elective courses are both theoretical and practical. A strong intramural sports program is designed to provide some form of activity for nearly every student on the campus; while for those who wish to specialize in the physical education field, a four-year professional curriculum is offered, leading to the Bachelor of Science in Education degree and to a special state four-year provisional certificate.

**Required Courses**

Physical education two hours a week. One credit hour each quarter for the first six quarters.

First Year. This work is given both out-of-doors and in the gymnasium. It is systematically graded and arranged to fit the needs and interest of the individual. Corrective work, for those who need it, and the fundamentals of natural gymnastics and games are stressed.

Second Year. A continuation of the first year program, with greater emphasis on play activities.

**Elective Courses**

Intramural Sports. Ample athletic fields and a splendid new gymnasium afford exceptional facilities for an intramural program that is sufficiently broad and varied to offer some form of activity for practically all University students. In their proper seasons, the following sports are offered: football, basketball, baseball, speedball, handball, playground ball, volleyball, tennis, wrestling, boxing and track.

Intercollegiate Athletics. The Ohio Northern University is a member of the Ohio Intercollegiate Athletic Conference and has gained an enviable reputation for the quality and character of her teams. In football, basketball, baseball, and track the University has consistently been rated among the stronger members of the conference. Additions to the coaching staff insure well trained and well coached representatives in all sports. In fact, Ohio Northern offers a wide opportunity for indoor and outdoor sports and takes just pride in maintaining varsity teams and an intramural program of high order.
Four-Year Professional Course

The curriculum for the four-year professional course for teachers and supervisors of physical education will be found under the Division of Teacher Training.

101. Physical Education
     Fall, 1 Hour
102. Physical Education
     Winter, 1 Hour
103. Physical Education
     Spring, 1 Hour
Men—Gymnasium and outdoor classes in season, natural gymnastics, informal play. Six sections. M. W., 1, 2, 3, 4, 5, or 6.

     Mr. C. Lamb, Mr. H. Lamb

Women—A course in natural gymnastics including games and sports in season, dancing, and tumbling. Four sections. T. Th., 1, 2, 3, 4.

     Miss Tolf

104. Physical Education
     Fall, 1 Hour
105. Physical Education
     Winter, 1 Hour
106. Physical Education
     Spring, 1 Hour
Men—Continuation of course 103 with team games and apparatus added. Six sections. M. W., 1, 2, 3, 4, 5, or 6.

     Mr. C. Lamb, Mr. H. Lamb

Women—A continuation of course 103. Four sections. T. Th., 1, 2, 4, 6.

     Miss Tolf

101a. Physical Education for Majors
     Fall, 1 Hour
102a. Physical Education for Majors
     Winter, 1 Hour
103a. Physical Education for Majors
     Spring, 1 Hour
Courses 101a to 106a inclusive are required of all students majoring or minoring in physical education in place of courses 101 to 106. These courses consist of natural activities in season, including games, stunts, tumbling, clogging, folk and characteristic dancing, natural dancing, pageantry for women and combat activities for men. These courses apply toward physical education major. Men, T. Th., 5. Women, by arrangement.

     Mr. C. Lamb, Miss Tolf

115. Personal and General Hygiene
     Fall, Winter, Spring, 2 Hours
A course designed to cover the various phases of personal hygiene and health, from the individual aspect, with emphasis on preventive measures. For men each quarter; for women Winter quarter only. T. Th., 3 and 4.

     Mr. C. Lamb, Mr. Kramer

117. Health Education
     Fall, 3 Hours
A course for the special teacher and supervisor of physical education, dealing with the sanitation of school buildings, surveys of various school systems, teachers' health, and other health problems arising in a school system. M. W. F., 5.

     Miss Tolf
151. Health Education
Spring, 3 Hours
This course deals with the health program of the public schools, and the teaching of habits, attitudes and knowledge conducive to good health. M. W. F., 2.
Miss Tolf

152. Health Education
Winter, 3 Hours
The relation of hygiene to home and community life, including a study of sewage disposal, refuse, disposal, transmission and control of diseases. M. W. F., 5.
Miss Tolf

155. Kinesiology
Spring, 2 Hours
This course deals with the general body mechanics of the human organism, furnishing the student an opportunity to study and analyze the activities of the physical education program in their relation to coordination and the proper body mechanics. Prerequisite: Comparative Anatomy 106 and Mammalian Anatomy and Physiology 113. T. Th., 3.
Mr. C. Lamb

156. Theory and Practice of Plays and Games
Spring, 3 Hours
The need, purpose, and functions of play in education are studied. Activities adaptable to various age levels of the elementary and secondary schools are studied. Two hours of theory and two hours of laboratory per week. M. T. W. Th., 6.
Miss Tolf

158. First Aid and Athletic Training
Spring, 2 Hours
Lectures, discussion and practice in the giving of first aid in cases of emergency. Methods of scientific training and conditioning of athletic teams. The American Red Cross First Aid Certificate may be obtained by students who pass a satisfactory examination. T. Th., 4.
Mr. C. Lamb

201. Principles and Methods of Physical Education
Fall, 4 Hours

202. Principles and Methods of Physical Education
Winter, 4 Hours

203. Methods of Physical Education
Spring, 4 Hours
Lectures, demonstrations and practice. An examination of the principles underlying modern practices in physical education, from the standpoint of general education. The methods used in the natural program of physical education, such as the teaching of fundamental skills of tumbling and stunts, basketball, indoor baseball, speedball, volleyball, handball. Class, M. W., 4; practice, T. Th., 5.
Mr. C. Lamb

221a. Methods in Coaching Football
Fall, 3 Hours
A course covering in detail, equipment, fundamentals of the game, kicking, passing, handling the ball, tackling, blocking, etc.; individual position play; discussion of various types of offensive and defensive formations now in use, and the merits of each; strategy and generalship. T. Th. F., 4.
Mr. H. Lamb

221b. Methods in Coaching for Women
Fall, 3 Hours
This course is to prepare major and minor students in physical education to coach athletics in secondary schools. The course covers presentation of technique, basic principles, team play and methods for instruction of hockey, soccer and speedball. M. W. F., 6.
Miss Tolf
222. **METHODS IN COACHING BASKETBALL**

**Winter, 3 Hours**

Men—Special emphasis is given to the fundamentals, passing, shooting, dribbling, feinting, and pivoting; to the various styles of offense and defense used by leading coaches; to equipment; to the conditioning of a team; and to the handling of a team in games. Lectures, reports, demonstration, and practice. T. Th. F., 4.


Mr. H. Lamb

223. **METHODS IN COACHING BASEBALL AND TRACK**

**Spring, 3 Hours**

This course covers pitching, catching, batting, fielding, baserunning, individual position and team play in baseball. It takes up the best methods and forms for all of the events in track and field. Lectures, reports, demonstration and practice. T. Th. F., 4.

Mr. C. Lamb, Mr. H. Lamb

Women—Baseball, tennis, track, and field sports. M. W. F., 7.

Miss Tolf

252. **NORMAL DIAGNOSIS**

**Winter, 2 Hours**

This course includes recording of personal and family history, methods of making general health examinations, including special methods of examining the eyes, ears, nose, throat, spine, feet, and weighing and measuring. T. Th., 3.

Mr. C. Lamb

254. **ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION—MEN AND WOMEN**

**Fall, 2 Hours**

A course dealing with the objectives, principles, and methods of organization and administration of physical education in elementary and secondary schools and colleges. It includes management of athletic sports, games, and contests, and intramural athletics. T. Th., 2.

Mr. C. Lamb

255. **INDIVIDUAL GYMNASTICS**

**Winter, 2 Hours**

Lectures, demonstrations and practice in the organization and administration of corrective exercises for special physical defects. This course deals with the selection and prescription of exercises designed to correct various postural defects and deformities. T. Th., 4.

Mr. C. Lamb

260. **HISTORY OF PHYSICAL EDUCATION**

**Spring, 2 Hours**

This course traces the evolution and development of physical education through ancient and modern times. It demonstrates the close relationship existing between certain elements in civilization and the status of physical education in that civilization. T. Th., 1.

Mr. C. Lamb

265. **PROBLEMS IN PHYSICAL EDUCATION**

**Spring, 3 Hours**

This course deals with specific problems in physical and health education and is open to properly qualified students. Time to be arranged.

Mr. C. Lamb

263. **STUDENT TEACHING—PHYSICAL EDUCATION**

**Fall, Winter, Spring, 6 Hours**

Students taking the four year course for the training of physical education supervisors and teachers are required to prepare a syllabus of the work covered, write lesson plans, hold conferences with the professor in charge and teach in the University, junior and senior high schools and elementary school.

Mr. C. Lamb
271. Advanced Coaching Practice
272. Advanced Coaching Practice
273. Advanced Coaching Practice

These courses are designed to give students who have had courses 221, 222, and 223 an opportunity to do actual coaching under supervision, in all sports in season. Hours arranged.

Mr. H. Lamb

HISTORY AND POLITICAL SCIENCE

The history courses stress the evolution of human institutions with a view to developing an understanding of our present civilization. Students majoring in history must take courses in both American and European history and electives in the allied social sciences, particularly political science, sociology, psychology and economics. The department will recommend no graduate for the teaching of history who has not taken nine hours in American government.

The most appropriate sequence of courses for a major in history would be History of Western Europe 110, 111, 112; History of the United States 113, 114, 115; History of England 104, 105, 106; Recent American History 216, 217, 218; or Constitutional History of the United States 224, 225, 226; and Recent European History 251, 252, 253 or Bourbon France 235, 236, 237. In addition to the 36 hours required for the major in history the student must complete nine hours in American government.

The courses in political science are designed to prepare the student for the intelligent performance of the functions of citizenship, for entrance into public service, for the study of law, and for graduate study in this field. Those majoring in political science are advised to pursue courses in sociology, psychology, history and economics.

HISTORY

104. ENGLISH HISTORY TO 1558
105. ENGLISH HISTORY: 1558-1783
106. ENGLISH HISTORY: 1783 TO THE PRESENT TIME

A general introductory study of the English people in their political, social and institutional development, followed by a survey of the growth of the British Empire and the evolution of the British Commonwealth of Nations. M. W. F., 6, and T. Th. F., 1.

Mr. Rogers

110. HISTORY OF WESTERN EUROPE A. D. 1 TO 1517
111. HISTORY OF WESTERN EUROPE 1517 TO 1815
112. History of Western Europe 1815 to Present Time

An introductory survey of European history. The Medieval background, the Renaissance, the rise of international rivalry, the World War and its aftermath. Open to freshmen. T. Th. F., 1 and 5.

Spring, 3 Hours

Mr. Rogers

113. History of the United States to 1815

Fall, 3 Hours

Mr. Rogers

114. History of the United States: 1815 to 1865

Winter, 3 Hours

Spring, 3 Hours

Mr. Binkley

115. History of the United States: 1865 to the Present Time

A study of the political, social and economic development of the United States from the discovery to the present time. Not open to freshmen. T. Th., F., 4.

Mr. Binkley

216. Recent American History

Fall, 2 Hours

Mr. Binkley

217. Recent American History

Winter, 2 Hours

Spring, 2 Hours

Mr. Binkley

218. Recent American History

An investigation and intensive study of some of the major movements of the United States since the Civil War. Prerequisite: History 113, 114, 115. T. Th., 5.

*224. Constitutional History of the United States

Fall, 2 Hours

Mr. Binkley

*225. Constitutional History of the United States

Winter, 2 Hours

Mr. Binkley

*226. Constitutional History of the United States

Spring, 2 Hours

A survey of the constitutional development of the United States from the colonial period to the present time. Prerequisite: Political Science 101, 102, 103, and History 113, 114, 115. T. Th., 5.

Mr. Binkley

235. Bourbon France and the Revolutionary Era

Fall, 2 Hours

Mr. Rogers

236. Bourbon France and the Revolutionary Era

Winter, 2 Hours

Mr. Rogers

237. Bourbon France and the Revolutionary Era

Spring, 2 Hours

Three courses presenting in detail the history of Europe during the period of the absolute monarchy, the ancient regime, the revolutionary era and Napoleon. Prerequisite: History 110, 111, 112. T. Th., 7.

Mr. Rogers

*251. Recent European History

Fall, 2 Hours

Mr. Rogers

*252. Recent European History

Winter, 2 Hours

Spring, 2 Hours

Mr. Rogers

*253. Recent European History

Three courses presenting the background of the World War, the War, the Peace, and the new Europe. Prerequisite: History 110, 111, 112. T. Th., 7.

Mr. Rogers

* Not given in 1940-1941.
### Political Science

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Semester</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>101</td>
<td>American Government</td>
<td>Fall</td>
<td>3 Hours</td>
</tr>
<tr>
<td>102</td>
<td>American Government</td>
<td>Winter</td>
<td>3 Hours</td>
</tr>
<tr>
<td>103</td>
<td>American Government</td>
<td>Spring</td>
<td>3 Hours</td>
</tr>
<tr>
<td>104</td>
<td>Introduction to Political Science</td>
<td>Fall</td>
<td>2 Hours</td>
</tr>
<tr>
<td>105</td>
<td>Introduction to Political Science</td>
<td>Winter</td>
<td>2 Hours</td>
</tr>
<tr>
<td>106</td>
<td>Introduction to Political Science</td>
<td>Spring</td>
<td>2 Hours</td>
</tr>
<tr>
<td>204</td>
<td>Municipal Government</td>
<td>Winter</td>
<td>3 Hours</td>
</tr>
<tr>
<td>208</td>
<td>Comparative Government</td>
<td>Fall</td>
<td>3 Hours</td>
</tr>
<tr>
<td>209</td>
<td>Comparative Government</td>
<td>Winter</td>
<td>3 Hours</td>
</tr>
<tr>
<td>210</td>
<td>American Political Parties</td>
<td>Fall</td>
<td>3 Hours</td>
</tr>
<tr>
<td>211</td>
<td>Political Science Problems</td>
<td></td>
<td>3 Hours</td>
</tr>
<tr>
<td>212</td>
<td>American Political Theories</td>
<td>Spring</td>
<td>3 Hours</td>
</tr>
<tr>
<td>230</td>
<td>European Political Theories</td>
<td>Spring</td>
<td>3 Hours</td>
</tr>
</tbody>
</table>

*Not given in 1940-1941.*
PSYCHOLOGY AND SOCIOLOGY

The purpose of this department is to acquaint the student with a study of the traits of human nature and the problems of social organization in order that he may become a better citizen, a more efficient teacher, and be better able to further his interests and studies either in private life or in institutions of learning.

Students who desire to major in this department will find it profitable to take courses in biology and such courses in mathematics as will aid in the use of statistical data. For those desiring to place major emphasis on sociology, a good background of history is essential.

PSYCHOLOGY

101. General Psychology
A general survey of psychological facts and principles including the topics of perception, motivation, learning, remembering, personality, and social behavior. Prerequisite: One year of college work. Two sections. Daily, 1 or 7.

Fall, 5 Hours
Mr. Ewing

102. Applied Psychology
The application of psychological principles to problems of modern life. Advertising, vocational psychology, industrial relations, personnel work, and social problems. Daily, 1 or 7.

Winter, 5 Hours
Mr. Ewing

104. Social Psychology
A study of social behavior and social adjustment. The effect of the social environment upon the development of personality. The relation of social and psychological laws to problems of the community. Prerequisite: Psychology 101. M. W. F., 7.

Spring, 3 Hours
Mr. Ewing

135. Educational Psychology

Winter, 3 Hours
Mr. Ewing

136. Adolescent Psychology
An intensive study of the problems of growth; systematic psychology and personality of adolescence; applied problems in junior and senior high schools. Prerequisite: General Psychology 101, or Educational Psychology 135. M. W. F., 5.

Spring, 3 Hours
Mr. Ewing

152. Child Psychology
Source and characteristics of original nature; social and non-social instincts; attention, sense perception, imagination, thinking, habit, play, moral development, physical development; exceptional children. Prerequisite: Psychology 101. M. W. F., 4.

Spring, 3 Hours
Mr. Ewing

210. Abnormal Psychology
This course is an introduction to the study of problems of mental health and is designed to meet the needs of students of education and pre-professional courses. Prerequisite: Psychology 101. Daily, 1.

Spring, 5 Hours
Mr. Ewing
212. **Psychological Problems**  
Minor investigation. Open only to qualified seniors. By arrangement.  
Mr. Ewing

**SOCIOMETRY**

151. **General Sociology**  
Fall, 3 Hours

152. **General Sociology**  
Winter, 3 Hours
A study of the phenomena of human relations, including the nature and import of sociology, social evolution, socialization, social ideals, and social control. Serious consideration is given to the question, "How does human life in general become what it is, what values does it actually contain, and under what conditions can those values be more completely realized?" Not open to freshmen. Courses 151 and 152 are prerequisite to other courses in sociology. M. W. F., 2.  
Mr. Ewing

153. **American Society**  
Spring, 3 Hours
Social pathology as it concerns our own society including the study of such problems as child labor, poverty, crime, the family, public health, etc. Prerequisite: Sociology 151 and 152. M. W. F., 2.  
Mr. Ewing

211. **Criminology**  
Spring, 3 Hours
A consideration of the problems of crime and criminals. Special attention is given to the factors conducive to the making of criminals, together with a suggested program of treatment and prevention. The work also includes some study of the history of punishment and penal institutions. Prerequisites: Sociology 151 and 152. M. W. F., 8.  
Mr. Ewing

*212. **The Family**  
Spring, 3 Hours
A discussion course on the history of marriage and the family. A detailed study of the normal family, the conditions which interfere with the normal functioning of the family, and the means of social control. Prerequisites: Sociology 151 and 152 or consent of the instructor. M. W. F., 8.  
Mr. Ewing

**RELIGION AND PHILOSOPHY**

The courses in Biblical Literature seek to serve students interested in work of a religious nature. The sociological, historical and religious interpretations of the Biblical material are stressed in order that a sound point of view may be obtained. The courses are intended to prepare students for graduate work, to enable students to meet more effectively the needs of their home communities, and also to enable them to reconstruct constantly their religious experiences in the light of the high religious and ethical idealism of the prophets and Jesus.

Students preparing for the ministry are urged to work out their majors in the social sciences, especially psychology and sociology, and also to obtain a good background in the natural sciences and philosophy.

* Not given in 1940-1941.
BIBLICAL LITERATURE

151. Old Testament
The history of the Hebrew people from early times to the Division of the Hebrew Kingdom. The purpose of the course is to introduce the student to the essential features of the political, social and religious life of this interesting people with special emphasis upon their religious activities. Not open to freshmen. M. W. F., 6.

Fall, 3 Hours
Mr. Potter

152. Old Testament
The history of the Hebrew and Jewish people from the Division of the Hebrew Kingdom to the Death of Herod the Great. Not open to freshmen. M. W. F., 6.

Winter, 3 Hours
Mr. Potter

153. The Life of Christ
A study of the life and teaching of Christ together with some consideration of the social and political setting into which he was born and its relation to the success of his message. Not open to freshmen. M. W. F., 6.

Spring, 3 Hours
Mr. Potter

232. The Life of Paul

Fall, 3 Hours
Mr. Potter

233. Later New Testament Literature
This course deals with the book of Revelation, the Johannine Epistles, the fourth Gospel, Hebrews, and the General Epistles. An analysis of their essential teachings is made together with the circumstances which caused their production. M. W. F., 3.

Winter, 3 Hours
Mr. Potter

PHILOSOPHY

201. Introduction to Philosophy
A survey of the workings of the mind. A study is made of the characteristics of effective thinking, and the various methods involved. Resourcefulness in thinking, classifications of knowledge and how conclusions are reached are studied. A desirable course to parallel a study of the sciences and philosophy. M. W. F., 1.

Fall, 3 Hours
Mr. Potter

202. Logic
A constructive study of mental processes, the laws of learning, mental fallacies, methods of proof, the proper organization and presentation of ideas, and the limitation and expression of knowledge. M. W. F., 5.

Fall, 3 Hours
Mr. Potter

203. Ethics
A study of morality and the problems of conduct; their historical development and social and political relationships. Especially designed for teachers and students in professional schools. M. W. F., 5.

Winter, 3 Hours
Mr. Potter

*205. History of Philosophy
* Not given in 1940-41
*206. History of Philosophy  
Winter, 3 Hours

*207. History of Philosophy  
Spring, 3 Hours

These three courses in philosophy trace the movements of philosophical thought up to and including (a) the time of Christ, (b) the close of the nineteenth century, and (c) recent and present philosophy. The courses must be taken in sequence. T. Th. F., 7.

Mr. Potter

RELIGION

203. Church History  
Spring, 3 Hours

A consideration of the significant individuals, movements and events in the Christian Church from the Apostolic Age to the present day and their relation to the course of general history. M. W. F., 5.

Mr. Potter

210. History of Religion  
Spring, 3 Hours

A study of the origin and development of the primitive and historic religions of mankind. The fundamental religious beliefs and customs and the institutions which have grown up around these beliefs are studied. A knowledge of the general aim and nature of religion is sought. M. W. F., 3.

Mr. Potter

* Not given in 1940-41
Division IV. Teacher Training

FRANK L. LOY, Chairman and Director of Teacher Training

The Teacher Training work at Ohio Northern University, organized within the College of Liberal Arts, is designed to aid its students in forming clear conceptions of the dignity and importance of the teacher's work; to trace in the history of education the origin and development of modern principles of teaching; to present in theory and practice approved and rational methods of instruction; to create and maintain high professional standards among present and prospective teachers; and to offer such courses for the professional training of teachers as will broaden their horizon and advance them to higher planes of usefulness, ability, and service.

The Ohio Northern University is accredited by the State Department of Education to train teachers in the following fields: Elementary, High School, Industrial Arts, Health and Physical Education, Public School Music, and Commerce. Those who complete the courses described in the following pages will be granted the state four-year provisional certificate.

Students who wish to enroll in any teacher training curriculum and prepare for a State Teacher's Certificate must secure a statement from the Registrar or Director of Teacher Training that their entrance examination score is satisfactory.

ELEMENTARY EDUCATION

Grades One to Six

Ohio Northern University offers a three-year curriculum for the training of elementary teachers. This entitles the student to the state elementary four-year provisional certificate.

A four-year course is offered for students who desire both the provisional certificate and the degree of Bachelor of Science in Education.

During the freshman year, the student will be required to take diagnostic tests in arithmetic, geography, history, and English to determine his knowledge of the content of these subjects. Students failing in any of these tests will be assigned to non-credit courses until their deficiencies are made up.

For sequence of major and minor courses see later pages in this section. The Division of Certification of the State Department of Education
specifies the following course requirements for the provisional elementary certificate:

I. PROFESSIONAL COURSES
A. Introduction to Education ............................... 2 sem. hrs.
B. Educational Psychology I ............................. 2 sem. hrs.
C. Educational Psychology II ............................. 2 sem. hrs.
D. Principles of Education ................................ 2 sem. hrs.
E. School Management ..................................... 2 sem. hrs.
F. Methods:
   1. Reading .............................................. 3 sem. hrs.
   2. Skills .............................................. 3 sem. hrs.
   3. Content ........................................... 3 sem. hrs.
   G. Student Teaching .................................... 5 sem. hrs.

II. Art ......................................................... 6 sem. hrs.
   (Including Graphic Expression, Design, Materials and Methods).

III. English .................................................... 15 sem. hrs.
   (Including children's literature 3 sem. hrs., base course, speech, and guaranteed grammatical competence).

IV. Health and Physical Education.
A. Hygiene .................................................. 3 sem. hrs.
B. Health Activities ....................................... 3 sem. hrs.

V. Music.
A. Literature and appreciation .......................... 2 sem. hrs.
B. Introduction to music .................................. 2 sem. hrs.
C. Music Education ....................................... 2 sem. hrs.

VI. Practical Arts ............................................ 3 sem. hrs.

VII. Science.
A. General Science or Biology ......................... 8 sem. hrs.

VIII. Social Studies ......................................... 24 sem. hrs.
   (Composed of integrated base course plus pertinent electives or distributed credits in history, political science, sociology, economics, principles of geography, problems of rural and urban life).
   Total of Required Courses ............................ 92 sem. hrs.
   Institutional Requirements .......................... 20-36 sem. hrs.
   Untrammeled Electives ................................. 12 sem. hrs.
   TOTAL .................................................. 124-140 sem. hrs.

THREE-YEAR CURRICULUM FOR ELEMENTARY TEACHERS

First Year

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 101</td>
<td>Physical Education 102</td>
<td>Physical Education 103</td>
</tr>
<tr>
<td>English 101</td>
<td>English 102</td>
<td>English 102a</td>
</tr>
<tr>
<td>History 104 or 110</td>
<td>History 105 or 111</td>
<td>History 106 or 112</td>
</tr>
<tr>
<td>Zoology 101</td>
<td>Zoology 102</td>
<td>Zoology 103</td>
</tr>
<tr>
<td>Introduction to Political Science 104</td>
<td>Introduction to Political Science 105</td>
<td>Introduction to Political Science 106</td>
</tr>
<tr>
<td>Speech 101</td>
<td>Elective</td>
<td>General Psychology 101</td>
</tr>
</tbody>
</table>
## Second Year

### Fall Quarter
- Physical Education 104
- English 121 or 103
- Geography 155
- Teaching of Literature 118
- Introduction to Education 153a
- Public School Music 124

### Winter Quarter
- Physical Education 105
- English 122 or 104
- Educational Psychology 135
- Teaching of Arithmetic 119
- Teaching of Geography 156
- Public School Music 154

### Spring Quarter
- Physical Education 106
- English 122a or 105
- Teaching of Reading 117
- Practical Arts 101
- Public School Music 125

## Third Year

### Fall Quarter
- History 113
- Professionalized Course in Industrial Arts 126
- Principles of Teaching 154
- Educational Measurements 229
- Health Education 117
- Electives

### Winter Quarter
- History 114
- Organization and Administration 107
- Professionalized Course in Industrial Arts 127
- Teaching of Reading 217
- Student Teaching and Technique of Teaching 170 or 171

### Spring Quarter
- History 115
- Teaching of History 176
- Theory and Practice of Plays and Games 156
- Professionalized Course in Industrial Arts 128
- Student Teaching and Technique of Teaching 170 or 171

## Four-Year Curriculum for Elementary Teachers

### First Year

#### Fall Quarter
- Physical Education 101
- English 101
- History 104 or 110
- Zoology 101
- Introduction to Political Science 104
- Speech 101

#### Winter Quarter
- Physical Education 102
- English 102
- History 105 or 111
- Zoology 102
- Introduction to Political Science 105
- Hygiene 115
- Elective

#### Spring Quarter
- Physical Education 103
- English 102a
- History 106 or 112
- Zoology 103
- Introduction to Political Science 106
- Practical Arts 101

### Second Year

#### Fall Quarter
- Physical Education 104
- English 103 or 121
- History 113
- General Psychology 101
- Professionalized Course in Industrial Arts 126
- Geography 155

#### Winter Quarter
- Physical Education 105
- English 104 or 122
- History 114
- Educational Psychology 135
- Professionalized Course in Industrial Arts 127
- Organization and Administration 107
- Elective

#### Spring Quarter
- Physical Education 106
- English 105 or 122a
- History 115
- Professionalized Course in Industrial Arts 128
- Plays and Games 156
- Elective

### Third Year

#### Fall Quarter
- Introduction to Education 153a
- Teaching of Literature 118
- Public School Music 124
- Economics 122
- Teaching of Elementary Geography 156

#### Winter Quarter
- Teaching of Arithmetic 119
- Public School Music 154
- Economics 122
- Teaching of Elementary Geography 156
- Elective

#### Spring Quarter
- Teaching of Reading 117
- Public School Music 125
- Teaching of History 176
- Economics 123
- Local Flora 110 or Heredity 230
Fourth Year

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Teaching and Technique of Teaching</td>
<td>Student Teaching and Technique of Teaching</td>
<td>Student Teaching and Technique of Teaching</td>
</tr>
<tr>
<td>170 or 171</td>
<td>170 or 171</td>
<td>170 or 171</td>
</tr>
<tr>
<td>Educational Measurements</td>
<td>History of Education 138</td>
<td>Sociology 153</td>
</tr>
<tr>
<td>229</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Teaching 154</td>
<td>Sociology 152</td>
<td>Electives</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>6 or 10</td>
</tr>
<tr>
<td>Practical Arts 235</td>
<td>Teaching of Reading 217</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Sociology 151</td>
<td>Elective</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2 or 7</td>
<td></td>
</tr>
</tbody>
</table>

Student Teaching offered each quarter during senior year. Only six hours required.

Graduates from the Two-Year Elementary Curriculum may receive the degree, Bachelor of Science in Education, by completing the following courses:

Third Year

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics 121 or American Government 101</td>
<td>Economics 122 or American Government 102</td>
<td>Economics 123 or American Government 103</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>History 110</td>
<td>History 111</td>
<td>History 112</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Botany 107</td>
<td>Botany 108</td>
<td>Botany 109</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>Educational Psychology 136</td>
<td>Electives</td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Electives</td>
<td>Electives</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

Fourth Year

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>English</td>
<td>Student Teaching</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Educational Measurements 229</td>
<td>Electives</td>
<td>Electives</td>
</tr>
<tr>
<td>3</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Requirements for a Degree in Elementary Education

Upon the satisfactory completion of 186 quarter hours, including 6 hours of physical education, the student will be recommended for the degree of Bachelor of Science in Education. The student must have an average scholarship rating of at least one quality point for each scheduled hour.

SECONDARY EDUCATION

Requirements for the Degree of Bachelor of Science in Education

(Requirements for the Bachelor of Arts degree will be found in earlier pages of this bulletin.)

A. General and Academic Requirements

1. English

Composition 101, 102, 102a, and Literature.
2. **Biological Science**  
   9 Hours  
   Botany 107, 108, 109, or Zoology 101, 102, 103. Courses in physical science may be substituted for biological science.

3. **Social Science**  
   9 Hours  
   The completion of any one of the following courses will meet the social science requirement: History 110, 111, 112; History 113, 114, 115; Political Science 101, 102, 103. With the consent of the student's adviser, other courses in the field of the social sciences may be substituted.

4. **General Psychology**  
   5 Hours  
   Required as prerequisite to the professional courses in Education.

5. **Physical Education**  
   6 Hours  
   Physical education is required in addition to the one hundred eighty quarter hours required for graduation.

Constants for freshman year in all four-year curricula leading to the Bachelor of Science in Education degree follow:

<table>
<thead>
<tr>
<th>Fall Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 101</td>
<td>Physical Education 102</td>
<td>Physical Education 103</td>
</tr>
<tr>
<td>English 101</td>
<td>English 102</td>
<td>English 102a</td>
</tr>
<tr>
<td>Biological Science or Physical Science</td>
<td>Biological Science or Physical Science</td>
<td>Biological Science or Physical Science</td>
</tr>
<tr>
<td>Social Science</td>
<td>Social Science</td>
<td>Social Science</td>
</tr>
</tbody>
</table>

Electives in line with student's objectives to complete the schedule.

**B. Professional Requirements**

1. **Educational Psychology**  
   3 or 6 Hours  
   Psychology 135, 136.

2. **Introduction to Education and Principles of Education**  
   6 Hours  
   Education 207, 208.

3. **School Administration**  
   3 Hours  
   Administration 252.

4. **Special Methods or Professionalized Subject Matter Courses in Teaching Major**  
   3 to 5 Hours  
   Education 250.

5. **Student Teaching, Including Technique of Teaching**  
   6 to 9 Hours  
   Education 270.

6. **Electives**  
   The following courses are offered as electives in Education: Education 136, 153a, 138, 229.

   The above courses meet the professional requirements of the State Department of Education.
   The minimum professional requirements are 30 quarter hours.
The professional requirements of the various states may be secured from the Director of the Division of Teacher Training.

In order to secure the proper correlation with academic courses the student is expected to distribute the work in education over several quarters. The following sequence is very desirable:
Second Year: General Psychology 101, Educational Psychology 135 or 136.
Third Year: Principles of Education 207, 208; Special Methods and Observation.
Fourth Year: Administration 252; Special Methods (if not completed), and Student Teaching.

C. MAJOR AND MINOR SUBJECTS

All candidates for the degree of Bachelor of Science in Education or Bachelor of Arts, who expect to teach must have a teaching major of 36 quarter hours and one or more minors of 24 quarter hours each. Students should confer with their advisers before electing their major and minor subjects.

The Division of Certification of the State Department of Education specifies the following minimum requirements in the various teaching fields for the provisional high school certificate.

A. Biological Science (Prerequisite 1
   high school unit) .......... 15 sem. hrs.
2. Botany ................... 3 sem. hrs.
   (Or General Biology, 6 sem. hrs.)
3. Pertinent electives ....... 9 sem. hrs.
B. Bookkeeping ................. 9 sem. hrs.
   (Bookkeeping, accounting, and methods)
C. Bookkeeping—Social Business .... 20 sem. hrs.
2. Business Law
3. Economic Geography
4. Economics
5. Business Organization
6. Excess in above or pertinent electives .... 11 sem. hrs.
D. Earth Science (Prerequisite 1
   high school unit) .......... 15 sem. hrs.
1. Geology .................. 3 sem. hrs.
2. Geography ................ 3 sem. hrs.
3. Pertinent electives or
   excess in above .......... 9 sem. hrs.
E. English (Prerequisite 3
   high school units) .......... 15 sem. hrs.
1. English Composition ...... 6 sem. hrs.
2. English and American
   Poetry ................. 3 sem. hrs.
3. English and American
   Prose ................. 3 sem. hrs.
4. Pertinent electives or
   excess in above .......... 3 sem. hrs.
F. General Science ............. 15 sem. hrs.
1. Physics ................ 3 sem hrs.
2. Chemistry ............... 3 sem hrs.
3. Biology ................ 3 sem hrs.
4. Other science electives
   or excess in above ....... 6 sem hrs.
   (General science will also be added to a certificate on the basis of an integrated base course and pertinent electives totaling 15 semester hours).
G. History (Prerequisite 2
   high school units) .......... 15 sem. hrs.
1. World History ........... 3 sem hrs.
2. American History ........ 3 sem hrs.
3. Political Science ........ 3 sem hrs.
4. Pertinent electives or
   excess in above .......... 6 sem hrs.
H. Industrial Arts .......... 24 sem hrs.
Well distributed over the following areas:
1. Graphic Arts
   (Including drawing, planning, printing, photography and duplicating)
2. Woods
   (Including furniture construction, carpentry and wood finishing)
3. Metals
(Including sheet metal, art metal, foundry and machine metal work).
4. Applied Electricity,
   (Communication, transportation and power).
5. Ceramics.
   (Clay and concrete).
6. Methods and Organization.

I. Languages (Prerequisite 2
   high school units) .......... 15 sem. hrs.
   (15 semester hours in the lan-
   guage in which certification is
   desired).

J. Library Science .......... 15 sem. hrs.
   Distributed over the following areas:
   1. Bibliographic.
   3. Technical.

K. Mathematics (Prerequisite 2
   high school units) .......... 15 sem. hrs.
   2. College Geometry .......... 3 sem. hrs.
   3. Trigonometry .......... 3 sem. hrs.
   4. Pertinent electives or
      excess in above .......... 6 sem. hrs.

L. Music—Instrumental .......... 24 sem. hrs.
   (Valid in both elementary and
   high school).
   1. Harmony (written, oral and key-
      board), sight singing and ear
      training .......... 10 sem. hrs.
   2. History and appreciation
      .......... 4 sem. hrs.
   3. Applied music (Orches-
      tral instruments) .......... 4 sem. hrs.
   4. Music education, including instrument-
      mental methods and conducting
      .......... 6 sem. hrs.
   5. Membership in band or orchestra

M. Music—Vocal .......... 24 sem. hrs.
   (Valid in both elementary
   and high school).
   1. Harmony (written, oral and key-
      board), sight singing and ear
      training .......... 10 sem. hrs.
   2. History and appreciation
      .......... 4 sem. hrs.
   3. Applied music—piano or singing or
      both .......... 4 sem. hrs.
   4. Music education, including methods
      for elementary and high school ob-
      servation, participation and conduct-
      ing .......... 6 sem. hrs.
   5. Membership in some choral group.

N. Physical Education .......... 16 sem. hrs.
   1. Principles, organization and adminis-
      tration of health and physical edu-
      cation .......... 4 sem. hrs.
   2. Theory and practice, including stunts,
      apparatus, tumbling, swimming,
      dancing, etc. .......... 4 sem. hrs.
   3. Theory and practice, including ath-
      letic coaching in intramural and in-
      terscholastic athletics .......... 4 sem. hrs.
   4. Health education, including teaching
      of health and school health prob-
      lems .......... 4 sem. hrs.

O. Physical Science (Prerequisite
   one high school unit) .......... 15 sem. hrs.
   2. Chemistry .......... 6 sem. hrs.
   3. Pertinent electives or ex-
      cess in above .......... 3 sem. hrs.

P. Salesmanship—Merchandising
   .......... 20 sem. hrs.
   3. Advertising.
   4. Retailing.
   5. Merchandising.
   7. Excess in above or pertinent
      electives .......... 14 sem. hrs.

Q. Science (Comprehensive
   Major) .......... 40 sem. hrs.
   Integrated base course plus pertinent
   electives or forty semester hours well
   distributed over the following areas:
   1. Physics.
   2. Chemistry.
   5. Geology.
   6. Astronomy.

R. Social Science .......... 15 sem. hrs.
   (Prerequisite one high school unit)
   2. Sociology .......... 3 sem. hrs.
   3. Industrial Geography .......... 3 sem. hrs.
   4. Pertinent electives or ex-
      cess in above .......... 6 sem. hrs.

S. Social Studies (Comprehensive
   Major) .......... 40 sem. hrs.
   Integrated base course plus pertinent
   electives or forty semester hours well
   distributed over the following areas:
   1. Economics.
   2. Sociology.
5. Principles of Geography.
6. Political Science.

T. Speech .................. 15 sem. hrs.
   Distributed over the following areas: .............. 10 sem. hrs.
   1. Speech fundamentals.
   2. Interpretative reading.
   3. Speech correction and voice.
   4. Dramatic production.
   5. Public address and discussion.
   6. Excess in above or pertinent electives ........ 5 sem. hrs.
   7. Political Science.

U. Stenography—Typing .... 20 sem. hrs.
   1. Shorthand ............... 9 sem. hrs.
   2. Typing .................. 3 sem. hrs.

V. Typing .................. 5 sem. hrs.
   (Typing and methods)

Any of the above subjects appearing on a certificate issued by the State of Ohio shall be valid for teaching that subject or any subject listed as a required course in the above schedule.

After September 1, 1939, teaching subjects will not be designated as majors or minors. The certificate will, however, indicate the number of hours of preparation in each subject listed thereon.

The Division of Certification of the State Department of Education specifies the following minimum requirements for the provisional special certificate.

A. Art ...................... 60 sem. hrs.
   1. Drawing ................ 15 sem. hrs.
   3. Appreciation and History .............. 10 sem. hrs.
   4. Methods, teaching materials, sources, organization, observation and student teaching .... 10 sem. hrs.

B. Business Education .... 45 sem. hrs.
   Distributed over the following areas:
   1. Stenographic-Typing.
      Shorthand, Typing, Office Practice, Business English and Correspondence, Methods in Shorthand and Typing.
   2. Bookkeeping—Social Business.
      Business Law, Accounting, Economic Geography, Economics, Business Organization.
      Marketing Principles, Salesmanship, Advertising, Retailing, Merchandising.
      Minima — Typing 3 sem. hrs.; Shorthand, 6 sem. hrs.; Bookkeeping and Accounting, 6 sem. hrs.; Methods, 2 sem. hrs.

C. Industrial Arts .......... 45 sem. hrs.
   Well distributed over the following areas:
   1. Graphic Arts.
   3. Office Practice.
   6. Excess in above or pertinent electives ........ 6 sem. hrs.

D. Library Science.
   1. Professional Preparation 17 sem. hrs.
      a. Educational Psychology .............. 3 sem. hrs
      b. School Administration, Organization or Management or Library Organization and Management .... 3 sem. hrs.
      c. Methods of Teaching or Materials and Methods of Library Science ........ 3 sem. hrs.
      d. Student Teaching or Supervised Field Work .... 5 sem. hrs.
   2. Special Preparation .. 40 sem. hrs.
      Distributed over the following areas:
      a. Bibliographic.
      (This shall include reference
b. Technical.
   (This shall include cataloguing and classification).

c. Administrative.
   (Administration of school libraries must be included).

d. Field Work.
   (Preferably done in school library).

E. Music.
1. Instrumental ........... 53 sem. hrs.
   a. Methods, Materials and Observation ........... 4 sem. hrs.
   b. Student Teaching ........... 3 sem. hrs.
      (Elementary and Secondary levels).
   c. Conducting ........... 2 sem. hrs.
   d. Instrumental classes, 4 sem. hrs.
   e. Theory (Ear Training, Sight Singing, Dictation, Harmony, etc)........... 16 sem. hrs.
   f. Applied Music ........... 16 sem. hrs.
   g. History, Appreciation and Literature ........... 4 sem. hrs.
   h. Ensemble ........... 4 sem. hrs.

2. Vocal ........... 53 sem. hrs.
   a. Methods, Materials and Observation ........... 6 sem. hrs.
   b. Student Teaching ........... 3 sem. hrs.
      (Elementary and Secondary levels).
   c. Conducting ........... 2 sem. hrs.
   d. Class Voice ........... 2 sem. hrs.
   e. Theory (Ear Training, Sight Singing, Dictation, Harmony, etc) ........... 16 sem. hrs.
   f. Applied Music ........... 16 sem. hrs.
   g. History, Appreciation and Literature ........... 4 sem. hrs.
   h. Ensemble ........... 4 sem. hrs.

F. Physical Education ........... 40 sem. hrs.
1. The Principles, Organization and Administration of Physical and Health Education ........... 4 sem. hrs.
2. Theory and Practice of Physical Education ........... 12 sem. hrs.
   (Games of low organization; Elementary Physical Education; Play and Recreation; First Aid, Activities other than athletics such as: games, stunts, gymnastics, apparatus, dancing, tumbling, swimming).
3. Theory and Practice of Physical Education ........... 6 sem. hrs.
   (Athletic coaching, including interscholastic and intramural sports such as: (Men) Football, soccer, speedball, basketball, baseball, tennis, track. (Women) Soccer, volleyball, hockey, basketball, baseball, tennis, track).
4. Health Education ........... 10 sem. hrs.
   (The teaching of Health and School Health Problems, Hygiene, including personal health, public health, child hygiene, sanitation, immunology, and allied subjects).
5. Individual Corrective Gymnastics and Normal Diagnosis ........... 2 sem. hrs.
6. Human Anatomy and Physiology ........... 6 sem. hrs.

G. Speech ........... 40 sem. hrs.
1. 34 sem. hrs. well distributed over the following: Speech fundamentals, Interpretative Reading, Speech correction and voice, Dramatic production, Public address and discussion (including debates, extempore speaking, panel discussion, the oration, the persuasive speech and the various original speech forms), and special methods in teaching Speech.
2. Remaining 6 sem. hrs. to be selected from the fields designated in (1) above or from other collegiate speech courses.

NOTE: The above subjects may also be added to the provisional high school certificate.

MAJOR AND MINOR SEQUENCES

Students should take courses in the major and minor subjects in the order given below. Failure to follow the major and minor sequences may result in loss of credit.
Biology

Major
First Year—Biology 107, 108, 109, or 101, 102, 103.
Second Year—Biology 101, 102, 103, or 107, 108, 109, 110.
Third Year—Biology 106, 113, 218, or 222, 224, 230, 250.
Fourth Year—Biology 219, 220, 235.

Minor
Second Year—Biology 101, 102, 103.
Third Year—Biology 110, 230.
Fourth Year—Biology 219, 235.
NOTE: Entrance requirement, 1 unit of biological science.

Chemistry—Physics

Major
First Year—Chemistry 101, 102, 103.
Second Year—Physics 109, 110, 111, and 109a, 110a, 111a.
Third Year—Chemistry 104, 105, 106.
Fourth Year—Chemistry 206, 207, 208 and Physics 220.
NOTE: Combined teaching major of 50 hours, at least 20 hours of which must be either chemistry or physics. It is recommended that students electing this major take mathematics during the freshman year.

Minor
First Year—Chemistry 101, 102, 103.
Second Year—Physics 109, 110, 111, and 109a, 110a, 111a.
NOTE: Entrance requirement, mathematics 2 units, physical science, 1 unit.

Economics—Sociology

Major
Second Year—Economics 121, 122, 123, and Sociology 151, 152, 153.
Third Year—Economics 131, 132, 133, or 204, 207, 208.
Fourth Year—Economics 214, 215, 217, or Philosophy 201, 202, 203; 205, 206, 207.

Minor
First Year—Economics 121, 122, 123.
Second Year—Sociology 151, 152, 153.
NOTE: Entrance requirement, 2 units.
NOTE: Combined major 50 hours, 30 hours of which must be economics.

English

Major
First Year—English 101, 102, 102a.
Second Year—English 121, 122, 122a, or 103, 104, and 105.
Third Year—English 217, 218, 219, 205, 225.
Fourth Year—English 211, 215, 216, or 204, 224.
Minor
First Year—English 101, 102, 102a.
Second Year—English 121, 122, or Speech 110, 111.
Third Year—English 210, 211.
Fourth Year—English 216, 217.
NOTE: Entrance requirement 3 or 4 units.

French
Major
First Year—French 104a, 105a, 106a.
Second Year—French 206a, 207a, 208a.
Third Year—French 223, 224, 225; 250.
Fourth Year—224a, 225a, 226a, and 231a, 232a, 233a.

Minor
First Year—French 104a, 105a, 106a.
Second Year—French 206a, 207a, 208a.
Third Year—French 224a, 225a, 226a; 250.
NOTE: Entrance requirement 2 units.

History
Major
First Year—History 110, 111, 112.
Second Year—History 113, 114, 115, or 104, 105, 106.
Third Year—History 216, 217, 218, or 235, 236, 237, 250.
Fourth Year—History 224, 225, 226, or 251, 252, 253.
NOTE: History majors are expected to elect 9 hours in American Government in addition.

Minor
First Year—History 110, 111, 112.
Second Year—History 113, 114, 115, or 104, 105, 106.
Third Year—History 216, 217, 218.
NOTE: Entrance requirement 3 units.

History—Political Science
Major
First Year—History 110, 111, 112; Political Science 104, 105, 106.
Second Year—Political Science 101, 102, 103; History 113, 114, 115.
Third Year—Political Science 208, 209, 210; 250.
Fourth Year—Political Science 212 and History 216, 217, 218, or 251, 252, 253.
NOTE: Entrance requirement 2 units.
NOTE: Combined major 50 hours, 30 hours of which must be history

Latin
Minor
First Year—Latin 110, 111, 112.
Second Year—Latin 115, 116, 117.
Third Year—Latin 118.
NOTE: Entrance requirement 2 units.
Ohio Northern University

Mathematics

Major
First Year—Mathematics 100 or 101, 103, 105; 112.
Third Year—Mathematics 106, 111A, 212.
Fourth Year—Mathematics 215, 216, 217.

Minor
First Year—Mathematics 100 or 101, 103.
Second Year—Mathematics 105, 112.
NOTE: Entrance requirement, 2 units.

COMMERCIAL EDUCATION

This curriculum designed for students who wish to prepare themselves for teaching commercial education leads, upon completion, to the degree of Bachelor of Science in Education. It is approved and accredited by the State Department of Education, and students who complete it in a satisfactory manner are eligible to receive the state high school provisional certificate for the teaching of commercial education.

First Year

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 101</td>
<td>Physical Education 102</td>
<td>Physical Education 103</td>
</tr>
<tr>
<td>English Composition 101</td>
<td>English Composition 102</td>
<td>1</td>
</tr>
<tr>
<td>Mathematics 100 or 101</td>
<td>Mathematics 103B or 103</td>
<td>1</td>
</tr>
<tr>
<td>Stenography 110</td>
<td>Stenography 111</td>
<td>1</td>
</tr>
<tr>
<td>Typewriting 101</td>
<td>Typewriting 102</td>
<td>1</td>
</tr>
<tr>
<td>Biological Science</td>
<td>Biological Science</td>
<td>1</td>
</tr>
</tbody>
</table>

Second Year

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 104</td>
<td>Physical Education 105</td>
<td>Physical Education 106</td>
</tr>
<tr>
<td>Economics 121</td>
<td>Economics 122</td>
<td>1</td>
</tr>
<tr>
<td>Accounting 131</td>
<td>Accounting 132</td>
<td>1</td>
</tr>
<tr>
<td>Stenography 115</td>
<td>Stenography 116</td>
<td>1</td>
</tr>
<tr>
<td>Typewriting 107</td>
<td>Typewriting 108</td>
<td>1</td>
</tr>
<tr>
<td>General Psychology 101</td>
<td>Educational Psychology 135</td>
<td>1</td>
</tr>
</tbody>
</table>

Third Year

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 106 or 121</td>
<td>English 107 or 122</td>
<td>English 108 or 122a</td>
</tr>
<tr>
<td>Marketing 241</td>
<td>Marketing 242</td>
<td>Office Practice 130</td>
</tr>
<tr>
<td>Principles of Education 207</td>
<td>Principles of Education 208</td>
<td>1</td>
</tr>
<tr>
<td>Accounting 231</td>
<td>Accounting 232</td>
<td>Accounting 233</td>
</tr>
<tr>
<td>Electives</td>
<td>Electives</td>
<td>Electives</td>
</tr>
</tbody>
</table>

2

5

5

5
Fourth Year

**Fall Quarter**
- Business Finance 214  3
- Geography 155  3
- Special Methods 230  3
- Advertising 245  3
- Business Law 231  3

**Winter Quarter**
- **Student Teaching 240 ** 6
- Retailing 247  3
- Business Law 222  3
- Electives  3

**Spring Quarter**
- Public Finance 217  3
- School Administration 252  3
- Business Law 223  3
- Salesmanship 246  3
- Electives  4

*Students not meeting the accepted standards of efficiency in typewriting and stenography must take additional courses in these fields.

**Student Teaching offered each quarter, six quarter hours required.**

The following options give the privilege of teaching the secondary subjects indicated:

**OPTION I—BUSINESS EDUCATION**

45 Semester Hours
(68 Quarter Hours)

This comprehensive major is designed to prepare the student to teach all phases of business education. This shall be distributed among the following three phases of business education: (a) Stenography-Typing; (b) Bookkeeping-Social Business; (c) Salesmanship-Merchandising.

**OPTION II—STENOGRAPHY-TYPING**

20 Semester Hours
(30 Quarter Hours)

This field is valid for teaching shorthand, typing, business English, clerical practice, and secretarial practice. It may be expanded to a forty-hour major.

**Detail:**
- Shorthand ................. 9 semester hours
- Typing ...................... 3 semester hours
- Methods ................... 2 semester hours
- Office Practice
- Business English and Correspondence
- Excess in the above or pertinent electives to total 20 semester hours

**OPTION III—BOOKKEEPING-SOCIAL BUSINESS**

20 Semester Hours
(30 Quarter Hours)

This field is valid for teaching bookkeeping, business law, economic geography, business economics, business organization and management. It may be expanded to a forty-hour major.

**Detail:**
- Bookkeeping and Accounting ............ 9 semester hours
- Business Law
- Economic Geography
- Economics
- Business Organization
- Excess in the above or pertinent electives to total 20 semester hours

**OPTION IV—SALESMAINSIP-MERCHANDISING**

20 Semester Hours
(30 Quarter Hours)

This field is valid for teaching merchandising, retail store selling, salesmanship, advertising, and economic geography.

**Detail:**
- Marketing Principles ............... 3 semester hours
Ohio Northern University

Salesmanship .................................. 3 semester hours
Advertising
Retailing
Merchandising
Economic Geography
Excess in the above or pertinent electives to total 20 semester hours

**OPTION V—Typing**

This is valid only for teaching typing.

**DETAIL:**

Typing and methods .................................. 5 semester hours

**OPTION VI—Bookkeeping**

9 to 11 Semester Hours

**DETAIL:**

Bookkeeping and accounting .................................. 11 semester hours
For description of courses see Department of Economics and Business Administration.

**NOTE 1.** The graduation requirement is 180 quarter hours.
**NOTE 2.** Economics and Business Administration courses 103, 104, 105, 207, 208, and 251 may be offered as electives for those wishing a major in business administration.

**HEALTH AND PHYSICAL EDUCATION**

The purpose of this curriculum is the preparation of teachers and supervisors of physical education, athletic coaches, and recreation directors. Students majoring or minoring in physical education must have their schedules approved by their adviser in the Department of Health and Physical Education. Students completing the following curriculum will be granted the degree of Bachelor of Science in Education with a major in health and physical education.

The department recommends that all majors in physical education secure minors in some of the sciences, such as mathematics, physics or chemistry.

This curriculum is fully approved and accredited by the State Department of Education, and students who complete it in a satisfactory manner are eligible to receive the state high school provisional certificate for the teaching and supervision of physical education.

**First Year**

**FALL QUARTER**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 101</td>
<td>1</td>
</tr>
<tr>
<td>Biology 101</td>
<td>3</td>
</tr>
<tr>
<td>English 101</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics, Foreign</td>
<td></td>
</tr>
<tr>
<td>Language or Social Science</td>
<td>7</td>
</tr>
<tr>
<td>Hygiene 115</td>
<td>2</td>
</tr>
</tbody>
</table>

**WINTER QUARTER**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 102</td>
<td>1</td>
</tr>
<tr>
<td>Biology 102</td>
<td>3</td>
</tr>
<tr>
<td>English 102</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics, Foreign</td>
<td></td>
</tr>
<tr>
<td>Language or Social Science</td>
<td>9</td>
</tr>
</tbody>
</table>

**SPRING QUARTER**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 103</td>
<td>1</td>
</tr>
<tr>
<td>Biology 103</td>
<td>3</td>
</tr>
<tr>
<td>English 103</td>
<td>3</td>
</tr>
<tr>
<td>Theory and Practice of Plays and Games 156</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics, Foreign</td>
<td></td>
</tr>
<tr>
<td>Language, or Social Science</td>
<td>6</td>
</tr>
</tbody>
</table>
INDUSTRIAL ARTS EDUCATION

The industrial arts curriculum has been established to meet the need of those desiring to teach industrial arts in the junior and senior high schools of Ohio.

In the secondary program, industrial arts includes both study and experiences in the materials, processes, products and occupations of an industrial society in order that the functions of orientation, avocation, consumer literacy, technical competency, social understandings, and cultural relationships may be achieved.

These functions are achieved through providing adequate situations for their development. For example, orientation is achieved through explor-
ing many types of tools, materials, processes, products, and occupations common to an industrial society. The avocational function is stimulated by studying the possibilities of a variety of useful and enduring leisure time interests and activities. Consumer literacy is sought in situations that provide for the development of intelligent attitudes and understandings concerning the selection and use of the commoner products of industry.

It is the aim of the department to provide a well rounded and comprehensive program, equipping graduates for specific fields as well as for general programs such as are usually found in the smaller high schools. Students completing the following curriculum in a satisfactory manner will be granted the degree of Bachelor of Science in Education with a major in industrial arts.

The curriculum is approved and accredited by the State Department of Education, and students who complete it satisfactorily are eligible to receive the state high school provisional certificate for the teaching of industrial arts.

**First Year**

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 101</td>
<td>Physical Education 102</td>
<td>Physical Education 103</td>
</tr>
<tr>
<td>English 101</td>
<td>English 102</td>
<td>English 102a</td>
</tr>
<tr>
<td>Chemistry 101, 101a</td>
<td>Chemistry 102, 102a</td>
<td>Industrial Arts Orientation</td>
</tr>
<tr>
<td>Drawing 111</td>
<td>Drawing 112</td>
<td>Laboratory 111</td>
</tr>
<tr>
<td>Elective</td>
<td>Elective</td>
<td>Elective</td>
</tr>
</tbody>
</table>

**Second Year**

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 104</td>
<td>Physical Education 105</td>
<td>Physical Education 106</td>
</tr>
<tr>
<td>Economics 121</td>
<td>Economics 122</td>
<td>Economics 123 or 204</td>
</tr>
<tr>
<td>Physics 109, 109a</td>
<td>Physics 110, 110a</td>
<td>Physics 111, 111a</td>
</tr>
<tr>
<td>Woods 115</td>
<td>Woods 116</td>
<td>Woods 117</td>
</tr>
<tr>
<td>Psychology 101</td>
<td>Design 127</td>
<td>Elective</td>
</tr>
<tr>
<td>Elective</td>
<td>Elective</td>
<td>Elective</td>
</tr>
</tbody>
</table>

**Third Year**

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Education 207</td>
<td>Psychology 135</td>
<td>Psychology 136 or</td>
</tr>
<tr>
<td>Metals 210</td>
<td>Principles of Education 208</td>
<td>Elective</td>
</tr>
<tr>
<td>Materials of Industry 231</td>
<td>Metals 220</td>
<td>High School Administration 252</td>
</tr>
<tr>
<td>Industrial Arts 126</td>
<td>Photography 225</td>
<td>Industrial Arts Methods</td>
</tr>
<tr>
<td>Elective</td>
<td>Elective</td>
<td>and Organization 250</td>
</tr>
</tbody>
</table>

Electrical Engineering 213
Fourth Year

**FALL QUARTER**
- Speech 101 3
- Crafts and Hobbies 235 3
- Illumination 421 or Electrical Engineering 301 3
- Elective 7

**WINTER QUARTER**
- Speech 102
- Ceramics 240
- Elective

**SPRING QUARTER**
- English 118 3
- Machine Shop 333 3
- *Teaching Industrial Arts 6
- Elective 4 or 10

* Offered each quarter, 6 hours required.

**NOTE:** Seventy quarter hours are required for a major in the field of industrial arts.

Forty quarter hours are required for a minor in this field. The following courses are suggested:

**INDUSTRIAL ARTS**

**111, 112. DRAWING**
(For description of these courses see Engineering section).

**113. DRAWING**
(See Engineering section).

**101. INDUSTRIAL ARTS ORIENTATION LABORATORY**
An orientation course in Industrial Arts, required of all majors and minors. Covering briefly the fundamental tools and operations for each area. Prerequisite: Drawing 111. Daily, 5 and 6.

**115. WOODS**
Uses and characteristics of the common woods. Use and care of the fundamental hand tools and power machines. Basic operations and materials. Prerequisite: Drawing 111. M. W. F., 5 and 6.

**116. WOODS**
This is a continuation of Woods 115. M. W. F., 5 and 6.

**117. WOODS**

**126. PROFESSIONALIZED COURSE IN INDUSTRIAL ARTS**
For description see Professionalized Subject Matter section, T. Th., 2 and 3.

**127. APPLIED DESIGN**
Practice in free-hand sketching. Originality is emphasized in designing and studying suitable shop projects. M. T. W. Th., 2.
210. **Metals**  
Practice in many basic operations including casting, planning, laying out, cutting, folding, wiring, burring, raising, setting down, welding, riveting, soldering, and others. Not open to freshmen. Daily, 3 and 4.  
Mr. Lowman  
**Fall, 5 Hours**

220. **Metals**  
Mr. Lowman  
**Winter, 5 Hours**

213. **Elementary Electric Machines**  
See Electrical Engineering section for description. Daily, 3.  
Mr. Pearson  
**Spring, 5 Hours**

225. **Photography**  
Study of cameras, photographic materials, development and theory of development, printing processes and many other topics. One lecture and one two-hour laboratory period each week. Time to be arranged.  
Mr. C. Lamb and Mr. Lowman  
**Winter, 2 Hours**

231. **Materials of Industry**  
A study of industrial materials, their characteristics, sources and uses. T. Th., 2.  
Mr. Lowman  
**Fall, 2 Hours**

235. **Crafts and Hobbies**  
Work in copper, brass, wood, plastics and other materials. M. W. F., 1 and 2.  
Mr. Lowman  
**Fall, 3 Hours**

240. **Ceramics**  
Work in clay, concrete and others. Daily, 7 and 8.  
Mr. Lowman  
**Winter, 5 Hours**

333. **Machine Shop**  
See Mechanical Engineering section for description. M. W. F., 6, 7, 8.  
Dean Needy and Assistants  
**Spring, 3 Hours**

301. **Elementary Alternating Currents**  
Mr. Pearson  
**Fall, 3 Hours**

250. **Industrial Arts Organization and Methods**  
This is the methods course for industrial arts majors and minors. It covers the methods of instruction, the selection and evaluation of instructional materials and the planning and equipping of the modern school laboratory. Daily, 4.  
Mr. Lowman  
**Spring 5 Hours**

260. **Special Problems in Industrial Arts**  
Time to be arranged. Offered any quarter.  
Mr. Lowman  
**1 to 4 Hours**

421. **Illumination**  
Mr. Pearson  
**Fall, 3 Hours**

**PUBLIC SCHOOL MUSIC**  
This course is designed for students who wish to prepare themselves for the teaching and supervision of music in public schools. Applicants for
admission are expected to possess a reasonable amount of musical training. Students completing this course receive the degree Bachelor of Science in Education and the state four-year provisional certificate.

### First Year

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 101</td>
<td>Physical Education 102</td>
<td>Physical Education 103</td>
</tr>
<tr>
<td>English 101</td>
<td>English 102</td>
<td>English 102a</td>
</tr>
<tr>
<td>Sight Singing and Ear Training 101</td>
<td>Sight Singing and Ear Training 102</td>
<td>Sight Singing and Ear Training 103</td>
</tr>
<tr>
<td>Harmony 111</td>
<td>Harmony 112</td>
<td>Harmony 113</td>
</tr>
<tr>
<td>Applied Music</td>
<td>Applied Music</td>
<td>Applied Music</td>
</tr>
<tr>
<td>History or Political Science</td>
<td>History or Political Science</td>
<td>History or Political Science</td>
</tr>
<tr>
<td>Chorus</td>
<td>Chorus</td>
<td>Chorus</td>
</tr>
<tr>
<td>*Band or Orchestra</td>
<td>*Band or Orchestra</td>
<td>*Band or Orchestra</td>
</tr>
</tbody>
</table>

### Second Year

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 104</td>
<td>Physical Education 105</td>
<td>Physical Education 106</td>
</tr>
<tr>
<td>General Psychology 101</td>
<td>Educational Psychology 135</td>
<td>Voice Class</td>
</tr>
<tr>
<td>Sight Singing and Ear Training 104</td>
<td>Sight Singing and Ear Training 105</td>
<td>Sight Singing and Ear Training 106</td>
</tr>
<tr>
<td>History and Appreciation 153</td>
<td>History and Appreciation 154</td>
<td>History and Appreciation 155</td>
</tr>
<tr>
<td>Harmony 114</td>
<td>Keyboard Harmony 115</td>
<td>Form and Analysis 211</td>
</tr>
<tr>
<td>Conducting 140</td>
<td>Conducting 141</td>
<td>Conducting 142</td>
</tr>
<tr>
<td>Applied Music</td>
<td>Applied Music</td>
<td>Applied Music</td>
</tr>
<tr>
<td>Chorus</td>
<td>Chorus</td>
<td>Chorus</td>
</tr>
<tr>
<td>Band or Orchestra</td>
<td>Band or Orchestra</td>
<td>Band or Orchestra</td>
</tr>
</tbody>
</table>

### Third Year

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>**Primary Methods 202</td>
<td>**Student Teaching 213</td>
<td>**Intermediate Methods 203</td>
</tr>
<tr>
<td>Public Speaking 101</td>
<td>Public Speaking 102</td>
<td>Orchestral Instruments 222</td>
</tr>
<tr>
<td>Orchestral Instruments 220</td>
<td>Orchestral Instruments 221</td>
<td>Applied Music</td>
</tr>
<tr>
<td>Principles of Education 207</td>
<td>Applied Music</td>
<td>Elective</td>
</tr>
<tr>
<td>Applied Music</td>
<td>Elective</td>
<td>Ensemble</td>
</tr>
<tr>
<td>Elective</td>
<td>Ensemble</td>
<td>1/2</td>
</tr>
</tbody>
</table>

### Fourth Year

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>**Student Teaching 214</td>
<td>**Junior and Senior High School Methods 204</td>
<td>**Student Teaching 215</td>
</tr>
<tr>
<td>Educational Methods 230</td>
<td>School Orchestration 251</td>
<td>High School Administration 252</td>
</tr>
<tr>
<td>Applied Music</td>
<td>Applied Music</td>
<td>Advanced Orchestration 252</td>
</tr>
<tr>
<td>Science</td>
<td>Science</td>
<td>or Advanced Elective</td>
</tr>
<tr>
<td>Elective</td>
<td>Elective</td>
<td>Applied Music</td>
</tr>
<tr>
<td>Ensemble</td>
<td>Ensemble</td>
<td>Ensemble</td>
</tr>
</tbody>
</table>

* Elective for vocal majors.
** Instrumental or vocal according to the major.
NOTE: Attendance at all recitals is required of music majors.
Those who complete the above curriculum will receive a regular High School Certificate with either a major in vocal music and a minor in instrumental music, or a major in instrumental and a minor in vocal music, or the student may elect to prepare in one or two regular academic fields and one music field.

Those who wish to earn the Provisional Special Certificate in Music must complete the following courses as specified by the State Department of Education.

The completion of this program will require five years.

<table>
<thead>
<tr>
<th>Instrumental</th>
<th>53 sem hrs.</th>
<th>Vocal</th>
<th>53 sem hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Methods, Materials and Observation</td>
<td>4 sem hrs.</td>
<td>a. Methods, Materials and Observation</td>
<td>6 sem hrs.</td>
</tr>
<tr>
<td>b. Student Teaching (Elementary and Secondary levels)</td>
<td>3 sem hrs.</td>
<td>b. Student Teaching (Elementary and Secondary levels)</td>
<td>3 sem hrs.</td>
</tr>
<tr>
<td>c. Conducting</td>
<td>2 sem hrs.</td>
<td>c. Conducting</td>
<td>2 sem hrs.</td>
</tr>
<tr>
<td>d. Instrumental Classes</td>
<td>4 sem hrs.</td>
<td>d. Class Voice</td>
<td>2 sem hrs.</td>
</tr>
<tr>
<td>e. Theory (Ear Training, Sight Singing, Dictation, Harmony, etc.)</td>
<td>16 sem hrs.</td>
<td>e. Theory (Ear Training, Sight Singing, Dictation, Harmony, etc.)</td>
<td>16 sem hrs.</td>
</tr>
<tr>
<td>g. History, Appreciation and Literature</td>
<td>4 sem hrs.</td>
<td>g. History, Appreciation and Literature</td>
<td>4 sem hrs.</td>
</tr>
<tr>
<td>h. Ensemble</td>
<td>4 sem hrs.</td>
<td>h. Ensemble</td>
<td>4 sem hrs.</td>
</tr>
</tbody>
</table>

For description of courses see Department of Music.
DESCRIPTION OF PROFESSIONAL COURSES IN EDUCATION

EDUCATIONAL PSYCHOLOGY

135. Educational Psychology

Winter, 3 Hours
The application of psychological principles to education, problems of thinking, motivation, attitudes, learning, memory and transfer of training. Prerequisite: Psychology 101. M. W. F., 5.
Mr. Ewing

136. Educational Psychology

Spring, 3 Hours
An intensive study of the problem of growth, reaction, systematic psychology and personality of youth; applied problems in junior and senior high schools. Prerequisite: Psychology 101 or 135. M. W. F., 8.
Mr. Ewing

PRINCIPLES AND HISTORY OF EDUCATION

154. Principles of Teaching, in the Elementary Grades

Fall, 3 Hours
Consideration will be given to the various types of lessons and the most approved methods of teaching in the elementary schools; an evaluation of the present-day curriculum in furthering the child’s growth; power and appreciation; needed changes in the organization and administration of the elementary school. Prerequisite: Principles of Education 153a. M. W. F., 7.
Miss Geeting

153a. Principles of Education

Fall, 3 Hours
This course is an introduction to education. In addition to an overview of education, consideration is given to the application of psychological principles to the tasks of instruction. Leading topics are educational aims, sources of human conduct, and modification of conduct through education. M. W. F., 6.
Miss Geeting

207. Principles of Secondary Education

Fall, 3 Hours
The object of this course is to give a fundamental conception of the secondary school; the function of the school in meeting the needs of adolescent years; a study of the educative process and the contributions of modern educational philosophers to educational theory and practice; and observations in training school. Prerequisite: Psychology 136. M. W. F., 3.
Mr. Loy

208. Principles of Teaching (Secondary)

Winter, 3 Hours
This course deals with the different types of teaching in secondary schools; the selection and arrangement of subject matter; economy in class room management; the conduct of the recitation under various plans; the disciplinary problem; the use of textbooks and the most approved methods of teaching in high school; and observations in training school. Prerequisite: Principles of Education 207. M. W. F., 3.
Mr. Loy

138. History of Education

Spring, 3 Hours
A survey of ancient, mediaeval, and modern education with the object of acquiring a better understanding of modern educational problems. M. W. F., 7.
Mr. Loy
107. Organization and Administration of Elementary Schools

A study and discussion of the organization and control of elementary schools, relation of the elementary schools to higher schools, economy of time and effort, the larger problems of the elementary schools as a preparation of the student for service in the elementary field. Attention will be given to Ohio school laws relating to elementary schools and elementary teachers. M. W. F., 7.

Mr. Loy

252. High School Administration

Problems of major importance, the high school principal and his duties; the staff; the curriculum; program building; extra-curricular activities; problems of management; systems of grading; records and reports are considered and observations in training school. Prerequisite: Education 207 or 208. M. W. F., 7.

Mr. Loy

229. Educational Measurements

Standardized tests as a means of classifying and promoting pupils; use of standard tests in improving instruction; elementary principles of statistical methods in education; and observations in training school. Prerequisite: Education 207 or 208. M. W. F., 3; T. Th. F., 5.

Mr. Ewing

PROFESSIONALIZED SUBJECT MATTER COURSES

117. History of the Development of the Teaching of Reading

A thorough study of two systems of teaching reading; comparison and contrast with at least six other present day systems of teaching reading; reference reading; observation and class discussions. Brief history of the English language; principles of selecting materials for teaching language; preparations of materials for teaching; relation of language and spelling to other subjects in the curriculum. M. T. W. Th., 5.

Miss Geeting

118. Teaching of Literature in Elementary Grades

Principles of selecting materials for the teaching of literature; preparation of these materials for teaching; comparison of curricula in progressive schools; creative work; observation and class discussion; supervised practice in teaching literature, in elementary grades, to class. M. T. W. F., 5.

Miss Geeting

217. Teaching of Reading in Elementary Grades, Winter, 2 Hours

A study of children’s readiness for reading; discovering special reading interests; materials and methods best adapted to teach children how to read and to increase interest in reading; supervised practice in teaching reading to the class; comparison of courses of study; evaluation of textbooks; a study of tests in reading. T. Th., 3.

Miss Geeting
119. Teaching Elementary Arithmetic  Winter, 4 Hours
Modern methods of teaching arithmetic to elementary children; psychology of the teaching of
arithmetic; diagnostic and remedial work; literature of the subject; comparison of courses of
study; evaluating of text books; observation and class discussion; supervised practice in teaching
to class. M. T. W. Th., 5.

Miss Geeting

155. Geography for Elementary Teachers  Fall, 3 Hours
Weather observations; geographical controls; continent study of North America, South Amer-
ica, and Europe; relationship between man and his environment; industry as the key to a
region; a brief history of the growth of geography. M. W. F., 1.

Mr. Dobbins

156. Teaching Geography in Elementary Grades, Winter, 3 Hours
Modern methods of teaching geography in the elementary grades; principles of selecting ma-
terials for teaching geography; preparation of this material for teaching purposes; experimental
studies made in the teaching of geography; writing lesson plans; activities suitable for children
to gain an understanding of geographical principles; comparison of courses of study; evaluation

Miss Geeting

176. History for Elementary Teachers  Spring, 3 Hours
Principles of selecting material for teaching history in each of the six elementary grades; prepara-
tion of this teaching material; comparison of courses of study; study of modern methods of
teaching history; a study of the application of these methods with groups of children, through
observation; the use and value of aids of all kinds; library references; tests and remedial work;

Miss Geeting

156. Theory and Practice of Plays and Games  Spring, 3 Hours
The need, purpose and function of play in education are studied. This includes a consideration
of the social, educational and biological aspects of play and recreation. Activities adaptable to
various age levels of the elementary and secondary schools are learned. Two hours of theory
and two hours of laboratory per week. M. T. W. Th., 6.

Miss Tolf

126. Professionalized Course in Industrial Arts  Fall, 2 Hours
This course includes a brief survey of the history of the fine arts; a survey of the history of
industrial arts; the relation of industrial arts to fine arts; the use of home industries as a means
of personal contact; the use of tools and materials for elementary schools. T. Th., 2 and 3.

Miss Geeting

127. Professionalized Course in Industrial Arts  Winter, 2 Hours
For description of course, see Industrial Arts section.

Mr. Lowman

128. Professionalized Course in Industrial Arts, Spring, 5 Hours
The psychology of the teaching of art; the application of educational principles to the teaching
of arts; relation of art to other school subjects; selection of materials to be used in the teach-
ing of drawing and industrial arts; organizing these materials for teaching purposes; study of
textbooks in art; study of courses of study. M. T. W. Th. F.

Miss Geeting
Public School Music

This course begins with the presentation of notation and develops independent sight-reading ability through the use of Public School Music materials presented according to the class methods employed in public schools. M. W. F., 2.

Mr. Watson

Public School Music

A study of the child’s singing voice in grades 5 and 6; selection and presentation of rote, listening and sight-reading material for these grades. Observation is required. M. W. F., 2.

Mr. Watson

History and Appreciation

The origin and development of music, studied from an appreciative basis. M. W. F., 2.

Mr. Davidson

Special Methods in High School Subjects

These courses are professionalized subject-matter courses and deal with subject-matter that is necessary for the successful teaching of high school subjects. They cover the selection of materials, methods of instruction, and the organization of the work in each subject under consideration. Observation in the training school is required. Prerequisite: Education 207 or 208. Credit 3 to 5 hours, Fall, Winter.

250. Teaching English

250. Teaching History and Social Sciences

250. Teaching Mathematics

250. Teaching Latin

250. Teaching Modern Languages

250. Teaching Biology

250. Teaching Physics and Chemistry

Note: These courses in special methods do not count toward the academic major.

Observation and Participation

The work in observation and participation is integrated with the courses in educational theory and student teaching.

Student Teaching

Student teaching will be required of all candidates for the degree, Bachelor of Science in Education or Bachelor of Arts who expect to teach,
and of all candidates for the diploma in elementary education. The Training School is the center around which all courses are organized.

**Prerequisites**

1. Students preparing for teaching in the elementary field, may do student teaching in the junior year or in later years of their college course. High school student teaching may be done in the senior year.

2. The student is expected to have a general scholarship rating of one and one-fourth (1 ¼) quality points per scheduled hour. This means that a student should have a rank of C plus before student teaching may be done in any training school.

3. A student who wishes to do student teaching in the elementary field, must be able to make a score of 80 on the Ayres Scale for Handwriting.

4. Those wishing to do student teaching in the elementary schools must have completed the following academic and professional courses as outlined in the curricula for the preparation of elementary teachers: English, 6 hours; social science, 6 hours; educational psychology, 3 hours; principles of education, 3 hours; and at least 12 quarter hours of professionalized subject matter or method courses in the elementary school subjects, 4 quarter hours of which must be in reading.

5. A senior who wishes to do student teaching in the high school, must have completed 24 hours of work including special methods in the major subject. It is highly recommended that student teaching be done in a major subject in which the student’s scholarship ranks highest. A rating of less than C plus or B should be looked upon as disqualifying one for student teaching.

6. The student must have the recommendation of both his major and minor professors and the Director of Teacher Training. Continuance in student teaching depends upon the attitude, preparation, and progress of the student teacher.

170. **Student Teaching—Grades 1, 2, 3**

**Fall, Winter, or Spring, 6 Hours**

A course for students specializing in the primary grades. Students are required to write a syllabus of the work to be covered; prepare lesson plans and teach them in the Training School; hold conferences with critic teacher; and spend two hours per week on the campus in studying the technique of teaching.
171. **Student Teaching—Grades 4, 5, 6**  
**Fall, Winter, or Spring, 6 Hours**

This is a course for students specializing in the teaching of the intermediate grades. A syllabus and bibliographies for both children's and teachers' uses will be worked out by the practice teacher along with the teaching units used in the class-room. The technique of teaching will be discussed in general conferences two hours per week.

270. **Student Teaching—Junior and Senior High School**  
**Fall, Winter, or Spring, 6 Hours**

Students will prepare a syllabus of work to be covered; write lesson plans; prepare a bibliography of teaching helps; study the technique of teaching two hours per week; and attend conferences.

263. **Student Teaching—Physical Education Students**  
**Fall, Winter, or Spring, 6 Hours**

Students taking the four-year course for the training of physical education supervisors and teachers will be required to prepare a syllabus of work to be covered, write lesson plans, hold conferences with the professor in charge in the department, and teach in the University, Junior and Senior High School, and Elementary School.

215. **Student Teaching—Music**  
**Fall, Winter, or Spring, 9 Hours**

For description of course see Department of Music.

242. **Student Teaching in Industrial Arts Education**  
**Fall, Winter, or Spring, 6 Hours**

Prerequisite: Special Methods 238.

240. **Student Teaching in Commerce**  
**Fall, Winter, or Spring, 6 Hours**
COLLEGE OF ENGINEERING

John Alfred Needy

Dean
History

The first catalogue of the University included a course in surveying. In 1880, a department of Civil Engineering was organized. Later, departments in Mechanical and Electrical Engineering were established. In 1906, the Department of Chemical Engineering was inaugurated. Since then all the courses of the various curricula have been revised and greatly strengthened.

Purpose

The purpose of the College of Engineering is to furnish the student the knowledge necessary for a thorough training in the principles of Engineering, and to give him such special and technical information as is required in his own particular field of Engineering.

Time to Enter

Those desiring to enter at the beginning of any quarter other than the Fall quarter are advised to correspond with the Dean of the College relative to the advisability of admission at that particular time.

Admission

Candidates of good moral character may apply for admission upon the following plans:

1. Certificate. Graduates from first grade high schools or accredited academies whose credits show proper distribution of units are admitted without examination upon presentation of properly signed entrance certificates. Distribution of fifteen units must be as follows:

   English .................................................. 3
   Mathematics, including solid geometry .................. 3
   Physics .................................................. 1
   Electives ............................................... 6
   Two units to be chosen from the following list: Chemistry, Biology, Language, History.

   Applicants deficient in advanced algebra, solid geometry, or physics are required to make up deficiencies.

2. Examination. Candidates who are not graduates of first grade high schools or academies and are therefore deficient in some of the units for admission may be admitted upon examination.

3. Advanced Standing. An applicant from another college seeking advanced standing must present evidence of honorable dismissal and an official transcript of his college record. Some credit may be allowed for prac-
tical experience in drafting, surveying, and shop work. Applicants for such credit must submit a satisfactory statement from their employer, giving time of service, nature of work, name and address of employer.

Advance credit will not be given for more than 162 quarter hours (108 semester hours).

4. Special Student. Mature persons not candidates for a degree may be admitted, if on consultation the Dean is satisfied that they have sufficient preparation to pursue the work successfully. Such applicants are classified as Special Students. Upon completion of their work, a certificate showing the course of study pursued and the amount of work covered is presented to them.

The standard load in the College of Engineering is 18 hours, no student being permitted to carry less than 15 hours. Extra hours based upon scholarship attainments may be granted by the Dean.

Classification

The minimum requirements for sophomore standing are 46 credit hours and a point average of 0.5; for junior standing, 97 credit hours and a point average of 0.7; for senior standing, 150 credit hours and a point average of 0.9.

Graduation and Degrees

Two hundred and sixteen hours including physical education are required for graduation. The student must have a scholarship rating of at least one quality point for each credit hour. A student cannot be a candidate for more than one degree at any one time.

Final credits toward graduation must be earned in residence.

The university is empowered to grant the customary academic degrees, which in the College of Engineering are Bachelor of Science in Civil Engineering, (B. S. in C. E.); Bachelor of Science in Mechanical Engineering, (B. S. in M. E.); Bachelor of Science in Electrical Engineering, (B. S. in E. E.) The University may confer the professional degree upon a candidate who within five years after graduation has a record of at least three years in a responsible position, has submitted an approved thesis, and has successfully completed a comprehensive examination.

Pre-Chemical Engineering

Fundamental chemistry has in recent years become a vital factor in the industrial world, and its application to the processes of manufacturing is in
dispensable. The University offers a two-year course in pre-chemical engineering which admits the student to any approved university where he may complete the course in chemical engineering.

**First Year**

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 101</td>
<td>Physical Education 102</td>
<td>Physical Education 103</td>
</tr>
<tr>
<td>Mathematics 101</td>
<td>Mathematics 103</td>
<td>Mathematics 105</td>
</tr>
<tr>
<td>Physical Education 115</td>
<td>Chemistry 102 or 102</td>
<td>Chemistry 103a or 103</td>
</tr>
<tr>
<td>Chemistry 1012 or 101</td>
<td>English 102</td>
<td>English 102a</td>
</tr>
<tr>
<td>English 101</td>
<td>Mechanical Engineering 112</td>
<td>Mechanical Engineering 113</td>
</tr>
<tr>
<td>Mechanical Engineering 111</td>
<td>Survey of Engineering 121</td>
<td>Survey of Engineering 122</td>
</tr>
<tr>
<td>Survey of Engineering 120</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Summer Quarter**

| Mechanical Engineering 442    |                                 |                                 |
| Industrial Arts 101           |                                 |                                 |

**Second Year**

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 104</td>
<td>Physical Education 105</td>
<td>Physical Education 106</td>
</tr>
<tr>
<td>Mathematics 107</td>
<td>Mathematics 108</td>
<td>Mathematics 109</td>
</tr>
<tr>
<td>Physics 104</td>
<td>Physics 106</td>
<td>Physics 105</td>
</tr>
<tr>
<td>Chemistry 104</td>
<td>Chemistry 105</td>
<td>Chemistry 106</td>
</tr>
<tr>
<td>Economics 121</td>
<td>Geology 332</td>
<td>Mechanical Engineering 114</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Summer Quarter**

| Mechanical Engineering 501    |                                 |                                 |

**PRE-AERONAUTICAL ENGINEERING**

An ever increasing emphasis has been placed upon the study of aeronautics and airplane design in particular. Both in time of war and peace, the study is not only interesting but practical since it assists in transportation, the enriching of commerce, and in time of war, the defense of the country.

The primary objective of this course is to provide the student with sound basic training in order that he may complete the course in an approved school of aeronautical engineering.

**First Year**

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 101</td>
<td>Physical Education 102</td>
<td>Physical Education 103</td>
</tr>
<tr>
<td>Mathematics 101</td>
<td>Mathematics 103</td>
<td>Mathematics 105</td>
</tr>
<tr>
<td>Chemistry 1012 or 101</td>
<td>Chemistry 102a or 102</td>
<td>Chemistry 103a or 103</td>
</tr>
<tr>
<td>English 101</td>
<td>English 102</td>
<td>English 102a</td>
</tr>
<tr>
<td>Mechanical Engineering 111</td>
<td>Mechanical Engineering 112</td>
<td>Mechanical Engineering 113</td>
</tr>
<tr>
<td>Engineering 101</td>
<td>Engineering 101</td>
<td>Engineering 101</td>
</tr>
</tbody>
</table>

|                           |                                 |                                 |
CIVIL ENGINEERING

Although many of the former divisions have grown into separate departments, civil engineering offers greater opportunities than ever before. No sharp line of distinction can be drawn in the fundamental training of civil, mechanical, electrical, and chemical engineering, for the reason that the sciences basic to engineering—mathematics, physics, chemistry, and some applied science—are essential in all departments of engineering.

The department is supplied with high grade instruments and appliances necessary for first class instruction and practice. The laboratories are well equipped, the drafting room large and modern, the scientific library excellent. A fully equipped senior design room is also in use.

**Second Year**

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education</td>
<td>Physical Education</td>
<td>Physical Education</td>
</tr>
<tr>
<td>104</td>
<td>105</td>
<td>106</td>
</tr>
<tr>
<td>Public Speaking</td>
<td>Public Speaking</td>
<td>English</td>
</tr>
<tr>
<td>101</td>
<td>102</td>
<td>118</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Mathematics</td>
<td>Mathematics</td>
</tr>
<tr>
<td>107</td>
<td>108</td>
<td>109</td>
</tr>
<tr>
<td>Physics</td>
<td>Physics</td>
<td>Physics</td>
</tr>
<tr>
<td>104</td>
<td>106</td>
<td>105</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>Economics</td>
<td>Electrical</td>
</tr>
<tr>
<td>221</td>
<td>125</td>
<td>Engineering</td>
</tr>
<tr>
<td>Mechanical</td>
<td>Mechanical</td>
<td>or Industrial</td>
</tr>
<tr>
<td>Engineering 101</td>
<td>Engineering 101</td>
<td>Arts 101</td>
</tr>
<tr>
<td>1/4</td>
<td>1/4</td>
<td>1/4</td>
</tr>
</tbody>
</table>

**First Year**

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education</td>
<td>Physical Education</td>
<td>Physical Education</td>
</tr>
<tr>
<td>101</td>
<td>102</td>
<td>103</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Mathematics</td>
<td>Mathematics</td>
</tr>
<tr>
<td>107</td>
<td>103</td>
<td>105</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Chemistry</td>
<td>Chemistry</td>
</tr>
<tr>
<td>1012 or 101</td>
<td>1022 or 102</td>
<td>1032 or 103</td>
</tr>
<tr>
<td>English</td>
<td>English</td>
<td>English</td>
</tr>
<tr>
<td>101</td>
<td>102</td>
<td>1022</td>
</tr>
<tr>
<td>Mechanical</td>
<td>Mechanical</td>
<td>Mechanical</td>
</tr>
<tr>
<td>Engineering 111</td>
<td>Engineering 114</td>
<td>Engineering 113</td>
</tr>
<tr>
<td>1/4</td>
<td>1/4</td>
<td>1/4</td>
</tr>
</tbody>
</table>

**Third Year**

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics</td>
<td>Physical Education</td>
<td>Physical Education</td>
</tr>
<tr>
<td>215</td>
<td>105</td>
<td>106</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>Mathematics</td>
<td>Mathematics</td>
</tr>
<tr>
<td>311</td>
<td>108</td>
<td>109</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Physics</td>
<td>Physics</td>
</tr>
<tr>
<td>1112</td>
<td>106</td>
<td>105</td>
</tr>
<tr>
<td>Elective</td>
<td>Economics</td>
<td>Civil Engineering</td>
</tr>
<tr>
<td>3</td>
<td>125</td>
<td>223</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>Civil Engineering</td>
<td>Electrical Engineering</td>
</tr>
<tr>
<td>321</td>
<td>312</td>
<td>213</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>Civil Engineering</td>
<td>or Mechanical Engineering</td>
</tr>
<tr>
<td>101</td>
<td>101</td>
<td>443</td>
</tr>
<tr>
<td>1/4</td>
<td>1/4</td>
<td>1/4</td>
</tr>
</tbody>
</table>
## Fourth Year

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Engineering 411</td>
<td>Civil Engineering 412</td>
<td>Civil Engineering 413</td>
</tr>
<tr>
<td>Civil Engineering 421</td>
<td>Civil Engineering 422</td>
<td>Civil Engineering 423</td>
</tr>
<tr>
<td>Civil Engineering 431</td>
<td>Civil Engineering 432</td>
<td>Civil Engineering 433</td>
</tr>
<tr>
<td>Civil Engineering 441</td>
<td>Civil Engineering 442</td>
<td>Civil Engineering 443</td>
</tr>
<tr>
<td>Civil Engineering 101</td>
<td>Civil Engineering 101</td>
<td>Civil Engineering 101</td>
</tr>
</tbody>
</table>

Total number of hours required for graduation 216.

Attendance at Engineering Lectures is required.

Attendance on Inspection Trip is required during third year.

## ELECTRICAL ENGINEERING

The courses offered in electrical engineering require a thorough study of theoretical and applied electricity. The first half of the course of study consists of basic engineering subjects. In the second half an intensive study is made of direct current circuits and machinery, alternating current circuits and machinery, electrical power transmission, electrical machine design, electronics, and high-frequency currents. Carefully chosen laboratory experiments supplement class instruction in theory.

The curriculum stresses fundamentals rather than specialized skills. Ample opportunity is provided by campus activities and elective courses for the engineer to develop his cultural as well as his technical training.

The University power plant supplies both direct and alternating currents for laboratory test purposes. The laboratory equipment includes direct current and alternating current motor-generator sets, compound and series direct current motors, rotary converters, squirrel-cage and wound-rotor induction motors, transformers, vacuum tube oscillators, capacity bridges, teletypewriters, an artificial communication line, an oscillograph, and the necessary auxiliary equipment and instruments for thorough laboratory instruction.

## First Year

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 101</td>
<td>Physical Education 102</td>
<td>Physical Education 103</td>
</tr>
<tr>
<td>Mathematics 101</td>
<td>Mathematics 103</td>
<td>Mathematics 105</td>
</tr>
<tr>
<td>Chemistry 101 or 102</td>
<td>Chemistry 102 or 102</td>
<td>Chemistry 102 or 103</td>
</tr>
<tr>
<td>English 101</td>
<td>English 102</td>
<td>English 102</td>
</tr>
<tr>
<td>Mechanical Engineering 111</td>
<td>Mechanical Engineering 112</td>
<td>Mechanical Engineering 113</td>
</tr>
<tr>
<td>Seminar 101</td>
<td>Seminar 101</td>
<td>Seminar 101</td>
</tr>
</tbody>
</table>

*Not given in 1940-1941*
Second Year

**FALL QUARTER**
- Physical Education 104  1
- Mathematics 107  5
- Physics 104  5
- Civil Engineering 221  5
- Public Speaking 101  3
- Seminar 101  ½

**WINTER QUARTER**
- Physical Education 105  1
- Mathematics 108  5
- Physics 106  5
- Economics 125  5
- Public Speaking 102  3
- Seminar 101  ½

**SPRING QUARTER**
- Physical Education 106  1
- Mathematics 109  5
- Physics 105  5
- Electrical Engineering 213  5
- English 118  3
- Seminar 101  ½

Third Year

**FALL QUARTER**
- Physics 213  5
- Electrical Engineering 311  5
- Elective or Mathematics 216  3
- Electrical Engineering 321  1
- Mechanical Engineering 311  5
- Seminar 101  ½

**WINTER QUARTER**
- Civil Engineering 312  5
- Mechanical Engineering 313  4
- Electrical Engineering 312  5
- Elective or Mathematics 212  3
- Electrical Engineering 322  1
- Seminar 101  ½

**SPRING QUARTER**
- Civil Engineering 313  5
- Mechanical Engineering 313  4
- Electrical Engineering 313  5
- Elective or Mathematics 215  3
- Electrical Engineering 323  1
- Seminar 101  ½

Fourth Year

**FALL QUARTER**
- Electrical Engineering 411  5
- Elective or Electrical Engineering 441  3
- Electrical Engineering 431  5
- Civil Engineering 441  3
- Electrical Engineering 421  3
- Seminar 101  ½

**WINTER QUARTER**
- Electrical Engineering 412  5
- Electrical Engineering 422  4
- Civil Engineering 322  5
- Elective or Electrical Engineering 442  1-3
- Seminar 101  ½

**SPRING QUARTER**
- Electrical Engineering 413  5
- Electrical Engineering 423  3
- Civil Engineering 433  5
- Mechanical Engineering 323  4
- Seminar 101  ½

Total number of hours required for graduation 216.
Attendance at engineering lectures is required.
Attendance on Engineering Inspection Trip is required during third year.

MECHANICAL ENGINEERING

Mechanical engineering deals with the transformation and transmission of energy, and with the theory and construction of mechanism and machinery.

The first half of the curriculum consists of basic engineering subjects. In the latter half an exhaustive study is made of heat engineering, together with the design, erection and maintenance of power plant apparatus. Thorough training is given in machine drafting, machine design, thermodynamics, steam engines, steam boilers, gas engines, electrical machinery, and steam power plants.

The University has its own steam and gas-engine driven lighting plant and a central steam heating plant, lighting and heating all the University buildings. The equipment is installed with special conveniences for making

*Not given in 1940-1941*
laboratory tests on boilers, heating and power apparatus under operating conditions.

A machine shop supplements the laboratory equipment, giving opportunity for training in the use of tools and general machine shop practice.

**First Year**

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 101</td>
<td>Physical Education 102</td>
<td>Physical Education 103</td>
</tr>
<tr>
<td>Mathematics 101</td>
<td>Mathematics 103</td>
<td>Mathematics 105</td>
</tr>
<tr>
<td>Chemistry 102a or 101</td>
<td>Chemistry 102a or 102</td>
<td>Chemistry 103a or 103</td>
</tr>
<tr>
<td>English 101</td>
<td>English 102</td>
<td>English 102a</td>
</tr>
<tr>
<td>Mechanical Engineering 111</td>
<td>Mechanical Engineering 112</td>
<td>Mechanical Engineering 113</td>
</tr>
<tr>
<td>Mechanical Engineering 101</td>
<td>Mechanical Engineering 101</td>
<td>Mechanical Engineering 101</td>
</tr>
</tbody>
</table>

**Second Year**

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 104</td>
<td>Physical Education 105</td>
<td>Physical Education 106</td>
</tr>
<tr>
<td>Public Speaking 101</td>
<td>Public Speaking 102</td>
<td>English 118</td>
</tr>
<tr>
<td>Mathematics 107</td>
<td>Mathematics 108</td>
<td>Mathematics 109</td>
</tr>
<tr>
<td>Physics 104</td>
<td>Physics 106</td>
<td>Physics 105</td>
</tr>
<tr>
<td>Civil Engineering 221</td>
<td>Economics 125</td>
<td>Electrical Engineering 213</td>
</tr>
<tr>
<td>Mechanical Engineering 101</td>
<td>Mechanical Engineering 101</td>
<td>Industrial Arts 101</td>
</tr>
<tr>
<td>Mechanical Engineering 101</td>
<td>Mechanical Engineering 101</td>
<td>Mechanical Engineering 101</td>
</tr>
</tbody>
</table>

**Third Year**

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics 213</td>
<td>Civil Engineering 312</td>
<td>Civil Engineering 313</td>
</tr>
<tr>
<td>Mechanical Engineering 311</td>
<td>Mechanical Engineering 312</td>
<td>Mechanical Engineering 313</td>
</tr>
<tr>
<td>Mathematics 216 or Electrical Engineering 301</td>
<td>Mechanical Engineering 312</td>
<td>Mechanical Engineering 313</td>
</tr>
<tr>
<td>Mechanical Engineering 321</td>
<td>Mechanical Engineering 332</td>
<td>Mechanical Engineering 313</td>
</tr>
<tr>
<td>Mechanical Engineering 101</td>
<td>Mechanical Engineering 101</td>
<td>Mechanical Engineering 101</td>
</tr>
</tbody>
</table>

**Fourth Year**

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Engineering 411</td>
<td>Civil Engineering 322</td>
<td>Mechanical Engineering 423</td>
</tr>
<tr>
<td>or Electrical Eng. 301</td>
<td>Mechanical Engineering 412</td>
<td>Civil Engineering 433</td>
</tr>
<tr>
<td>Mechanical Engineering 411</td>
<td>Mechanical Engineering 412</td>
<td>Mechanical Engineering 443</td>
</tr>
<tr>
<td>Mechanical Engineering 421</td>
<td>Mechanical Engineering 422</td>
<td>Electrical</td>
</tr>
<tr>
<td>Mechanical Engineering 431</td>
<td>Mechanical Engineering 422</td>
<td>Mechanical</td>
</tr>
<tr>
<td>Civil Engineering 441</td>
<td>or 442 or Elective</td>
<td>Engineering 101</td>
</tr>
<tr>
<td>Mechanical Engineering 101</td>
<td>Mechanical Engineering 101</td>
<td>Mechanical Engineering 101</td>
</tr>
</tbody>
</table>

Total number of hours required for graduation 216.

Attendance at Engineering Lectures is required.

Attendance on Inspection Trip is required during third year.
The Ohio Northern Student Chapter of the American Society of Civil Engineers holds semi-monthly meetings. All civil engineering students are eligible for membership.

The American Institute of Electrical Engineers student branch holds semi-monthly meetings. At these meetings original papers and papers printed in the Proceedings of the American Institute of Electrical Engineers are read and discussed. All students interested in electrical engineering are eligible for membership.

The American Society of Mechanical Engineers holds semi-monthly meetings at which original papers in this field of engineering are read and discussed by members of the society. Students enrolled in the department of mechanical engineering are eligible for membership.

The student affiliate branch of the National Society of Professional Engineers embraces all departments of the College of Engineering.

The University Radio Club maintains a short-wave station, W8AOT, gives code practice and short-wave operating experience and holds semi-monthly meetings at which papers and talks on radio subjects are presented.

The Ohio Northern Chapter of Student Affiliates of the American Chemical Society holds semi-monthly meetings. Scientific men of national and often international renown appear before this group from time to time.

**The Annual Inspection Trip**

The Junior class devotes one week to an extended visit to some large commercial center. The class spends its time profitably in the study of various phases of engineering and industrial activity in Chicago, Milwaukee, South Bend, Detroit, Pittsburgh, or the Cleveland areas.

**Positions**

Past experience shows that the demand for graduates of the College of Engineering exceeds the supply. Often representatives of leading utilities and industries visit the University to interview seniors relative to employing them upon graduation. The University does not guarantee positions to its graduates but does everything within its power to assist them in obtaining employment after graduation.
Description of Courses

All courses in pre-chemical engineering are, for the most part, described in the Liberal Arts section of this catalogue under the department of Chemistry.

CIVIL ENGINEERING

101. A. S. C. E. Student Branch Meetings ½ Hour
Fall, Winter and Spring Quarters. Professional seminar meetings of the Student Branch of the American Society of Civil Engineers to hear lectures by prominent engineers, to read and discuss papers presented by members of the Branch, and to gain some experience in the conduct of such meetings.

Mr. Webb

221. Surveying
Fall, 5 Hours
Use of chain, level, and transit. Land surveying, topographic surveying by stadia and transit, city surveying and measurements of volumes. Prerequisite: Trigonometry 103. Recitations. M W. F., 1; laboratory, T. Th., 5, 6, 7, or M. W., 6, 7, 8.

Mr. Webb

223. Surveying
Spring, 5 Hours
Precise surveying, advanced topographic surveying, hydrographic surveying. Prerequisite: Surveying 221. Recitations, M. W. F., 1; laboratory, T. Th., 6, 7, 8.

Mr. Webb

311. Railroad Engineering
Fall, 5 Hours
Simple curves, compound curves, reverse curves, spirals, switches, and turnouts. Prerequisite: Surveying 213. Recitations, M. T. W. Th., 4; laboratory, F., 5, 6, 7.

Mr. Webb

312. Mechanics of Materials
Winter, 5 Hours
General principles of stresses, elastic limit, shear, riveted joints, torsion, beams, stresses in beams, deflection in beams. Prerequisite: Calculus 109 and Mechanics 213. Daily, 2.

Mr. Pearson

313. Mechanics of Materials
Spring, 5 Hours
Beams with more than two supports, shear in beams, special beams, bending combined with tension or compression, column theory, column formulas used by engineers, resilience in bending or shear, combined stresses, theory of elastic limit and failure, curved beams and hooks. Prerequisite: Mechanics of Materials 312. Daily, 2.

Mr. Pearson

321. Testing Materials
Fall, 2 Hours
Testing cement mortars, tests of small wooden beams and columns with deflection instrument, tension test of steel and iron with extensometer, tests for impurities in concrete aggregates, sieve analysis of concrete aggregates, test of weir. Prerequisite: Mechanics of Materials 313. Laboratory, T. Th., 5, 6.

Mr. Webb

322. Hydraulics
Winter, 5 Hours
Static water pressure, flotation, buoyancy, laws of falling bodies applied to hydraulics, measurements of flow. Prerequisite: Physics, Calculus 109 and Mechanics 213. Daily, 3.

Mr. Webb
323. **Highway Engineering**
Design, construction, and maintenance of earth roads, paved roads, and streets. Prerequisite: Geology and Surveying 213. Recitations, M. W. F., 4.

**Spring, 3 Hours**

Mr. Webb

332. **Geology**

**Winter, 3 Hours**

Mr. Webb

411. **Structural Engineering**
An introductory course covering by analytical and graphical methods the determinations of reactions, moment, shears and stresses in simple trussed structures for fixed and moving loads. Design steel and wood beams, and design and make detail drawings of simple roof truss. Prerequisite: Mechanics of Materials 313. M. W. F., 5, 6, 7.

**Fall, 6 Hours**

Mr. Webb

412. **Structural Engineering**
An extension of Structural Engineering 411. Credit 6 hours covering the use of influence lines and the design of plate girders and columns. Design and make detail drawings of a plate girder viaduct. Prerequisite: Structural Engineering 411. M. W. F., 5, 6, 7.

**Winter, 6 Hours**

Mr. Webb

413. **Structural Engineering**

**Spring, 6 Hours**

Mr. Webb

421. **Reinforced Concrete**

**Fall, 4 Hours**

Mr. Webb

422. **Reinforced Concrete**
Design of buildings. Prerequisite: Reinforced Concrete 421. Recitation, 2 hours; drafting room, 4 hours. T. Th., 5, 6, 7.

**Winter, 4 Hours**

Mr. Webb

423. **Reinforced Concrete**
Design of retaining walls and bridges. Prerequisite: Reinforced Concrete 422. Recitation, 2 hours; drafting room, 4 hours. T. Th., 5, 6, 7.

**Spring, 4 Hours**

Mr. Webb

431. **Sewerage**
General course on sewerage system and disposal of sewerage. Prerequisite: Hydraulics 322. Daily, 2.

**Fall, 5 Hours**

Mr. Webb

432. **Water Supply**
Requisites of a water supply, quality of water, collecting and distributing works, studies of rainfall and runoff, works for treating water. Theory of dams. Prerequisite: Hydraulics 322 and Sewerage 431. Daily, 2.

**Winter, 5 Hours**

Mr. Webb
433. **Hydraulic Machinery**  
*Spring, 5 Hours* 
Water power, hydrology. Types of turbines and setting, tangential water wheels, reaction turbines, governors, testing, selection of type. Centrifugal pumps, description, installation and operation, theory and classification. Prerequisite: Hydraulics 322. Daily, 3.  
Mr. Webb

441. **Financial Engineering**  
*Fall, 3 Hours* 
Mr. Webb

442. **Foundations**  
*Winter, 3 Hours* 
A descriptive course dealing with pile foundations, pile driving, sheet piling cofferdams, open and pneumatic caissons, open wells, types of piers and abutments and underpinning. Prerequisite: Reinforced Concrete 421. M. W. F., 4.  
Mr. Webb

443. **Contracts and Specifications**  
*Spring, 3 Hours* 
Mr. Webb

**ELECTRICAL ENGINEERING**

101. **Seminar**  
*½ Hour* 
Fall, Winter and Spring quarters. Presentation of talks and papers by student members. Participation in conducting the Ohio Northern Student Branch of the American Institute of Electrical Engineers.  
Mr. Pearson

213. **Elementary Electric Machines**  
*Spring, 5 Hours* 
Introductory or survey course for all engineering students. The electric and magnetic circuit, D. C. and A. C. generators and motors as well as transformers, storage batteries and illumination will be treated. Prerequisite: Physics 106. Daily, 3.  
Mr. Pearson

301. **Elementary Alternating Currents**  
*Fall, 5 Hours* 
A comprehensive survey of the generation, transmission, distribution, and use of alternating current power. The theory and characteristics of alternating current circuits, machines and protective apparatus are studied. Prerequisite: Elementary Electric Machines 213. M. W. F., 5.  
Mr. Pearson

*311. **Alternating Current Circuits**  
*Fall, 5 Hours* 
A fundamental course in alternating current circuit theory. Vector representation, the calculation of impedance in series and parallel circuits, polyphase circuits and elementary transients are studied. Prerequisite: Elementary Electric Machines 213. M. T. W. Th., 1; laboratory, T. Th., 6.  
Mr. Pearson

312. **Alternating Current Machines**  
*Winter, 5 Hours* 
Mr. Pearson

*Not given in 1940-1941*
313. **Electrical Transmission**

This is a course in the electrical transmission of energy. Overhead and underground systems and high voltage phenomena. Prerequisite: Alternating Current Circuits 311. M. T. W. Th., 4; laboratory, T. Th., 6.

**Spring, 5 Hours**

Mr. Pearson

321, 322, 323. **Shop Projects**

Required for graduation. Practical projects involving calculation, drafting, engineering judgment and skill in construction or repair work. These projects may vary from armature winding and motor repairing to the design and construction of laboratory apparatus. This course involves no class room or text book work and the course is usually covered in one hour per quarter for three quarters. Individual assignments are made to each student. M. T. W. Th., 6-8.

**Fall, Winter, Spring, 1 Hour**

Mr. Pearson

411. **Direct Currents**

This is a thorough course in the theory, characteristics, application and control of direct current circuits and machinery. Prerequisite: Elementary Electric Machines 213. M. T. W. Th., 1; laboratory, T. Th., 6.

**Fall, 5 Hours**

Mr. Pearson

412. **High Frequency Currents**

This is a course in the theory and calculation of circuits and apparatus performance at communication frequencies. Prerequisite: Electrical Transmission 313. M. T. W. Th., 4; laboratory, T. Th., 6.

**Winter, 5 Hours**

Mr. Pearson

413. **High Frequency Currents**

This is a continuation of the above course involving the mathematical and experimental analysis of equipment characteristics and circuit performance at radio frequencies. Prerequisite: High Frequency Currents 412. M. T. W. Th., 4; laboratory, T. Th., 6.

**Spring, 5 Hours**

Mr. Pearson

421. **Illumination**


**Fall, 3 Hours**

Mr. Pearson

422. **Electrical Machine Design**

A course in the detailed electrical calculation of direct current generators and controllers. Prerequisite: Direct Currents 411. Recitations, M. T. W. Th., 5.

**Winter, 4 Hours**

Mr. Pearson

423. **Electrical Machine Design**

The electrical design of alternating current generators, motors and transformers. Prerequisite: Alternating Current Machines 312. M. W. F., 4.

**Spring, 3 Hours**

Mr. Pearson

431. **Electronics**

This is a course in the theory of electronic flow in vacuum tubes. Characteristics and application of newer types of tubes. Amplifiers, modulators, oscillators and detectors. Prerequisite: Elementary Alternating Currents 301. M. W. F., 5.

**Fall, 5 Hours**

Mr. Pearson
441, 442. **Advanced Electrical Laboratory**  Fall, Winter, 3 Hours
Elective in the senior year. Special laboratory problems and investigations more intricate and advanced than included in the required courses. Minor research projects may be undertaken. Hours to be arranged to suit balance of schedule.

Mr. Pearson

**MECHANICAL ENGINEERING**

101. **A. S. M. E. Student Branch Meetings**  ½ Hour
Fall, Winter and Spring Quarters. Professional seminar meetings of the Student Branch of the American Society of Mechanical Engineers to hear lectures by prominent engineers, to read and discuss papers presented by members of the Branch and to gain some experience in conducting such meetings.

Mr. Needy

111. **Engineering Drawing**  Fall, Winter, 4 Hours
Use of instruments, Applied geometry, lettering, orthographic projections, and pictorial drawing. Ten hours drafting work each week. Daily, 1, 3, 4; M. W. F., 6, 8; T. Th., 6, 8; S. 1, 4.

Mr. Brame

112. **Engineering Drawing**  Winter, 4 Hours
Developments: intersections, perspective and working drawings. Prerequisite: Engineering Drawing 111. Ten hours work in drafting room each week. Daily 3, 4; M. W. F., 6, 8; T. S., 1, 4.

Mr. Brame

113. **Engineering Drawing**  Spring, 5 Hours
Descriptive geometry, advanced orthographic projections, problems of point, line, plane, and curved surfaces. Shades and shadows. Prerequisite: Engineering Drawing 112. Recitations, 3 hours. Six hours drafting room work each week. T. Th. F., 3; M. W., 6, 7, 8; S., 1, 4.

Mr. Brame

114. **Engineering Drawing**  Spring, 3 Hours
A course in technical drawing designed for chemical engineering students. One recitation and three two-hour laboratory periods each week. Prerequisite: Engineering Drawing 113. W., 3; T. Th., 6, 7; S., 3, 4.

Mr. Brame

115. **Engineering Drawing**  Spring, 3 Hours
Primarily intended for students majoring in Industrial Arts. Additional work in isometric, oblique, perspective drawings, charts, graphs, and other figures. Time to be arranged.

Mr. Brame

120. **Survey of Engineering**  Fall, 1 Hour
The purpose of this course of study is to assist the student to find out definitely what branch of engineering he wishes to pursue, since without inconvenience he can change at the end of the first year. F., 1.

Mr. Needy

121. **Survey of Engineering**  Winter, 1 Hour
Prerequisite: Survey of Engineering 120. F., 1.

Mr. Needy

122. **Survey of Engineering**  Spring, 1 Hour
Prerequisite: Survey of Engineering 121. F., 1.

Mr. Needy
311. THERMODYNAMICS
Mr. Needy

312. STEAM POWER PLANTS
A study of the combustion, handling and storage of fuel, and of steam generating machinery, including boilers, stokers, steam engines, and condensers. Prerequisite: Physics 105 and Thermodynamics 311. M. T. W. Th., 3.
Mr. Needy

313. STEAM POWER PLANTS
A continuation of Steam Power Plants 312 with consideration given to complete installations, the cost of power, typical specifications and the power test codes. M. T. W. Th., 2.
Mr. Needy

321. MECHANICAL LABORATORY
Calibration of instruments, use of planimeter, study of engine indicators and their use, determination of steam quality, approximate coal analysis, heating value of coal by use of bomb calorimeter, flue gas analysis, testing of lubricating oils for flash point, fire point, and viscosity. Prerequisite: Thermodynamics 311. T. Th., 5, 6.
Mr. Needy

322. MECHANICAL LABORATORY
Boiler evaporative test, engine indicator and brake horsepower tests, indicator card analysis, efficiency tests of injector, electric motor, ventilating fan, centrifugal pump and automobile motor. Prerequisite: Mechanical Laboratory 321. T. Th., 6, 7.
Mr. Brame

323. MACHINE DESIGN
Mr. Needy

332. MECHANISM
Mechanisms, motion and velocity, kinematic chains, instantaneous centers, velocity diagrams, parallel and straight line motion, cams, gearing, bevel gears, gear trains, belting and intermittent motions. Daily, 6.
Mr. Brame

333. MACHINE SHOP
Bench work in filing, chipping, and fitting. Machine work in threading, turning, boring, drilling, shaping, tool grinding. M. W. F., 6, 7, 8.
Mr. Brame

334. ADVANCED MACHINE SHOP
Elective in the senior year. Special type of machine work more intricate and advanced than included in the required course. Minor problems in machine design may be worked out in this course. Laboratory hours to be arranged to suit balance of schedule. Prerequisite: Machine Shop 333.
Mr. Lowman

411. METALLURGY
The manufacture of pig iron, wrought iron, and steel, mechanical treatment of steel, iron and steel founding, physical and chemical constitution of iron and steel, alloy metals and metallography. Prerequisite: Chemistry 103. M. T. W. Th., 4.
Mr. Needy
412. **Machine Design**  
Complete design and detail of machine units. M. T. W. Th., 4.  
Mr. Needy  
*Winter, 4 Hours*

421. **Gas and Oil Engines**  
Liberation of heat energy, combustion, engine burning gas, kerosene and gasoline, semi-Diesel and Diesel engines, automobile engines, carburetion, ignition and testing. Prerequisite: Thermodynamics 311. Daily, 3.  
Mr. Needy  
*Fall, 5 Hours*

422. **Steam Turbines**  
Nozzle and blade design, mechanical losses, impulse turbine, reaction turbines, impulse reaction turbine, governing, economics of turbine operation, and the gas turbine. Prerequisite: Thermodynamics 311. M. T. W. Th., 2.  
Mr. Needy  
*Winter, 4 Hours*

423. **Gas Engine Design**  
Design of gas or oil engine. Complete calculations and detail drawings required of each member of the class. Prerequisite: Gas and Oil Engines 421, and Machine Design 323.  
Daily, 4.  
Mr. Needy  
*Spring, 5 Hours*

431. **Shop Projects**  
Practical projects involving calculation, design, drafting, engineering judgment and skill in construction or repair work. The course involves no classroom or textbook work, and is covered in one hour per week in the Fall quarter.  
Mr. Lowman  
*Fall, 1 Hour*

432. **Power Plant Operation**  
Practical work in the operation and maintenance of the University Power Plant. Prerequisite: Steam Power Plants 312 and 313. Daily, 7:00 a.m. to 5:00 p.m.  
Mr. Needy  
*Winter, Spring, 1-5 Hours*

442. **Electric Welding**  
The uses and principles of construction of arc welding equipment. Actual operation of arc welding and spot welding machines, including a study of lap, butt and perpendicular welding. Hours to be arranged.  
Mr. Needy  
*Winter, 1-5 Hours*

443. **Heating, Ventilating and Air Conditioning**  
Heating and ventilation. Heat losses from buildings, methods of heating, boilers, radiators, and accessories, steam systems, hot water systems, automatic temperature control, hot air furnace heating, fan systems, air washers, and air conditioning. Prerequisite: Thermodynamics 311. Daily, 6.  
Mr. Needy  
*Spring, 5 Hours*

501. **Engineering Practice Work**  
This summer practice work is required of all students in the course of Chemical Engineering. It is elective in other courses. The purpose of the course is to acquire the point of view of labor by personal contact. The student must keep notes and pass a creditable examination some time during the following Fall quarter. Work will be acceptable providing it is shop or factory experience, and is of ten weeks duration.  
Mr. Needy  
*Summer, 5 Hours*
COLLEGE OF PHARMACY

RUDOLPH HENRY RAABE

Dean
History

The College of Pharmacy of Ohio Northern University had its beginning in the departments of Science and Medicine. Following a passage of a law in Ohio in 1884, which required registration with the Ohio Board of Pharmacy of all who wished to engage in the practice of the profession, Pharmacy was changed from a sub-department to a separate and distinct division of the institution.

In 1885 the courses of study covered a period of thirty weeks, three terms of ten weeks each. From time to time the requirements for admission, the courses of study and facilities for instruction have been increased. These changes are concurrent with the progress in medical, chemical, pharmaceutical, health, and the allied sciences.

On August 24, 1925, the Ohio Northern University College of Pharmacy was admitted to membership in the American Association of Colleges of Pharmacy.

Graduates from either of the courses offered enjoy broad and liberal recognition.

Purpose

This College of Pharmacy aims to prepare men and women to meet not only the legal requirements of the profession but also the increasing public demand for educated and trained pharmacists. Majors are offered in biology, chemistry, pharmacology, and pharmacy.

Through organized courses of study instruction is given in the sciences pertaining to the selection, standardization, preservation, and dispensing of drugs, medicines, and chemicals used in the promotion of personal and public health, and in the service of the pharmacist to the public, to the medical practitioners, and to the profession.

A knowledge of the business methods involved in the successful distribution of medicinal materials is essential to the successful pursuit of the profession. Through a series of courses in business administration and drug store business methods, the student is given excellent opportunity to elect courses suited to his particular needs in this field.

Laboratories and Equipment

In addition to the general biological, chemical, and physical laboratories of the University, the College of Pharmacy has three pharmaceutical and dispensing laboratories. The desk arrangement is such as to afford the
student every facility for complete and thorough work, and the tables are supplied with an entire outfit of apparatus, including storing closet.

There are three chemical laboratories: General Inorganic, Organic, and Analytical. Each laboratory is equipped with individual lockers and with the necessary apparatus and supplies to do modern work in the courses offered. Chainomatic balances are the predominating type of analytical balances used.

The microscopic laboratory is equipped with tables, compound microscopes, microtome, projection lantern, and accessories.

Each individual locker in the pharmaceutical laboratories is equipped with apparatus and accessories necessary to do practice and experimental work in the courses offered, covering the entire range from the introductory courses for freshmen to the advanced courses in drug assay and the compounding of medicines. The practice dispensary laboratory is equipped with tables made by one of the leading drug store fixture manufacturers, and each table is equipped with a complete set of such apparatus as is needed in extemporaneous compounding and dispensing.

The Student Health Service Dispensary is administered by the registered pharmacists on the staff of the College of Pharmacy. Qualified junior and senior pharmacy students may be assigned to the pharmacists in charge for instructions in actual dispensary practice.

Library

Reference books and periodicals on pharmacy are located in the Brown Memorial Library. All the facilities of the general and special divisions of this library are at the disposal of pharmacy students.

Time to Enter

The College of Pharmacy opens on Monday, September 9, 1940, and continues three quarters. All matriculants must enter the College of Pharmacy on opening date and attend the introductory exercises unless excused by proper authority.

Students who are entitled to advanced standing shall enter at the time approved by the Dean.

Admission

Candidates who are at least seventeen years of age and of good moral character may apply for admission upon the following plans:

1. Certificate. Evidence of the satisfactory completion of four years
of high school work or its equivalent and a certificate of preliminary education issued by the Entrance Examiner of the Ohio Board of Pharmacy. Blanks for these purposes may be had by addressing the Ohio Northern University Entrance Examiner.

2. Examination. Candidates for admission who are deficient in high school units may be admitted upon examination. Entrance examinations are given by a regularly appointed examiner, as provided by law, known as the Entrance Examiner of the Ohio Board of Pharmacy.

3. Advanced Standing. A student desiring to transfer from another college must present a transcript of record and a certificate of honorable dismissal from the college he is leaving. He should submit a catalogue of his college. Full credit will be given for work satisfactorily completed in recognized institutions of higher learning, provided such work is parallel to the requirements for graduation in this institution.

Advanced credit is given for not more than 135 quarter hours (90 semester hours) exclusive of physical education.

Persons who meet the requirements for admission as indicated in the preceding paragraphs are issued a Permit to Enter the College of Pharmacy. To enter any of the regular courses of study the candidate, after being granted a Permit to Enter, must matriculate, prepare a schedule of study with the aid of an adviser and approval of the Dean, and pay tuition and fees as stated elsewhere in this catalogue.

Classification

The minimum requirements for sophomore standing are 38 credit hours and a point average of 0.5; for junior standing, 84 credit hours and a point average of 0.7; for senior standing, 130 credit hours and a point average of 0.9.

Requirement for Graduation

Every person upon whom a degree is conferred must be of good moral character; satisfactorily complete all prescribed work; spend the last year in resident study in this college; have as many quality points as scheduled hours; and be present at the commencement exercises unless officially excused.

The Four-Year Curriculum

The curriculum is flexible enough to allow preparation in specialized activities of the profession. In addition to a group of courses which are con-
stant for all candidates for the degree of Bachelor of Science in Pharmacy (B. S. in Pharm.), several groups of electives are offered. Courses designated as constants are required. A sufficient number of credit hours must be chosen from the elective group to bring the total number of credit hours up to the requirement for graduation. All subjects are assigned in logical sequence.

Students who elect the sciences may be assigned to courses in German or French, or both, in order to acquire ability to read scientific texts and periodicals published in these languages. Those who elect courses in economics and business administration may choose the language which best serves their needs. All elections are subject to the approval of the Dean.

All colleges holding membership in the American Association of Colleges of Pharmacy require for graduation the satisfactory completion of not less than four full college years.

Not less than two hundred sixteen credit hours, including physical education, are to be selected from the schedule below for graduation.

**Required Basic Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education</td>
<td>6</td>
</tr>
<tr>
<td>Chemistry 101, 102, 103, 206, 207, 208</td>
<td>30</td>
</tr>
<tr>
<td>English 101, 102, 102a</td>
<td>9</td>
</tr>
<tr>
<td>Mathematics</td>
<td>9</td>
</tr>
<tr>
<td>Physics</td>
<td>6 to 9</td>
</tr>
</tbody>
</table>

**Required Professional Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmaceutical Chemistry 201, 202, 203, 251, 252, 253</td>
<td>24</td>
</tr>
<tr>
<td>Pharmacy 101, 103, 104, 105, 151, 152, 153, 203, 251, 252, 253, 254, 261, 269, 299 and electives</td>
<td>51</td>
</tr>
<tr>
<td>Pharmacognosy 101, 102, 103, 151, 152, 153</td>
<td>24</td>
</tr>
<tr>
<td>Pharmacology 201, 202, 203, 211, 213, 222, 223</td>
<td>30</td>
</tr>
</tbody>
</table>

**Electives in the Basic Subjects**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>French or German</td>
<td>9</td>
</tr>
<tr>
<td>Economics</td>
<td>9</td>
</tr>
<tr>
<td>Biology</td>
<td>9</td>
</tr>
<tr>
<td>Botany</td>
<td>9</td>
</tr>
<tr>
<td>Zoology</td>
<td>9</td>
</tr>
</tbody>
</table>

**Electives in the Professional and Applied Subjects**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>6</td>
</tr>
<tr>
<td>Biological Assaying</td>
<td>3</td>
</tr>
<tr>
<td>Business Methods</td>
<td>9</td>
</tr>
<tr>
<td>Chemistry</td>
<td>20</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>10</td>
</tr>
<tr>
<td>Pharmacognosy</td>
<td>5</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>5</td>
</tr>
</tbody>
</table>
## Four-Year Course in Pharmacy

*Effective July 1, 1940*

**Degree: Bachelor of Science in Pharmacy**

### First Year

<table>
<thead>
<tr>
<th>Fall Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 101</td>
<td>Physical Education 102</td>
<td>Physical Education 103</td>
</tr>
<tr>
<td>Chemistry 101 or 101a</td>
<td>Chemistry 102 or 102a</td>
<td>Chemistry 103 or 103a</td>
</tr>
<tr>
<td>English 101</td>
<td>English 102</td>
<td>English 102a</td>
</tr>
<tr>
<td>Mathematics 101a</td>
<td>Mathematics 102a</td>
<td>Mathematics 103a</td>
</tr>
<tr>
<td>Pharmacognosy 101</td>
<td>Pharmacognosy 102</td>
<td>Pharmacognosy 103</td>
</tr>
<tr>
<td>or Biology (Botany) 107</td>
<td>Biology (Botany) 108</td>
<td>Biology (Botany) 109</td>
</tr>
<tr>
<td>Pharmacy (Theoretical) 103</td>
<td>Pharmacy (Latin) 103</td>
<td>Pharmacy (Arithmetic) 104</td>
</tr>
</tbody>
</table>

### Second Year

<table>
<thead>
<tr>
<th>Fall Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 104</td>
<td>Physical Education 105</td>
<td>Physical Education 106</td>
</tr>
<tr>
<td>Chemistry 206</td>
<td>Chemistry 207</td>
<td>Chemistry 208</td>
</tr>
<tr>
<td>Pharmacy 151</td>
<td>Pharmacy 152</td>
<td>Pharmacy 153</td>
</tr>
<tr>
<td>Pharmacognosy 151</td>
<td>Pharmacognosy 152</td>
<td>Pharmacognosy 153</td>
</tr>
<tr>
<td>Economics 121</td>
<td>Economics 122</td>
<td>Economics 123</td>
</tr>
</tbody>
</table>

### Third Year

<table>
<thead>
<tr>
<th>Fall Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmaceutical Chemistry 201</td>
<td>Pharmaceutical Chemistry 202</td>
<td>Pharmaceutical Chemistry 203</td>
</tr>
<tr>
<td>Pharmacology (Physiology) 211</td>
<td>Pharmacology (Bacteriology) 222</td>
<td>Pharmacology (Physiology) 213</td>
</tr>
<tr>
<td>Pharmacy (Business) 203</td>
<td>Pharmacy (History) 105</td>
<td>Pharmacy (Business) 203</td>
</tr>
<tr>
<td>Pharmacology 201</td>
<td>Pharmacology 202</td>
<td>Pharmacology (Law) 254</td>
</tr>
</tbody>
</table>

### Fourth Year

<table>
<thead>
<tr>
<th>Fall Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmaceutical Chemistry 251</td>
<td>Pharmaceutical Chemistry 252</td>
<td>Pharmaceutical Chemistry 253</td>
</tr>
<tr>
<td>Pharmacy (Dispensing) 251</td>
<td>Pharmacy (Dispensing) 252</td>
<td>Pharmacy (Dispensing) 253</td>
</tr>
<tr>
<td>Pharmacy (NNR) 261</td>
<td>Pharmacy (NNR) 262</td>
<td>Pharmacy (Survey) 209</td>
</tr>
<tr>
<td>Electives 3</td>
<td>Electives 5</td>
<td>Electives 5</td>
</tr>
</tbody>
</table>

Five credit hours must be selected each quarter of the Senior year from the following subjects:

<table>
<thead>
<tr>
<th>Fall Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmaceutical Chemistry 261</td>
<td>Pharmaceutical Chemistry 262</td>
<td>Pharmaceutical Chemistry (Biochemistry) 263</td>
</tr>
<tr>
<td>Pharmacy (Manufacturing) 264</td>
<td>Pharmacy (Manufacturing) 204</td>
<td>Pharmacy (Manufacturing) 204</td>
</tr>
<tr>
<td>Pharmaceutical Chemistry (Urinalysis) 271</td>
<td>Pharmaceutical Chemistry (Urinalysis) 271</td>
<td>Pharmaceutical Chemistry (Urinalysis) 271</td>
</tr>
<tr>
<td>General Physics 109</td>
<td>General Physics 110</td>
<td>Physical Education (First Aid) 158</td>
</tr>
<tr>
<td></td>
<td></td>
<td>General Physics 111</td>
</tr>
</tbody>
</table>


A PRE-PROFESSIONAL COURSE FOR PHARMACY STUDENTS

The professional courses in pharmacy are based upon satisfactory accomplishments in certain basic subjects. The prospective pharmacy student who has completed one or more years of work in a recognized College of Liberal Arts must submit a transcript of his credits before he can be admitted to advanced standing.

The required basic subjects which have been recommended by the American Association of Colleges of Pharmacy as being most advantageous to the successful pursuit of the professional and applied courses of study are botany, chemistry, economics, English, mathematics, and physiology. Certain basic courses in bacteriology, business, chemistry, foreign language, physics, public health studies, and zoology are listed as optional and will be given careful consideration in the evaluation of credits for advanced standing. The minimum length of time required to complete the professional and applied courses is three years.

*DEGREE BACHELOR OF SCIENCE IN PHARMACY

First Year

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacy 101</td>
<td>Pharmacy 103</td>
<td>Pharmacy 104</td>
</tr>
<tr>
<td>Pharmacognosy 151</td>
<td>Pharmacognosy 152</td>
<td>Pharmacognosy 153</td>
</tr>
<tr>
<td>Pharmacy 151</td>
<td>Pharmacy 151</td>
<td>Pharmacy 153</td>
</tr>
<tr>
<td>Electives</td>
<td>Electives</td>
<td>Electives</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

Second Year

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmaceutical Chem-</td>
<td>Pharmaceutical Chem-</td>
<td>Pharmaceutical Chem-</td>
</tr>
<tr>
<td>istry 201</td>
<td>istry 202</td>
<td>istry 203</td>
</tr>
<tr>
<td>Pharmacology 211</td>
<td>Pharmacology 222</td>
<td>Pharmacology 213</td>
</tr>
<tr>
<td>Pharmacy 203</td>
<td>Pharmacy 105</td>
<td>Pharmacology 223</td>
</tr>
<tr>
<td>Pharmacology 201</td>
<td>Pharmacology 202</td>
<td>Pharmacy 254</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Third Year

<table>
<thead>
<tr>
<th>FALL QUARTER</th>
<th>WINTER QUARTER</th>
<th>SPRING QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacy 251</td>
<td>Pharmacy 252</td>
<td>Pharmacy 253</td>
</tr>
<tr>
<td>Pharmaceutical Chem-</td>
<td>Pharmaceutical Chem-</td>
<td>Pharmaceutical Chem-</td>
</tr>
<tr>
<td>istry 251</td>
<td>istry 252</td>
<td>istry 253</td>
</tr>
<tr>
<td>Pharmacy 261</td>
<td>Pharmacy 262</td>
<td>Pharmacy 299</td>
</tr>
<tr>
<td>Electives</td>
<td>Electives</td>
<td>Electives</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

Five credit hours must be selected each quarter of the Senior year from the following subjects.
Description of Courses

BIOLOGY

One of the specific aims of this department is to prepare students for the study of medical sciences, and to give them foundation courses to qualify them for entrance into clinical and research laboratories.

101. ZOOLOGY

102. ZOOLOGY

103. ZOOLOGY

These courses are designed for students who desire a general acquaintance with some of the biological laws and theories as evidenced by the animal world. A general survey of the animal kingdom based on classification, morphology, physiology, and ecology. Special attention is given to the problems of the organism, with emphasis on development, reproduction, genetics, and evolution. Section 1, M. W., 3; F., 3; Section 2, T. Th., 3; 4; F., 4.

Mr. Huber and Mr. Dobbins

107. BOTANY

108. BOTANY

109. BOTANY

These courses are presented largely as cultural courses with emphasis placed on careful observation and logical conclusion. The time is devoted to a consideration of the physiological processes, ecology, structure, reproduction, genetics, distribution, and evolution of plants. M. W., 5; 6; F., 5; M. W., 7; 8; F., 7.

Mr. Dobbins

110. LOCAL FLORA

A systematic study which acquaints the student with many of the native and introduced plants. A field course supplemented by greenhouse and herbarium studies. S., 1, 2, 3; 4; T. Th., 1.

Mr. Dobbins

210. HISTOLOGY AND TECHNIQUE

Methods of collecting, killing, preserving, and preparing materials for demonstration and laboratory purposes are considered. A detailed microscopic study of various plant or animal tissues is made. Lecture and class work one hour, laboratory six to eight hours. Time schedule to be arranged. Open to seniors majoring in biology.

Mr. Dobbins or Mr. Huber
220. **Biological Problems**  
Minor investigations for qualified seniors who are taking a major or minor in biology. By arrangement any quarter. Fee depends on nature of work done.  
**Mr. Huber or Mr. Dobbins**

*222. **Plant Physiology**  
Course consists of a critical study of some of the physiological processes of plants. Prerequisite: Botany 107, 108, 109. M. W., 3, 4; F., 3.  
**Mr. Dobbins**

## CHEMISTRY

All students who are candidates for graduation from the College of Pharmacy will be required to complete Chemistry 101, 102, 103, 206, 207, and 208, or the equivalent. Those wishing to work in chemistry beyond the constants as listed for all pharmacy students, should see their adviser.

Additional courses in chemistry may be elected, subject to the recommendation of the student's adviser and approval of the Dean.

### 101a. **Introductory Chemistry**  
**Fall, 5 Hours**  
**Winter, 5 Hours**  
**Spring, 5 Hours**

### 102a. **Introductory Chemistry**

### 103a. **Introductory Qualitative Analysis**  
A series of courses designed for students who do not present chemistry credit. Course 101a and 102a consist of a careful study of the fundamental laws of chemistry and of the properties of the common metallic elements and their compounds; course 103a is an introductory study in qualitative analysis of acids and metals. A brief study is made of the properties of the common metallic elements and their compounds. Lecture and quiz, M. W. F., 3; laboratory, T. Th., 2, 3, 4 or 6, 7, 8.  
**Mr. Harrod**

### 101. **General Chemistry**  
**Fall, 5 Hours**  
**Winter, 5 Hours**  
**Spring, 5 Hours**

### 102. **General Chemistry**

### 103. **Qualitative Analysis**  
Basic courses in general chemistry. Prerequisite: One unit of high school chemistry. Lecture and quiz, M. W. F., 2; laboratory, T. Th., 2, 3, 4, or 6, 7, 8.  
**Mr. Harrod**

### 104. **Quantitative Analysis**  
**Fall, 5 Hours**  
**Winter, 5 Hours**  
**Spring, 5 Hours**

### 105. **Quantitative Analysis**

### 106. **Quantitative Analysis**  
These courses deal with the theory and practice of gravimetric and volumetric analysis. The use of the fundamental principles of modern theoretical chemistry, as well as the attainment of the ability to make quantitative separations and determinations, is emphasized. Prerequisite: Chemistry 103a or 103. Lecture, T. Th., 5, 24 hours; laboratory, M. W. F., 5, 6, 7, 108 hours.  
**Mr. Miller**

### 206. **Organic Chemistry**  
**Fall, 5 Hours**  
**Winter, 5 Hours**

### 207. **Organic Chemistry**

*Not given in 1940-1941*
208. **Organic Chemistry**  
*Spring, 5 Hours*

These courses consist of a fundamental study of the compounds of carbon. Careful attention is given to group structure, group relationship, group properties, isomerism and nomenclature. Prerequisite: Chemistry 103a or 103. Lecture and quiz, M. W. F., 5, 5.36 hours; laboratory, T. Th., 5, 5.72 hours.

Mr. Harrod

211a. **Advanced Qualitative Analysis**  
*Fall, 5 Hours*

211b. **Advanced Qualitative Analysis**  
*Winter, 5 Hours*

212. **Inorganic Preparations**  
*Spring, 5 Hours*

The fundamental purpose of these courses is to teach inorganic chemistry. Courses 211a and 211b deal with systematic analysis on a semi-quantitative basis and are more comprehensive than Chemistry 103 in both theoretical consideration and number of elements studied. Course 212 consists of a preparation of pure inorganic compounds, and a study of the theoretical principles involved. In all these courses the Periodic Law is used as the basis for the classification of the elements and their properties. Prerequisites: Chemistry 104 and 105. Lecture, T. Th., 4, 24 hours; laboratory, M. W. F., 5, 6, 7, 108 hours.

Mr. Miller

215. **Physical Chemistry**  
*Fall, 3 Hours*

216. **Physical Chemistry**  
*Winter, 3 Hours*

217. **Physical Chemistry**  
*Spring, 3 Hours*

A series of courses designed to develop a comprehensive conception of chemical change and the structure of matter. In the interest of the pre-medical student, special attention is given to osmosis, equilibrium, colloids, and hydrogen ion determination. Prerequisite: Quantitative Analysis, organic chemistry, general physics, and mathematics 109. Lecture and quiz, M. W. F., 4, 36 hours.

Mr. Miller

231. **Chemistry Problems**  
*3 Hours*

Minor investigations for qualified seniors who are majoring in chemistry. Consult head of department.

Mr. Harrod

---

### PHARMACEUTICAL CHEMISTRY

201. **Drug Assay**  
*Fall, 5 Hours*

A course involving the theory and methods of assay of the inorganic and organic substances of the United States Pharmacopoeia and National Formulary. Lectures and recitations, T. Th., 4, 24 hours; Laboratory, M. W. F., 2, 3, 4, 108 hours.

Mr. McFadden

202. **Drug Assay**  
*Winter, 5 Hours*

A continuation of Pharmaceutical Chemistry 201. In addition some attention is directed to the physical methods employed in the testing of certain classes of drugs. Lectures and recitations, T. Th., 4, 24 hours; Laboratory, M. W. F., 2, 3, 4, 108 hours.

Mr. McFadden

203. **Drug Assay**  
*Spring, 5 Hours*

A study of official methods of assay of crude drugs and preparations of crude drugs. Appropriate laboratory work is carried out to illustrate the various methods employed. Lectures and recitations, T. Th., 4, 24 hours. Laboratory, M. W. F., 2, 3, 4, 108 hours.

Mr. McFadden
251. INORGANIC PHARMACEUTICAL CHEMISTRY  Fall, 3 to 5 Hours
A study of the preparation, reactions, solubility, identity and purity of the inorganic substances of the United States Pharmacopoeia and National Formulary. The laboratory work consists of the preparation of a variety of substances and the application of the various official tests for purity and identity. Lectures and recitations, M. W. F., 1, 36 hours. Laboratory, T. Th., 1, 2, 3, 72 hours.

Mr. McFadden

252. ORGANIC PHARMACEUTICAL CHEMISTRY  Winter, 3 to 5 Hours
A study of the preparation, reactions, solubility, identity and purity of the synthetic organic substances of the United States Pharmacopoeia and National Formulary. Laboratory work is carried out to illustrate the various topics mentioned, stress being placed on the processes involved in the manufacture of synthetic drugs. Lectures and recitations, M. W. F., 1, 36 hours. Laboratory, T. Th., 1, 2, 3, 72 hours.

Mr. McFadden

253. NATURAL DRUG PRINCIPLES  Spring, 3 to 5 Hours
A study of the alkaloids, glucosides, saponins and allied substances occurring in crude drugs. Emphasis is placed on the relationship of chemical structure and pharmacological action. The laboratory work includes separation and identity of representative examples of the various principles. Lectures and recitations, M. W. F., 1, 36 hours. Laboratory, T. Th., 1, 2, 3, 72 hours.

Mr. McFadden

261. BIOCHEMISTRY  Fall, 3 Hours
An introductory course on the chemistry of fats, proteins and carbohydrates. Prerequisites: Organic chemistry and Quantitative chemistry or its equivalent. Lectures and recitations, M. W. F., 5, 36 hours.

Mr. McFadden

262. BIOCHEMISTRY  Winter, 3 Hours
A course in the chemistry of digestion and metabolism. Prerequisite: Biochemistry 261. Lectures and recitations, M. W. F., 5, 36 hours.

Mr. McFadden

263. BIOCHEMISTRY  Spring, 3 Hours
The chemistry of vitamins, sterols, hormones and enzymes. Prerequisite: Biochemistry 262. Lectures and recitations, M. W. F., 5, 36 hours.

Mr. McFadden

271. URINALYSIS  Any Quarter, 2 or 3 Hours
The principles and applications of urinalysis. The laboratory work includes the analysis of samples for the Health Service of the University. Laboratory, T. Th., 5, 6, 7, 36 hours.

Mr. McFadden

ECONOMICS and BUSINESS ADMINISTRATION

Ability to buy, sell and organize business efficiently is one of the essentials in the profession of pharmacy. General courses in the principles of accounting, economics, and business organization may be elected by those who wish to acquire a broader knowledge of sound business procedure.

Pharmacy 203 is a course in commercial pharmacy dealing specifically with drug store business methods.

121. PRINCIPLES OF ECONOMICS  Fall, 3 Hours
122. **Principles of Economics**

Winter, 3 Hours

123. **Principles of Economics**

Spring, 3 Hours

Wants, scarcity, and economic history, organization of production, value and price, monopoly and its control, financial organization, distribution of wealth and income, inequality and social reform, public finance, and international trade. M. W. F., 1 and 5.

Mr. Patton

131. **Principles of Accounting**

Fall, 3 Hours

132. **Principles of Accounting**

Winter, 3 Hours

133. **Principles of Accounting**

Spring, 3 Hours

Principles of the double-entry system, asset and equity accounts, journal and ledger, expense and revenue, periodic adjustment, working sheets, income statements, balance sheets, valuation and income determination, trading and manufacturing accounts, and partnership and corporate accounting. Prerequisite or concurrent: Economics 121, 122, 123. M. W. Th. F., 3.

Miss Lewis

For electives and other courses in business the student is referred to the Department of Economics and Business Administration in the College of Liberal Arts.

**ENGLISH**

The pharmacist must use both oral and written English. In order to communicate clearly and adequately with the wholesaler, manufacturer, medical practitioner, layman, state boards, the government, and to prepare papers for clubs, articles for magazines and local newspapers, or advertising, the ability to speak and write English is essential.

101. **Composition**

Fall, 3 Hours

102. **Composition**

Winter, 3 Hours

102a. **Composition**

Spring, 3 Hours

These three courses constitute a year of work for freshmen. A thorough drill in the mechanics of written English, composition and argumentation; description and narration. Considerable attention is given to the study of the structure of the short story. Daily themes. Students who show a high degree of proficiency in English may elect English 122a or English 104 in the place of Composition 102a. Four sections. M. W. F., 5, 6, 7.

Mr. L. Freeman and Miss Wilder

118. **Business Writing**

Spring, 3 Hours

A study of written communication in business, emphasizing the use of effective English and the technique of forms of communication. Sales, credit, collection, adjustment letters, business reports. Prerequisite: English 101, 102, 102a. M. W. F., 5.

Mr. L. Freeman

**HEALTH AND PHYSICAL EDUCATION**

Some form of physical activity is required of all students during the first two years of residence in the University. The nature of the work will
depend upon the needs of the individual as revealed by a careful examination.

The pharmacist should learn the fundamentals of personal and general hygiene that he may be able to maintain a high degree of efficiency during and after college life and to assist in the promotion of public health as outlined by the United States Public Health Service.

Courses 101, 102, 103, 104, 105, 106, 115, 152, and 258 as given in the Department of Health and Physical Education, and Bacteriology 207, 208, and 209 as given in the Department of Pharmacology are of special interest to the pharmacy student.

101. Physical Education

102. Physical Education

103. Physical Education

Men—Gymnasium and outdoor classes in season, natural gymnastics, informal play. Six sections. M. W., 1, 2, 3, 4, 5, or 6.

Mr. H. A. Lamb

Women—A course in natural gymnastics including games and sports in season, dancing, and tumbling. Six sections. T. Th., 1, 2, 3, 4.

Miss Tolf

104. Physical Education

105. Physical Education

106. Physical Education

Men—Continuation of course 103 with team games and apparatus added. Six sections. M. W., 1, 2, 3, 4, 5, or 6.

Mr. H. A. Lamb

Women—A continuation of course 103. Six sections. T. Th., 1, 2, 4, or 6.

Miss Tolf

115. Personal and General Hygiene

Fall, Winter, Spring, 2 Hours

A course designed to cover the various phases of personal hygiene and health, from the individual aspect, with emphasis on preventive measures. T. Th., 3, 4.

Mr. C. Lamb, Mr. Kramer

152. Health Education

Winter, 3 Hours

The relation of hygiene to home and community life, including a study of sewage disposal, refuse disposal, transmission and control of diseases. M. W. F., 5.

Miss Tolf

258. First Aid

Spring, 2 Hours

Lectures, discussion and practice in giving first aid in cases of emergency. The American Red Cross First Aid Certificate may be obtained by students who pass a satisfactory examination. T. Th., 4.

Mr. C. A. Lamb
MATHEMATICS

Inaccurate computations in pharmacy may lead to serious results. A course in mathematics especially designed for the student of pharmacy is required of all candidates for graduation. It includes the mathematical processes involved in operative pharmacy and in the compounding of prescriptions. A limited amount of the mathematics involved in commercial pharmacy is included. This course is listed and described in the Department of Pharmacy, course 104. In addition to Pharmacy 104 at least eight credit hours in college mathematics or its equivalent are required.

Those students who desire courses in chemistry beyond the prescribed constants may take additional courses in mathematics, subject to the recommendation of the student's adviser and approval of the Dean.

1013. FRESHMAN MATHEMATICS
        FALL, 3 Hours
1023. FRESHMAN MATHEMATICS
        WINTER, 3 Hours
1032. FRESHMAN MATHEMATICS
        SPRING, 3 Hours

A course built around high school mathematics. It acquaints the student with the meaning, practical use and possibilities in the general field of mathematics. Prerequisites: one unit algebra, one unit geometry. M. W. F., 4.

Mr. Fulton

101. COLLEGE ALGEBRA
        FALL, 5 Hours
Prerequisite: Plane geometry and one and one-half units of high school algebra. Daily, 3 or 5.

Mr. Whitted

103b. TRIGONOMETRY
        WINTER, 3 TO 5 Hours
The fundamental principles of the subject are developed and applied to trigonometric reductions and to the solutions of triangles. Numerous exercises in the field of geometry, physics, and mechanics are studied. Prerequisite: Plane geometry and one unit of high school algebra. Daily, 2 or 4.

Mr. Whitted

107. CALCULUS: DIFFERENTIAL
        FALL, 5 Hours
The fundamental theorems for the differentiation of algebraic, trigonometric, logarithmic, and exponential functions are taken up with numerous applications to problems in geometry, mechanics, and physics. Prerequisite: Mathematics 105. Daily, 4.

Mr. Whitted

108. CALCULUS: DIFFERENTIAL AND INTEGRAL
        WINTER, 5 Hours
This course is a continuation of Mathematics 107, but gives a more extended use of differentiation to analytical functions of two or more variables with an introduction to the indefinite integral. Prerequisite: Mathematics 107. Daily, 4.

Mr. Whitted

109. CALCULUS: INTEGRAL
        SPRING, 5 Hours
This is a continuation of Mathematics 108, but gives a more detailed account of methods of integration by the aid of substitution, parts and reduction formulae. Integration as a summation and the definite integral with its application to problems in surfaces, volumes, moments of inertia, center of gravity, and fluid pressure are studied. Prerequisite: Mathematics 108. Daily, 4.

Mr. Whitted
MODERN FOREIGN LANGUAGES

Many texts and periodicals pertaining to pharmacy and the allied sciences are published in a foreign language. In order to meet the demand of students who desire a knowledge of a foreign language for reading, conversational, or business purposes, appropriate courses in French and German are offered. If a student expects to do graduate work, he should have a working knowledge of at least two foreign languages, French and German.

German 118 is recommended for those who expect to enter graduate schools.

FRENCH

101. Elementary French
102. Elementary French
103. Elementary French

The elements of pronunciation and phonetics, essentials of grammar and easy reading. Conversation suited to the needs and abilities of the class. M. W. F., 5.

Mr. Herrick

GERMAN

101. Elementary German
102. Elementary German
103. Elementary German

Essentials of pronunciation, grammar, and composition, verb drill, and easy graded texts for reading. M. W. F., 1.

Mr. Herrick

118. Scientific German

The reading of scientific texts and periodicals with particular emphasis on individual needs. Required of pre-medical students. Prerequisite: German 101-103. T. Th. F., 2.

Mr. Herrick

MATERIA MEDICA
PHARMACOGNOSY

The study of the numerous plant and animal drugs is of prime importance in the field of pharmaceutical training, because a clear majority of the therapeutic agents of modern medicine represent either the crude drug as such, or else some derivative of the same. In these courses, the student is trained in the proper use and care of the compound microscope and in the methods of sectioning and making temporary mounts.

He is also trained in the elements of identification of powdered drugs
by microscopical examination, a technique which is becoming of increasing importance in view of the ever-increasing activity of the professional pharmacist in analysis.

101. PHARMACOGNOSY

Fall, 3 Hours

In this course, various types of plant cells and plant tissues, as well as the morphology (gross anatomy), histology, and physiology of the leaf, are studied by means of class demonstrations and individual laboratory exercises. Throughout this and the following two quarters, careful attention is paid to the botanical terms occurring in the United State Pharmacopoeia and the National Formulary. Lectures, T., 1, 12 hours; laboratory and recitation, T. Th., 2, 3, 48 hours.

Mr. Hocking

102. PHARMACOGNOSY

Winter, 3 Hours

The gross and microscopic anatomy of the stem and root and their variants are considered, and the classification of cryptogam plants is studied by careful examination of representatives of the various groups. Plants of economic importance are stressed. Lectures, T., 1, 12 hours; laboratory and recitations, T. Th., 2, 3, 48 hours.

Mr. Hocking

103. PHARMACOGNOSY

Spring, 3 Hours

The reproductive organs (flower, fruit and seed) of the phanerogam plants are studied as thoroughly as time will allow, and further attention is devoted to the study of classification of these, the seed plants. Emphasis is placed on plants of pharmaceutical or medicinal usage. Lectures, T., 1, 12 hours; laboratory and recitations, T. Th., 2, 3, 48 hours.

Mr. Hocking

151. PHARMACOGNOSY

Fall, 5 Hours

A study of the crude botanical drugs official in the latest revisions of the United States Pharmacopoeia and the National Formulary. The subjects of study are drugs obtained from plants of the lower groups up to and including drugs from several of the dicotyledonous families. Nomenclature, definitions, history, sources, commercial collection and preparation, geographical distribution, physical and chemical characteristics and constituents, properties, adulteration, preservation, and identification are the chief topics of discussion. Macroscopic study is supplemented in the case of important drugs by microscopic examination of the powdered or thinly sectioned drug. Prerequisite: College Botany or Pharmacognosy 102. Lectures and recitations, M. W. F., 2, 36 hours; laboratory, M. W., 7, 8, 48 hours.

Mr. Hocking

152. PHARMACOGNOSY

Winter, 5 Hours

In this course, study of the official crude drugs of the dicotyledons is continued. Prerequisite: College Botany or Pharmacognosy 102. Lectures and recitations, M. W. F., 2, 36 hours; laboratory, M. W., 7, 8, 48 hours.

Mr. Hocking

153. PHARMACOGNOSY

Spring, 5 Hours

In this course the study of the dicotyledonous crude drugs is concluded. The remainder of the time is devoted to a study of the animal drugs of the United States Pharmacopoeia and the National Formulary. Prerequisite: College Botany or Pharmacognosy 102. Lectures and recitations, M. W. F., 2, 36 hours; laboratory, M. W., 7, 8, 48 hours.

Mr. Hocking

201. PHARMACOGNOSY

Any Quarter, 3 to 5 Hours

A study of the histology of the crude botanical drugs, including microscopic identification and detection of adulterants. Prerequisite: College Botany or Pharmacognosy 101, 102, 103. Lectures. Credit and hours to be arranged.

Mr. Hocking
275. **Pharmacognosy Problems**  
Any Quarter, 1 to 5 Hours  
A course of special problems along advanced lines in this field, open to juniors and seniors who have shown ability to carry them to a satisfactory completion. Hours and time of work to be arranged.  

**Staff**

**Pharmacology**

In order that the pharmacist may be better prepared to discuss certain phases of the dynamics of drugs with members of the various professional groups engaged in health service and to have a better background for the critical examinations of prescriptions, a knowledge of pharmacology and its allied branches is a prime essential. The following courses of study are designed to meet these fundamental requirements.

**Fall, 5 Hours**

**Pharmacology**  
Mr. Hocking

**Winter, 3 to 5 Hours**

**Pharmacology**

**Spring, 3 to 5 Hours**

**Pharmacology**  
A study of the physiological action, therapeutics, toxicology, and dosage of accepted medicinal agents, based upon a therapeutic classification. Laboratory work is performed by students in groups of fours or sixes. Lectures, M. W. F., 6, 36 hours; laboratory, demonstrations and recitations, T. Th., 5, 6, 48 hours (for 5 hour course).

**Mr. Hocking**

**211. Physiology**

**Fall, 5 Hours**

A brief course in human physiology preparatory to the study of the action of drugs. The digestive, circulatory, respiratory, and nervous systems are the chief subjects considered. Lectures and recitation, M. W. F., 1, 36 hours; laboratory T. or Th., 1 and 2, 48 hours.  

**Mr. Kramer**

**213. Physiology**

**Fall, 1 Hour**

A continuation of Physiology 101. Lectures and recitations, M., 1, 12 hours.  

**Mr. Kramer**

**222. Bacteriology**

**Winter, 5 Hours**

A course in the fundamentals of bacteriology. The basic facts are studied and the essential technique practiced. To illustrate and give point to the general principles of the subject, particular attention is devoted to bacteria of economic importance, and especially to those causing disease. The value and use of antiseptics, germicides and disinfectants is studied in some detail. Lectures and recitations, F., 4, 12 hours; laboratory and demonstrations, Section A, M. W., 3, 4; Section B, T. Th., 3, 4, 48 hours.  

**Mr. Kramer**

**223. Bacteriology and Health**

**Spring, 4 Hours**

The outstanding human diseases are discussed in this course, together with modern biological methods of combating them. Toxins, anti-toxins, toxoids, bacteria, vaccines, and other products of bacterial origin are studied. Prerequisite: Pharmacology 222, or a course in general bacteriology. Lectures and recitations, T. W. Th. F., 1, 48 hours.  

**Mr. Kramer**
251. Biological Assaying
Attention is given to biological assay methods and standardization of the U. S. P. drugs that are most satisfactorily valued by this method. Lectures and recitations, 12 hours; laboratory, 96 hours. Time schedule to be arranged.

Staff

275. Pharmacology Problems
A course of special problems open to students of advanced standing and who have shown the ability to carry them to completion. Hours and time of work to be arranged.

Staff

PHARMACY

101. Pharmacy
This course is designed to give the student a good foundation for the further study of pharmacy. The aim is to acquaint the student with the reference books and literature used in pharmacy and to present the principles upon which pharmaceutical operations are based. Lectures and recitations, M. W., 1, 24 hours; laboratory, W. or F., 6, 7, 24 hours.

Mr. Raabe

103. Pharmaceutical Latin
A course covering such essentials of inflection and syntax as to familiarize the student with the etymology and construction of the nomenclature used in the United States Pharmacopoeia and National Formulary and to enable him to interpret prescriptions. Lectures and recitations, M. W., 1, 24 hours; laboratory, W. or F., 6, 7, 24 hours.

Mr. Raabe

104. Pharmaceutical Arithmetic
A course in calculations pertaining to pharmacy. The student is taught current weights and measures, applications of proportion, allegation, specific gravity, specific volume, thermometer scales, percentage solutions, and elementary chemical problems common to pharmacy. Lectures and recitations, M. W., 1, 24 hours; laboratory, W. or F., 6, 7, 24 hours.

Mr. Raabe

105. History of Pharmacy
A survey of the ancient, medieval, and modern practices and ideals of the profession of pharmacy. This course is mainly cultural. Lectures and discussions. M. W. F., 5, 36 hours.

Mr. Neuroth

151. Pharmacy
A thorough study of the more simple preparations official in the latest U. S. P. and N. F. The chief topics of this course are mixtures, lotions, solutions, liniments, magmas, and other preparations of quite similar nature. Prerequisite: Pharmacy 101 and Chemistry 101, 102, and 103. Lectures and recitations, M. W. F., 3; laboratory, T. Th., 2, 3, 4.

Mr. Neuroth

152. Pharmacy
This course includes emulsions, ointment, suppositories, and powder type of pharmaceuticals official in the United States Pharmacopoeia and National Formulary. Prerequisite: Pharmacy 101, Chemistry 101, 102 and 103. Lectures and recitations, M. W. F., 3, 36 hours; laboratory, T. Th., 2, 3 and 4, 72 hours.

Mr. Neuroth
153. Pharmacy
This course includes a study of pharmaceutical preparations made by extraction: tinctures, fluid-extracts, extracts, resins, and oleoresins. Prerequisite: Pharmacy 101, 151, and 152; Chemistry 101, 102, and 103; Pharmacognosy 151 and 152. Lectures and recitations, M. W. F., 3; laboratory, T. Th., 2, 3, and 4, 72 hours.

Mr. Neuroth

203. Pharmacy
A course in drug store business methods. Attention is given to arrangement of fixtures and stock, sources of supplies, distribution to the physician, dentist, veterinarian, the public, hospitals, and to other phases of business essential to successful drug store management. Lectures and recitations, M. W. F., 5, 36 hours.

Mr. Neuroth

204. Pharmacy
Students are required to manufacture official preparations and other pharmaceuticals to be used in the health service dispensary. Attention is given to commercial manufacturing problems. Students who have proved themselves capable will be permitted to compound prescriptions written by the University physician under the direction of a registered pharmacist. Prerequisite: Pharmacy 101, 151, 152, and 153. Lectures, 12 hours; laboratory, 72 hours.

Mr. Neuroth

205. Pharmacy
Manufacture of pharmaceuticals on a commercial basis. Lectures 12 hours, and laboratory, 72 hours.

Mr. Neuroth

206. Pharmacy
This course is a continuation of Pharmacy 205. The student is required to visit the laboratory of at least one reputable pharmaceutical manufacturer and to write a thesis. The subject of the thesis and the manufacturer to be visited must be approved by the student's faculty adviser and the Dean.

Mr. Neuroth

251. Dispensing Pharmacy

252. Dispensing Pharmacy

253. Dispensing Pharmacy
Prescriptions, compounding of prescriptions and recipes, incompatibilities, and dispensing are the subjects of this course. Lectures and laboratory, M. W. F., 2, 3, 72 hours. Prerequisite: Pharmacognosy 151, 152. Chemistry 103 or 103a, Pharmacy 151, 152, 153.

Mr. Raabe

254. Pharmacy
A course in the federal, state and local acts, laws and regulations governing the practice of Pharmacy and the sale of potent and habit forming drugs. Lectures and recitations, M. W. F., 5, 36 hours.

Mr. Neuroth

261. Pharmacy

262. Pharmacy
Courses in the new and non-official remedies which have been accepted by the Council on Chemistry and Pharmacy of the American Medical Association as well as the newer medicinals and preparations of the leading manufacturers which have not been accepted by the Council. Lectures and recitations, M. W. F., 4, 36 hours.

Mr. Raabe
275. **Pharmacy Problems**
Minor investigations for qualified students. Credit and fee depend on nature of work done.

**Staff**

299. **Pharmacy**

**Mr. Raabe**

**Physics**
It is impossible to comprehend many of the changes which occur in the manufacture of pharmaceutical preparations without having a knowledge of the fundamentals of the science of physics. Many of the fundamentals of this science are presented in the courses in chemistry, pharmacognosy, and pharmacy. However, the student who expects to do more comprehensive work in the sciences should arrange his schedule so as to include one year of college physics.

Physics 109, 110, and 111 are recommended as a pre-medical science. Electives in physics are subject to the recommendation of the student adviser and approval of the Dean.

109. **General Physics**

**Fall, 3 Hours**

110. **General Physics**

**Winter, 3 Hours**

111. **General Physics**
Open to freshmen. Prerequisite: One year each of algebra and geometry. M.W.F., 4.

109a. **General Physics**

2 Hours

110a. **General Physics**

2 Hours

111a. **General Physics**
Laboratory to precede or accompany 109, 110, 111. T.Th., two 2-hour periods. Any quarter. A year of work in college physics. Open to freshmen. Prerequisite: One year of high school algebra and plane geometry. Two 2-hour periods on T. or Th. at 5, 6 or 7, 8.

**Mr. Berger**

214. **Mathematics of Physics**
A course dealing with the application of mathematics to physics and related sciences. Prerequisite: Physics 111 and Calculus. Daily, 1.

**Mr. Berger**

220. **Modern Physics**
A lecture and quiz course involving fundamental questions on the nature of things, such as atomic structure, electron theory, quantum theory, and the theory of relativity. Prerequisites: General Chemistry and General Physics. M.W.F., 1.

**Mr. Berger**
WARREN G. HARDING
COLLEGE OF LAW

Claude Westcoat Pettit
Dean
History

The College of Law was organized as a department of the University in 1885, and has been in continuous operation since that date. It numbers among its alumni and former students many of the most prominent lawyers in Ohio and other states. Its graduates have been successful beyond the average as candidates for admission to the Bar at the State Bar Examinations, and as practitioners afterwards.

Affiliations

The College of Law was approved by the American Bar Association on January 10, 1939, subject to reinspection within two years. The College also holds membership in the League of Ohio Law Schools.

Purpose

The aim of its founders, continued through the ensuing years, was to afford an opportunity for students, both men and women, of limited means, to obtain a collegiate training in law, and by connection with the University to offer them the added opportunity for the general preliminary education indispensable to its successful study and practice. Tuition rates, therefore, are low and reasonable. The courses are planned primarily to train students for the practice of law, but they may also be pursued advantageously by anyone desiring to acquire a knowledge of the principles and history of law, either as part of a liberal education, or as part of the foundation for a business career.

Courses are offered in all subjects included in the Ohio bar examination, as well as various electives.

In training students for the practice of law, the College of Law has four chief aims:

1. To inculcate a systematic and complete grounding in the history and fundamental principles of law, and a readiness and accuracy in the application of these principles to the complicated relations, rights, and duties arising in modern society.

2. To impart a thorough and ready working knowledge of the common law and of statute law (including the more important statutes and decided cases of Ohio), to the end that the young lawyer may be prepared to serve his clients efficiently.

3. To show the place, importance, and aims of the law in society.

4. To inculcate the principles of legal ethics and of the lawyer's pub-
lic responsibility, so that the young lawyer may be prepared to take his place as a trusted leader, counselor, and guide in his community.

Schools Represented

An ever increasing proportion of our law students have secured their pre-legal education at colleges and universities other than Ohio Northern University. Many of these are coming with the bachelor's degree or its equivalent. Among the colleges and universities contributing to the pre-legal education of our students in the past are the following: Alfred Holbrook, Ashland College, Baldwin-Wallace, Bowling Green, Colgate, Defiance, Denison University, Depauw, Duquesne University, De Sales College, Fenn College, Geneva, Heidelberg, Hiram, John Carroll University, Kenyon, Marshall College, Miami, Mt. Union, Muskingum College, Ohio University, Ohio State University, Ohio Wesleyan University, Pittsburgh, Purdue, Rio Grande, Swarthmore, Toledo University, University of Cincinnati, University of Dayton, University of Kentucky, University of Michigan, University of Southern California, University of West Virginia, University of Wisconsin, Vincennes University, Virginia Military Institute, George Washington University, Washington and Lee University, Western Reserve University, Western State Teachers College, Wooster, and Youngstown College.

Building and Equipment

The College of Law is located in a handsome two story building, built of ornamental brick in the classical style, erected in the year 1923. This building was especially designed to meet the requirements of the College of Law, and contains the classrooms, professorial offices, court room, library, and reading rooms.

Library

The law library is up-to-date, modern, and well selected. It contains the reports of the courts of last resort of the States, the United States Supreme Court Reports, the Federal Reports, the Reporter System, a complete set of English reports, the more important series of special reports and selected cases, a collection of the latest editions of standard text books, leading legal periodicals, digests, the leading encyclopedias of law, and other works of reference. The library is accessible each week day, the students being allowed free access to the books.

The material included in the library complies with law library requirements of the American Bar Association.
Methods of Instruction

Instruction is based upon the case-book method. To the cases found in the case-book are added selected cases from Ohio and other jurisdictions. The lecture hour includes a thorough questioning of the students upon the cases studied and informal discussions by instructors and students upon the underlying and distinguishing principles illustrated by the cases.

Practice Court

There is a court room in the law building, completely and correctly furnished and equipped for modern court proceedings. Practice Court, under the direct supervision of the faculty, forms a regular part of the work in which each student must participate. Students are required to prepare all the papers necessary in the case, and to follow the customary order of procedure. Pleadings, writs, motions, and journal entries are thus prepared; juries impaneled, witnesses examined and cross-examined, arguments made to Court and jury, and in short, every step is taken in the moot case conforming to the procedure followed in a litigated action in a court of record; in a similar way, the Court requires practice in the Appellate courts, giving practical acquaintance with the proceedings and preparation of the necessary papers, in instituting and carrying on to completion cases appealed or brought up for review.

Admission

Students entitled to admission may enter the College of Law at the beginning of the first or second quarter; but to receive the fullest benefit of the regular law course, students who are entering as candidates for a degree are urged to enter in September, the beginning of the academic year.

Candidates of good moral character may apply for admission upon the following plans:

1. Certificate. To enter the first year of law the requirements are (1) graduation from a first grade high school and (2) two full years of collegiate study (60 semester hours or 90 quarter hours exclusive of physical education and military training) in an approved college of liberal arts in accordance with the rules of that institution. It is further required that the scholarship average of the applicant must not be below the graduating average of the institution from which he comes.

A student desiring to enroll in the College of Law should cause to be sent to the University Entrance Examiner at least ten days prior to the be-
ginning of the quarter, his transcript of collegiate work in duplicate. These papers must be on file, both for admission to the College of Law and for registration as a law student upon the rolls of the Supreme Court. In no case can a deficiency in pre-law study be made up concurrently with the work of the College of Law.

Students beginning the study of law will not be admitted to the work of the Spring quarter.

The entering class is limited to 40.

2. ADVANCED STANDING. Advance credit is given for not more than two years of law study in residence at any reputable law school in the United States maintaining a three-year full-time course.

3. SPECIAL STUDENT. Persons who are not candidates for a degree and who have sufficient education and experience to study law with profit may enter the College of Law as special students with the approval of the Dean, even though they cannot meet the entrance requirements for a degree. Anyone desiring to enter as a special student or to secure fuller information in regard to preliminary education should write to the University Entrance Examiner or the Dean of the College of Law. Such special students will not be eligible for the bar examination in Ohio and many other states.

PRE-LAW AND ARTS-LAW COURSES

The College of Liberal Arts offers favorable opportunities to the student in preparing for the study of law.

The Pre-Law course offered not only meets the requirements set by the Supreme Court of the State of Ohio as to the preliminary education that every student must have before beginning the study of law, but is especially planned to help the student to prepare properly for such an undertaking.

The Arts-Law course is designed for the student who desires the degree of Bachelor of Arts and the degree of Bachelor of Laws. By taking this course, which extends over a period of six years, the student not only meets the requirements set by the Supreme Court of the State of Ohio but in addition thereto is entitled to receive the degrees indicated.

For further information about these courses, the student is referred to the Liberal Arts section of the catalogue.

GRADUATION

The degree of Bachelor of Laws is conferred on students who have completed satisfactorily a total of one hundred twenty-five quarter hours including all the prescribed courses, or who have received credit therefor in
accordance with the section entitled Advanced Standing, and who have studied in residence at this College for at least three quarters immediately preceding graduation, and who have at last one quality point average for every credit hour.

**General Regulations**

1. Students may select from the courses offered such work as they desire, with the approval of the Dean, not to exceed a maximum of 16 credit hours per quarter. Special students may not become candidates for a degree.

2. Hours above 16 are considered as excess and are subject to special tuition rates. Only in exceptional cases are regular students allowed excess hours.

3. In the section of the general catalogue dealing with Administration are found rules and regulations pertaining to chapel and class attendance, registration, and preregistration, government, withdrawing courses, warning and probation, eligibility for extra-curricular activities, examinations, grade marks, and quality points.

4. Expenses, tuition fees, living costs, and housing are likewise described in an earlier section of this catalogue.

5. The Board of Trustees and Faculty of the University reserve the right to make such changes as they deem necessary without published notice.

**Classification**

The minimum requirements for junior standing are 38 credit hours and a point average of 0.9; for senior standing, 80 credit hours and a point average of 0.9.

**Other Advantages**

There are musical, debating, and dramatic societies and other organizations on the campus to which any student in the College of Law is eligible.

**Summer School**

The College of Law offers several courses during the summer School. The subjects are taught by regular instructors who are in residence. Summer courses are of particular interest to those who may desire to
complete the work required for a degree in nine consecutive quarters. For information write to the Dean, College of Law.

**College of Law Curriculum**

The work of the first year is all required. Second and third year courses are all required except those separately designated as electives which are open to both second and third year students subject to the provision that a student may not elect to exceed fifteen hours in any quarter in which elective courses are open to him, unless approved by the Dean.

**First Year**

**Fall Quarter**
- Common Law Pleading 3
- Contracts I 4
- Legal Bibliography 1
- Personal Property 3
- Torts I 4

**Winter Quarter**
- Contracts II 1
- Domestic Relations 4
- Real Property I 3
- Torts II 4

**Spring Quarter**
- Agency 5
- Criminal Law 3
- Real Property II 4

**Second Year**

**Fall Quarter**
- Equity I 4
- Evidence I 3
- Partnership 3
- Private Corporations 5

**Winter Quarter**
- Equity II 4
- Evidence II 3
- Suretyship 3
- Wills 4

**Spring Quarter**
- Negotiable Instruments 5
- Electives 10

**Third Year**

**Fall Quarter**
- Code Pleading 5
- Conflict of Laws 5
- Constitutional Law I 3
- Legal Ethics 2
- Constitutional Law II 5
- Taxation 3
- Trial and Appellate Practice I 3

**Winter Quarter**
- Constitutional Law II 3
- Taxation 3
- Trial and Appellate Practice I 3
- Trusts I 3

**Spring Quarter**
- Municipal Corporations 4
- Trial and Appellate Practice II 2
- Trial Practice 3
- Trusts II 3
- Electives 5
COURSES OF INSTRUCTION
FIRST YEAR
(All Courses are Required)

AGENCY
The nature and purposes of the agency relation, parties, methods of creating the relationship, the nature and extent of the authority, the duties and liabilities of the principal to the agent and third persons; also a consideration of workman’s compensation legislation and other phases of the subject of master and servant. Case book to be announced.

SPRING, 5 Hours

Mr. Owen

COMMON LAW PLEADING
This course embraces a discussion of the nature and purposes of pleading, emphasizing the connection between pleading and the history and development of the Common Law. Keigwin, Cases on Common Law Pleading.

FALL, 3 Hours

Mr. Pettit

CONTRACTS I

CONTRACTS II
Fundamental courses dealing with the nature of a contract; the capacity of the parties, offer and acceptance; consideration; requisites of contracts under seal; the performance of contracts, including conditions and impossibility of performance; the discharge of contracts; rights of beneficiaries, joint and several contracts; assignment of contracts; illegal contracts and the statute of frauds. Costigan, Cases on Contracts (4th Edition)

FALL, 4 Hours

Mr. Smith

CRIMINAL LAW AND PROCEDURE
This course treats of the theories of crime and of punishment; the criminal act and mental element in crime; specific offenses at common law and as developed by statutes; appropriate defenses in relation to the specific crimes; parties. Harno, Cases and Materials on Criminal Law and Procedure (2nd Edition).

SPRING, 5 Hours

Mr. Smith

DOMESTIC RELATIONS
This course includes the law of marriage and divorce, parent and child, the rights and liabilities of husband and wife, the rights and liabilities of infants, including a study of statutory material. Jacobs, Cases on Domestic Relations (2nd Edition).

WINTER, 3 Hours

Mr. Owen

LEGAL BIBLIOGRAPHY
This course is required, but no credit is given for it toward graduation. The purpose is to give the student training in the use of law books and in finding the law. The course must be completed to the satisfaction of the instructor. Law Books and Their Use (6th Edition).

FALL, 1 Hour

Mr. Owen

PERSONAL PROPERTY
This course deals with the distinctions between real and personal property; of the title to personal property and its transfer by agreement and by operation of law; its use and liabilities arising therefrom. Bigelow, Cases on Personal Property (2nd Edition).

FALL, 3 Hours

Mr. Pettit
REAL PROPERTY I
This course treats of the historical origin of land law, tenure, seisin, the differentiation of estates in land, rights in air, water, easement, covenants running with land, licenses, rents, waste and public rights. Biglow, Rights in Land (2nd Edition).

Mr. Pettit

REAL PROPERTY II

Mr. Pettit

TORTS I

TORTS II
Personal rights and duties, both absolute and those arising from social relations; violations of such rights, either by direct or indirectly by fraud, negligence; different kinds and classes of torts; defenses, excuse, justification, and other defenses by way of confession and avoidance; self defense, contributory negligence, its scope and limitations by modern Employer's Liability statutes; pleading, evidence and measure of damages. Bohlen and Harper, Cases on Torts.

Mr. Phelps

SECOND YEAR

EQUITY I

EQUITY II
These courses involve consideration of the rise of the court of equity; the powers of such court; principles governing the exercise of equitable jurisdiction, including injunctions, and specific reparation of tort, and specific performance, reformation and rescission of contracts, and equitable remedies. Cook, Cases on Equity (2nd Edition).

Mr. Owen

EVIDENCE I

EVIDENCE II
Competency of witnesses at common law and under modern statutes; burden of proof, prima facie cases and presumptions of law; the best evidence rule, hear-say rule and exceptions, parol evidence rule and exceptions. Morgan and Maguire, Cases on Evidence (1937).

Mr. Phelps

NEGOTIABLE INSTRUMENTS
This course involves the consideration of the general principles governing bills of exchange, promissory notes and checks, and the uniform negotiable instruments law. Britton, Cases on Bills and Notes (2nd Edition).

Mr. Phelps

PARTNERSHIP
The law governing partnership ventures, including their formation; individual and firm liability to creditors, marshalling of assets in equity and priorities as between individual and firm creditors. Clark and Douglas, Cases on Partnership.

Mr. Smith
PRIVATE CORPORATIONS
This course treats of the characteristics of private corporations, including their formation, powers, rights, and liabilities, the rights and liability of stockholders, and of officers and directors, and the rights of creditors against the corporation and its officers. Richards, Cases on Private Corporations (3rd Edition).

Mr. Owen

SURETYSHIP
This course includes the creation of the relationship, the contract, the statute of frauds, the rights and remedies, the defenses, guaranty contracts, and letters of credit, private and corporate sureties, and incidentally a consideration of the different kinds of bonds. Arant, Cases on Suretyship.

Mr. Smith

WILLS AND ADMINISTRATION OF ESTATES
This course treats of the nature of testamentary dispositions. Mechem and Atkinson, Cases on Wills and Administration (2nd Edition).

Mr. Pettit

THIRD YEAR

CODE PLEADING
This course deals with the problems of parties, joinder and splitting of causes of action, the petition, answer, reply, the demurrer, amended and supplemental pleadings, and various motions arising under code provisions of various states. Throckmorton, Cases on Code Pleading (2nd Edition).

Mr. Phelps

CONFLICT OF LAWS
This course treats of the principles of private international law; jurisdiction of courts; the law governing torts, contracts, divorce, transfers of property by deed, will and intestate succession; penal statutes; marriage, adoption, domicile; foreign judgments and such procedural matters as statutes of frauds and of limitations. Lorenzen, Cases and Materials on Conflict of Laws (4th Edition).

Mr. Pettit

CONSTITUTIONAL LAW I

CONSTITUTIONAL LAW II
Courses include the interpretation of the constitutional limitations for the protection of life, liberty and property, police power, taxation, eminent domain, obligation of contracts; and a consideration of the law of the American Federal system, with special reference to inter-state commerce, the powers of Congress and the jurisdiction of the federal courts. Dodd, Cases on Constitutional Law (2nd Edition).

Mr. Smith

LEGAL ETHICS
This course treats of the rules of conduct governing the lawyer in the practice of his profession. Case book to be announced.

Mr. Smith

MUNICIPAL CORPORATIONS
This course treats of the general nature and rights and liabilities of public corporations, (cities, villages, counties, and townships.) Case book to be announced.

Mr. Smith
TAXATION
This course treats of the various kinds of taxes, including property taxes, income taxes, inheritance taxes, franchise and excise taxes; with particular attention to constitutional limitations upon state and federal taxation. Consideration will also be given to the collection of taxes and the taxpayers remedies against the unlawful collection of taxes. Rattschaeffer, Cases on Taxation (2nd Edition).

Mr. Owen

TRIAL AND APPELLATE PRACTICE I

TRIAL AND APPELLATE PRACTICE II
Principles controlling the trial practice of civil actions; laying a foundation for review; methods and problems of procedure of review and disposition upon review. Hunter, Cases and Material on Ohio Trial Practice.

Mr. Phelps

TRIAL PRACTICE
The actual litigation of legal controversies, including the use of witnesses and a jury; the preparation of pleadings and briefs; the presentation of oral arguments. The judge of each case is a visiting member of the Ohio Bench or Bar.

Mr. Phelps

TRUSTS I

TRUSTS II
These courses treat of the origin and development in courts of equity of the law of trusts and trustees. Scott's Cases on Trusts (2nd Edition).

Mr. Pettit

ELECTIVE COURSES

ADMINISTRATIVE LAW
This course deals with the powers and procedure of administrative agencies in this country. It includes a consideration of the nature of the power vested in administrative bodies, distinction between legislative, judicial and executive powers; conclusiveness of administrative determinations, the requirement of due process, and the extent of judicial control over administrative action. Sears, Cases on Administrative Law.

Mr. Phelps

BANKRUPTCY
Procedure and practice in bankruptcy. Case book to be announced.

Mr. Jackson

* DAMAGES
In this course the rules governing the measure of damages in actions of contracts and tort are considered. McCormick, Cases and Materials on Damages.

Mr. Phelps

FUTURE INTERESTS
A study of future interests, vested and contingent, in real property. Leach, Cases on Future Interests.

Mr. Pettit

* Not given in 1940-1941
*Insurance*
This course includes the nature and requisites of the contract, parties, insurable interest, premiums, representations and warranties, agents and their powers, waiver, and estoppel, rights under the policy, a study of the standard fire policies, life insurance, marine and accident. Case book to be announced.

Mr. Owen

*Mortgages*
The various theories of the mortgage including the historical evolution thereof in equity; recording statutes, and other problems in connection with the law of mortgages. Case book to be announced.

Mr. Pettit

*Public Service Corporations*
This course treats of the history and development of the law regulating public utilities. Robinson, Cases on Public Utilities.

Mr. Phelps

Sales
The topics included in this course are formation of the contract, the statute of frauds, the passing of the property, fraud and retention of possession, illegality, condition and warranties, performance, rights of the seller and the buyer in case of breach. Woodward, Cases on Sales (3rd Edition).

Mr. Smith

*Not given in 1940-1941*
PRIZES ANNOUNCED ON UNIVERSITY RECOGNITION DAY
MAY 9, 1939

GENERAL PRIZES TO SENIORS

University Prize - - - - - Gertrude McBride
Walter F. Rittman Prize - - - - - Paul Adam
Hamilton E. Hoge Prize - - - - - Clyde C. Warren, 1938
Arthur D. Tudor Prize - - - - - Aloysius A. Caulfield
Charles R. Wilson Prize - - - - - Elmer Rebol
* - - - - - Joseph Mallone
* - - - - - Kathryn Schneider

Lefn and Fink Gold Medal - - - - - Elmer Rebol

DEPARTMENTAL HONORS

College of Liberal Arts

Biology - - - - - Martha Pounds
Chemistry - - - - - Richard Tomlinson
Economics and Business Administration - - - - - Richard Kahler
Elementary Education - - - - - Pauline Neumann
English Language and Literature - - - - - Gertrude McBride
Health and Physical Education - - - - - Norma Gray
History - - - - - Laurence Woodworth
Political Science - - - - - Alfred Treherne
Music - - - - - Kathryn Schneider
Modern Foreign Languages - - - - - Geraldine Disbrow

College of Engineering

Chemical Engineering - - - - - Charles Nagy
Civil Engineering - - - - - Vinton Brame
Electrical Engineering - - - - - Herbert Augsberger
Mechanical Engineering - - - - - Paul Adam

College of Pharmacy

Materia Medica - - - - - Mary Alice Altland
Pharmaceutical Chemistry - - - - - Elmer Rebol
Pharmacy - - - - - Elmer Rebol
Kappa Psi Freshman Prize - - - - - Jack Arthur Pritchard

* Name of donor withheld by request.
HONORARY DEGREES

1939

John W. Bricker - Doctor of Laws
Homer Ross Dunathan - Doctor of Pedagogy
Donald Timerman - Doctor of Divinity
Lily Bess Campbell - Doctor of Literature
James Joseph Pilliod - Doctor of Engineering

GRADUATES IN THE COLLEGE OF LIBERAL ARTS

Class of 1939

Bachelor of Arts

William T. Augur
Nellie Mae Balyeat
*Mrs. J. K. Bannister
Morris Siegelman Berke
Ludwell Leland Binkley
Floretta Fae Burr
Harold E. Cadwallader
John W. Chrispin, Jr.
*Martha Ellen Condon
Paul E. Creps
Stephen Francis Delrosso
Lucy M. Diesenhacher
Jack Miller Enterline

Catherine H. Fly
Robert Irwin Goble
Norma Gray
Carey-bob Hindall
*Richard P. Kahler
Le Roy Keel
William Henry Kiser
Gerald Thomas Leatherman
**Gertrude McBride
Walter Meredith Miley
John Howard Mills
Margaret Evelyn Minick
Mary Margaret Mohr

†Elzathan Paul Morehouse
Dorothy Jane Mumaugh
Edith Irene Rhoden
Thomas B. Runyan
Myron W. Shilling
Margaret A. Sleeman
**J. Richard Tomlinsona
†Ralph Carl Tucker
*Helen Turner
†Dwight F. Woodworth
Frederick G. Wuliger

Bachelor of Science in Education

†Edith M. Alspach
†Thomas Corwin Bailey
John William Banya
Mildred Catherine Becker
†Harold E. Bixel
†Lowell A. Bowers
Thomas L. Cremean
†Richard Raymoth Copeland
†Ronald A. Downing
John Henry Ehlen
†Homer Fields
†Theophilus A. Giessler
Esther Lois George
†Harry Alton Gross
†Jane Marie Greene
†Edna M. Hartle
Marie Hover

†Mrs. Mary R. Howard
William A. Howison
†Dorothy L. Huffman
Clara Mae Irvin
Harry Joseph Kane
†Lenore Kidd
Sarahbel Klingler
†Carol Wilma Lemon
†Cargil Lewis
Kenneth Lusk
Doris Elizabeth McClellan
Joseph Philip Malone
Harvey E. Orwick
†Walter Kenneth Pennisten
Mary Elizabeth Peters
William Norman Pigozzi
Mary Catherine Pounds

Larry James Rendin
Charles Salvo
Kathryn L. Schneider
Robert G. Sheidler
†Ethel Gish Skilten
†Bess V. Stover
†Marion Delbert Taylor
Richard Taylor
Herbert Trattner
†Hope L. Varner
†Helen C. Wagner
Chloie Warner
Alexander Webb
†Charles M. Wilson
Robert E. Wilson
Nelle M. Yoh

Two-Year Elementary Education

Ruby Burns
†Welcome O. Burns
†Lloyd Chalfin
†Mae Ruth Dilts
Susan M. Gilbert
Mary Rose Greulach
†K. Louise Hefner

Luella Hellen Krueger
Lola Jane Hunt
†Phyllis Marie Lee
†Vivian Baldwin Marling
Pauline Marie Neumann
Frances Evelyn Newhouse
Dorothy Lucille Page

Betty Lorena Place
†Hazel R. Schott
†Mollie E. Stanfield
†Ruth V. Weible
Dorothy Louise White
GRADUATES IN THE COLLEGE OF ENGINEERING

Bachelor of Science in Chemical Engineering
W. Lawrence Campbell  Herbert W. Sloan

Bachelor of Science in Civil Engineering
Willis Vinton Brame  Everett Huston Forney  Francis J. Fudge

Bachelor of Science in Electrical Engineering
Herbert M. Augsburger  Paul F. Freund  Clare A. Stump

Bachelor of Science in Mechanical Engineering
*Paul William Adam  Robert A. Reich, Jr.  Louis Paul Vickio
Daniel Roof Casselman  Earl Isaac Salo  Edward Florriane Youngman
Donald W. Hale  Wilbur R. Shannon

GRADUATES IN THE COLLEGE OF LAW

Bachelor of Laws
Hubert Anthony Beery  Harry Leo Hendy  Jack Levine
Oliver K. Bender  †John Corey Hess  Homer Klee Miller
Rodney Robinson Blake  Ronald A. Johnston  Willard Wayne Openlander
Anthony J. Bowers  †Wilbur D. Jones  †Charlton L. Pierce
A. A. Caulfield  Francis James Kopincenski  Charles C. Redmond
Charles B. Dollison  †Joseph Emerson Lady  Hyman Stern

GRADUATES IN THE COLLEGE OF PHARMACY

Bachelor of Science in Pharmacy
*Mary Alice Altland  Ray S. Kujawski  William Rae
Willis W. Bair  Mary Alpharetta McNeal  **Elmer W. Rebol
John Robert Bishop  †Warren Edward Martens  Leo Schmittke
Oliver W. Derr  William Morris Morgan  †Alvin D. Warren
Ben P. Federman  Frank Mounier, Jr.  Morton Wolman
Albert W. Kipp  Elsie Ortiz Gonzalez
Helen Elizabeth Koogler  Barton Richard Perriella

** With High Distinction

* With Distinction  † Work completed in Summer Session

SUMMARY OF THE CLASS OF 1939

<table>
<thead>
<tr>
<th>Degree</th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Arts</td>
<td>23</td>
<td>14</td>
<td>37</td>
</tr>
<tr>
<td>Bachelor of Science in Education</td>
<td>27</td>
<td>23</td>
<td>50</td>
</tr>
<tr>
<td>Bachelor of Science in Chemical Engineering</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Bachelor of Science in Civil Engineering</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Bachelor of Science in Electrical Engineering</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Bachelor of Science in Mechanical Engineering</td>
<td>8</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Bachelor of Laws</td>
<td>17</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>Bachelor of Science in Pharmacy</td>
<td>15</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>Graduates in Elementary Education</td>
<td>2</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td>** Totals</td>
<td>101</td>
<td>58</td>
<td>159</td>
</tr>
<tr>
<td>Name</td>
<td>City</td>
<td>State</td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------------</td>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td>Amiet, Arthur</td>
<td>Canton</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Andrews, Martin D., Jr.</td>
<td>Elmira, N.Y.</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Ansley, Nancy Ann</td>
<td>Russysylvania</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Arbough, David R.</td>
<td>Mansfield</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Bailey, Norma Jean</td>
<td>Fredericktown</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Baker, Travers</td>
<td>Ada</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Barton, James Curtis</td>
<td>Geneva</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Auer, Lieudell</td>
<td>Sidney</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Berkshire, Robert</td>
<td>Springfield</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Billing, Gerald</td>
<td>Anna</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Binkley, Robert</td>
<td>Ada</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Bischoff, Martha</td>
<td>Ada</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Bloom, Nelson</td>
<td>Montpelier</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Blue, Alma</td>
<td>Detroit, Mich.</td>
<td>Michigan</td>
<td></td>
</tr>
<tr>
<td>Bozarth, Doris</td>
<td>Alger</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Branstetter, Robert</td>
<td>McGuffey</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Bray, Junior</td>
<td>Empire</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Brewer, Charles Donald</td>
<td>Rossburg</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Brickman, Richard F.</td>
<td>McComb</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Brown, Robert Lewis</td>
<td>Bucyrus</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Bruezese, Joseph J.</td>
<td>Steubenville</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Casamento, Theodore</td>
<td>Jamestown, N.Y.</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Casper, Mabel Jane</td>
<td>Dola</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Clark, Ione Marie</td>
<td>Metamora</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Clinger, Maurice</td>
<td>Upper Sandusky</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Cloore, Catharine</td>
<td>Lima</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Coffing, William Todd</td>
<td>Piqua</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Connors, Robert</td>
<td>Schenectady, N.Y.</td>
<td>New York</td>
<td></td>
</tr>
<tr>
<td>Cowan, Robert Lee</td>
<td>Willsboro</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Crall, Wilma Dora</td>
<td>Bucyrus</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Closser, Bina-May</td>
<td>Ada</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Culbert, Robert</td>
<td>Fremont</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Davies, William Harvey</td>
<td>Moscow, Pa.</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>DeCrow, Joseph C.</td>
<td>Johnstown</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Dille, Cyrus</td>
<td>Kenton</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Dilts, Madge</td>
<td>Ada</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Doenges, Kenneth Carson</td>
<td>Montpelier</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Donnenwirth, William</td>
<td>Bucyrus</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Dray, Quincy</td>
<td>Harrod</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Durrell, Don Bliss</td>
<td>Toledo</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Ecker, Milton A.</td>
<td>Newburgh, N.Y.</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Edwards, Robert Earl</td>
<td>Toledo</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Elder, Robert Fenton</td>
<td>Ada</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Elder, Tyson J.</td>
<td>Wapakoneta</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Eley, Robert Martel</td>
<td>Ada</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Fair, Robert J.</td>
<td>Marion</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Fiedler, William Fred</td>
<td>Ada</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Folsom, Clay</td>
<td>Youngstown</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Foltz, John W.</td>
<td>Lima</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Foos, Birdell</td>
<td>Marion</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Forsythe, Thurman</td>
<td>Zanesville</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Fox, Carl A.</td>
<td>Plymouth</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Fryer, Melville S.</td>
<td>Spencerville</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Gast, George R.</td>
<td>Jackson</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Gast, Virginia</td>
<td>Lima</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Gittelson, Natalie</td>
<td>Brooklyn, N.Y.</td>
<td>New York</td>
<td></td>
</tr>
<tr>
<td>Glass, George Kenneth</td>
<td>Byesville</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Graham, Ruth</td>
<td>Harrod</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Graybill, Doris</td>
<td>Massillon</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Greenblatt, Jack</td>
<td>Newburgh, N.Y.</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Hablitzel, Charles</td>
<td>Van Wert</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Hafer, Janet</td>
<td>Argo, Ill.</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Hall, Vance Clark</td>
<td>Cincinnati</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Hambleton, Virginia</td>
<td>Canton</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Hamilton, James H.</td>
<td>Springfield</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Hanna, Alexander</td>
<td>Brooklyn, N.Y.</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Hardesty, Frank J.</td>
<td>Toledo</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Heitzman, George E.</td>
<td>Cloverdale</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Helffenbein, Fred</td>
<td>East Cleveland</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Hodde, Winifred</td>
<td>Lima</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Hoffman, Albert R.</td>
<td>Bryan</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Horner, Avonelle</td>
<td>Cleveland</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Horner, Walter</td>
<td>West Unity</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Hosenfeld, Charles</td>
<td>Martins Ferry</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Hosselman, Helen</td>
<td>Lima</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Howe, Charlotte</td>
<td>Wellsboro, Pa.</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Hudson, Stanton</td>
<td>Syracuse, N.Y.</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Hummer, Norman</td>
<td>Ashtabula</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Huston, Rachel Mae</td>
<td>Alger</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Jenkins, Evelyn</td>
<td>Ada</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Johnson, Karl W.</td>
<td>East Orange</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Jordon, Lloyd W.</td>
<td>Niagara Falls, N.Y.</td>
<td>New York</td>
<td></td>
</tr>
<tr>
<td>Joseph, Edward F.</td>
<td>Youngstown</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Kane, Robert John</td>
<td>Rochester, N.Y.</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Kelker, David R.</td>
<td>Lima</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Kirchenbaum, Morton</td>
<td>Cleveland</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Krock, Earl R.</td>
<td>LaRue</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Lainoff, Leo</td>
<td>Brooklyn, N.Y.</td>
<td>New York</td>
<td></td>
</tr>
<tr>
<td>Lamale, William H.</td>
<td>Ada</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Lamson, Richard</td>
<td>Lima</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Lee, Phyllis</td>
<td>Lima</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Loney, Wellington R.</td>
<td>Jackson</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Lust, Kathrynn</td>
<td>McCutcheonville</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Lutz, Fern E.</td>
<td>Bucyrus</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>McDowell, Paul Robert</td>
<td>Warren</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>McElroy, Elaine</td>
<td>Ada</td>
<td>Ohio</td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>City</td>
<td>State</td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------------</td>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td>McGowan, William F.</td>
<td>Port Clinton</td>
<td></td>
<td></td>
</tr>
<tr>
<td>McGrew, Cornelius</td>
<td>Canal Fulton</td>
<td></td>
<td></td>
</tr>
<tr>
<td>McKibben, Gerald Earl</td>
<td>Continental</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mabee, Kenneth W.</td>
<td>Mansfield</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magee, Ray J.</td>
<td>Toledo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mallone, Bruno A.</td>
<td>Geneva</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marshall, Charles</td>
<td>Ada</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mayhew, Fred E.</td>
<td>Toronto</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medler, Lucille</td>
<td>Findlay</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meighan, Charles</td>
<td>Ada</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Messenger, Doris</td>
<td>Ada</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mikezell, Paul</td>
<td>New Paris</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moriarty, Robert E.</td>
<td>Lorain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morris, Ruth Evelyn</td>
<td>Van Wert</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Munding, Bernard</td>
<td>Rochester, N.Y.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nickerson, Richard E.</td>
<td>Poughkeepsie, N.Y.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obenour, Alice Louise</td>
<td>Dola</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oliver, David G.</td>
<td>Detroit, Mich.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oller, Randall E.</td>
<td>Steuben</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owsoki, John Thomas</td>
<td>Elmira, N.Y.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patterson, Herman A.</td>
<td>Bucyrus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pepple, Allen Patterson</td>
<td>Lima</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Person, June Lois</td>
<td>DuBois, Pa.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pierson, Tom Edward</td>
<td>Copley</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pratte, George</td>
<td>Ada</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pugh, Robert Holmes</td>
<td>Akron</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reifensnyder, Bettie</td>
<td>Gary, Ind.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Richardson, Gavlord W.</td>
<td>Paulding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rizzo, Thomas N.</td>
<td>Newburgh, N.Y.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roe, Edwin</td>
<td>Salesville</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rozak, Ray Richard</td>
<td>Cleveland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rutledge, John W.</td>
<td>Ada</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sambucihini, P. Robert</td>
<td>Jamestown, N.Y.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schmidt, Earl Raymond</td>
<td>New Carlisle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schmied, James William</td>
<td>Madison</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schoenberger, Loren C.</td>
<td>Upper Sandusky</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schrenck, Martha Jane</td>
<td>Kenton</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**College of Engineering**

<table>
<thead>
<tr>
<th>Name</th>
<th>City</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baum, John Franklin</td>
<td>Ada</td>
<td></td>
</tr>
<tr>
<td>Beatty, Lawrence</td>
<td>McKeesport, Pa.</td>
<td></td>
</tr>
<tr>
<td>Bischoff, Robert</td>
<td>Ada</td>
<td></td>
</tr>
<tr>
<td>Blue, Herbert</td>
<td>Detroit, Mich.</td>
<td></td>
</tr>
<tr>
<td>Brown, David Charles</td>
<td>East Cleveland</td>
<td></td>
</tr>
<tr>
<td>Brown, William A.</td>
<td>Canton</td>
<td></td>
</tr>
<tr>
<td>Browning, Charles</td>
<td>New Philadelphia</td>
<td></td>
</tr>
<tr>
<td>Coleman, Robert Ellsworth</td>
<td>Dayton</td>
<td></td>
</tr>
<tr>
<td>Conner, David William</td>
<td>Alger</td>
<td></td>
</tr>
<tr>
<td>Cremen, Warren</td>
<td>Lima</td>
<td></td>
</tr>
<tr>
<td>Davies, David John</td>
<td>Belleville</td>
<td></td>
</tr>
<tr>
<td>Dunn, John Elwood</td>
<td>Greenock, Pa.</td>
<td></td>
</tr>
<tr>
<td>Ehlen, Donald W.</td>
<td>Kenton</td>
<td></td>
</tr>
<tr>
<td>Eicher, James Morrell</td>
<td>McKeesport, Pa.</td>
<td></td>
</tr>
<tr>
<td>Ernest, Roland E.</td>
<td>Lima</td>
<td></td>
</tr>
<tr>
<td>Fielder, George Arthur</td>
<td>New Philadelphia</td>
<td></td>
</tr>
<tr>
<td>Filliez, Robert A.</td>
<td>Lima</td>
<td></td>
</tr>
<tr>
<td>Fyke, Frank</td>
<td>Elizabeth, N.J.</td>
<td></td>
</tr>
<tr>
<td>Gabriel, David S.</td>
<td>West Richfield</td>
<td></td>
</tr>
<tr>
<td>Godfrey, Jack Eugene</td>
<td>Lima</td>
<td></td>
</tr>
<tr>
<td>Grafe, John Henry</td>
<td>Harmony</td>
<td></td>
</tr>
<tr>
<td>Halstead, Gerald G.</td>
<td>Howell, N.Y.</td>
<td></td>
</tr>
<tr>
<td>Havir, Robert John</td>
<td>Forest</td>
<td></td>
</tr>
<tr>
<td>Heistand, Dale W.</td>
<td>Nevada</td>
<td></td>
</tr>
<tr>
<td>Hines, Victor</td>
<td>Jewett</td>
<td></td>
</tr>
<tr>
<td>Hopper, Standish</td>
<td>Springville, N.Y.</td>
<td></td>
</tr>
<tr>
<td>Huber, Paul</td>
<td>Defiance</td>
<td></td>
</tr>
<tr>
<td>Hughes, Ned Claire</td>
<td>Mansfield</td>
<td></td>
</tr>
<tr>
<td>Irey, Lawrence</td>
<td>Caledonia</td>
<td></td>
</tr>
<tr>
<td>Keller, Joel H.</td>
<td>Lakewood</td>
<td></td>
</tr>
<tr>
<td>Lebold, Homer W.</td>
<td>Bolivar</td>
<td></td>
</tr>
<tr>
<td>Lemley, Charles D.</td>
<td>Pandora</td>
<td></td>
</tr>
</tbody>
</table>
Lindstrom, Ralph..................Ashtabula
McCutcheon, Robert J................Marion
Messenger, Paul....................Nevada
Miller, James E....................Flint
Moon, Harry Albert................Pittsbrun, Pa.
Neitheiser, William................Lima
Norman, Hugh.......................Akron
Noffke, Clifton C...................Huron
Opfer, Philip, Jr...................Berlin Hts.
Padden, Richard M...................Martins Ferry
Park, Herbert Milton.................Youngstown
Petach, Julius......................McKeesport, Pa.
Pletcher, Donald...................Lima
Roe, Charles M.....................Elwood City, Pa.
Reagan, Delmar J...................Lima
Ringlein, Robert...................Lima
Ringwood, Arthur..................Poughkeepsie, N. Y.
Rogers, Otis C......................Huntsville
Rogers, Robert C...................Cadiz
Ryavec, Fred.......................Cleveland
Steiner, Paul Ray...................Cleveland
Sunday, Virgil R...................Pettisville
Taggart, Charles...................Cleveland
Thacker, Georges...................Fostoria
Vincette, Cletus...................Lima
Weaver, Walter E....................Lima
Wilson, Robert O...................Youngstown

**College of Pharmacy**

Armstrong, James W..................Toledo
Barr, David B.......................Dover
Bowers, Jane.........................Van Wert
Burley Robert W.....................Zanesville
Burt, Charles Roby...............Akron
Capps, Robert T.....................Ashtabula
Cherry, Arthur W...................Kent
De Crow, Reaves W................Columbus
Dremer, Isadore.....................Cleveland
Fink, Charles Norman..............Frederickstown
Harris, Betty Lou...................Malta
Hart, Edwin Charles.................Malvern
Jones, Ernest W.....................Mansfield
Kasofsky, Hyman...................Cleveland
Kennedy, Rachel R..................Marysville
Klein, Carl Edward................Warren
Kreischer, Robert C................Dover
Margolis, Jack......................Cleveland
Opatrny, Albert J................Cleveland
Orndorff, John R..................Delta
Parker, Martha.....................Ashtabula
Patrick, Donald...................Youngstown
Pritchard, Jack...................Painesville
Pugh, Arthur.......................Lakewood
Resnick, Harold...................Cleveland Hts.
Rice, Clyde.........................Tiltonville
Runyan, Ruth.......................Martins Ferry
Singer, Sam.........................Cleveland
Skelly, John.........................Lima
Smith, William H..................Bucyrus
Spangler, Bud.......................New Brighton
Stower, Jack.......................Tiffin
Weimer, Paul.......................Millersburg
Wenner, Harold....................Carey
Zarinsky, Jack......................Cleveland
Zimmerman, Lawrence..............Youngstown

**SOPHOMORES**

**College of Liberal Arts**

Akin, Ross.........................Marion
Alaimo, Anthony....................Jamestown, N. Y.
Alford, Bettie......................Springville, N. Y.
Amoroso, Joseph...................Newburg, N. Y.
Antoszewski, Eugene.................Cleveland
Arbogast, Betty Lee................Ada
Arnold, Ruth Eleanor..............West Unity
Auten, Phyllis.....................Rawson
Banks, Joseph......................Sugar Creek
Bentley, Anna Frances..............Ada
Bianco, Dominick..................Steubenville
Birnbaum, Jack H..................Cleveland
Booher, Esther.....................Middletown
Bozarth, John P....................Alger
Bresin, Arthur.....................Cleveland
Buess, Jack........................Independence
Burke, John W......................Lima
Carhart, Dwight...................Marion
Cardone, Mario J..................Lima
Ceroni, Samuel.....................Pavilion, N. Y.
Chesler, Howard...................Cleveland
Cohen, Gene S......................Buffalo, N. Y.
Cole, Paulene......................West Valley, N. Y.
Crawford, Imogene................Ada
Dennis, Herbert...................Meadville, Pa.
Derby, Robert......................Norwalk
Dilts, Mae Ruth....................Ada
Douvacidjan, Harry...............Lima
English, Marvin...................Troy, N. Y.
Ernsberger, Fred..................Ada
Eyster, Ruth Margaret............Edison
<table>
<thead>
<tr>
<th>Name</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farley, Nelson</td>
<td>Dayton</td>
</tr>
<tr>
<td>Farris, Ettamae</td>
<td>Dayton</td>
</tr>
<tr>
<td>Ferrell, Kenneth W.</td>
<td>New Philadelphia</td>
</tr>
<tr>
<td>Fetter, Thomas C.</td>
<td>Marion</td>
</tr>
<tr>
<td>Fisher, Caroline</td>
<td>Piqua</td>
</tr>
<tr>
<td>Forman, Walter</td>
<td>Youngstown</td>
</tr>
<tr>
<td>Frederick, Robert</td>
<td>Carey</td>
</tr>
<tr>
<td>Gilbert (Mrs.) Susan M.</td>
<td>Xenia</td>
</tr>
<tr>
<td>Graham, Henry</td>
<td>Ada</td>
</tr>
<tr>
<td>Greulich, Mary Rose</td>
<td>Van Wert</td>
</tr>
<tr>
<td>Griffiths, Morgan D.</td>
<td>Copley</td>
</tr>
<tr>
<td>Guthrie, Elizabeth</td>
<td>Ada</td>
</tr>
<tr>
<td>Hague, Harry</td>
<td>Newburgh, N. Y.</td>
</tr>
<tr>
<td>Hakala, Helen</td>
<td>Ashtabula</td>
</tr>
<tr>
<td>Harris, Lowell E.</td>
<td>Ada</td>
</tr>
<tr>
<td>Hefner, K. Louise</td>
<td>Lima</td>
</tr>
<tr>
<td>Helsel, Albert C.</td>
<td>Elizabeth, Pa.</td>
</tr>
<tr>
<td>Hinkle, Laura Elizabeth</td>
<td>Kenton, Pa.</td>
</tr>
<tr>
<td>Hlass, John Richard</td>
<td>Barberton</td>
</tr>
<tr>
<td>Hoffman, Harry A.</td>
<td>Springville, N. Y.</td>
</tr>
<tr>
<td>Holcomb, Roberta</td>
<td>Freeport, N. Y.</td>
</tr>
<tr>
<td>Hoover, Robert</td>
<td>Pitcairn, Pa.</td>
</tr>
<tr>
<td>Horst, Gladys Ione</td>
<td>Continental</td>
</tr>
<tr>
<td>Hove, Ruth M.</td>
<td>Ada</td>
</tr>
<tr>
<td>Hunt, Lola Jane</td>
<td>Lima</td>
</tr>
<tr>
<td>Hurley, Myron K.</td>
<td>Huntsville</td>
</tr>
<tr>
<td>Jarvis, Willis</td>
<td>Xenia</td>
</tr>
<tr>
<td>Keel, George</td>
<td>Kenton</td>
</tr>
<tr>
<td>Knisely, Kathleen</td>
<td>Hamburg, N. Y.</td>
</tr>
<tr>
<td>Kritzler, James H.</td>
<td>LaPeyette</td>
</tr>
<tr>
<td>Krueger, Luella</td>
<td>Toledo</td>
</tr>
<tr>
<td>Lehman, Ruthella</td>
<td>Forest</td>
</tr>
<tr>
<td>Longsworth, Mary Ellen</td>
<td>Ada</td>
</tr>
<tr>
<td>McCoy, Scott</td>
<td>Springville, N. Y.</td>
</tr>
<tr>
<td>McCullough, Robert E.</td>
<td>Poland</td>
</tr>
<tr>
<td>McElroy, Charles</td>
<td>Ada</td>
</tr>
<tr>
<td>McPeck, Marybelle</td>
<td>Bellefontaine</td>
</tr>
<tr>
<td>Metzger, Henry</td>
<td>New Philadelphia</td>
</tr>
<tr>
<td>Mohr, Eriel E.</td>
<td>Van Wert</td>
</tr>
<tr>
<td>Moore, Archie</td>
<td>Ravenna</td>
</tr>
<tr>
<td>Moore, John Stewart</td>
<td>High Bridge, N. J.</td>
</tr>
<tr>
<td>Moore, Margaret</td>
<td>Ada</td>
</tr>
<tr>
<td>Neeley, Scott</td>
<td>Lima</td>
</tr>
<tr>
<td>Neumann, Pauline</td>
<td>Nevada</td>
</tr>
<tr>
<td>Newhouse, Frances E.</td>
<td>Ostrander</td>
</tr>
<tr>
<td>Page, Dorothy</td>
<td>Lima</td>
</tr>
<tr>
<td>Payne, Robert W.</td>
<td>Mt. Gilead</td>
</tr>
<tr>
<td>Pease, Mary</td>
<td>Belleville</td>
</tr>
<tr>
<td>Place, Betty</td>
<td>Wapakoneta</td>
</tr>
<tr>
<td>Ponessa, Alfred J.</td>
<td>Newburgh, N. Y.</td>
</tr>
<tr>
<td>Rady, Robert B.</td>
<td>Sandusky</td>
</tr>
<tr>
<td>Rex, Fred</td>
<td>Harrod</td>
</tr>
<tr>
<td>Richardson, Harold</td>
<td>Schenectady, N. Y.</td>
</tr>
<tr>
<td>Ries, Gray</td>
<td>Highland Park, Mich.</td>
</tr>
<tr>
<td>Robinson, Bettie</td>
<td>Fredericktown</td>
</tr>
<tr>
<td>Robinson, Earl Moore</td>
<td>Quaker City</td>
</tr>
<tr>
<td>Schnitzler, William J.</td>
<td>East Sparta</td>
</tr>
<tr>
<td>Seitz, Willard</td>
<td>Buffalo, N. Y.</td>
</tr>
<tr>
<td>Serinsky, Nathan</td>
<td>Newburgh, N. Y.</td>
</tr>
<tr>
<td>Shafer, Florice</td>
<td>Bloomville</td>
</tr>
<tr>
<td>Shaw, Joan</td>
<td>Ada</td>
</tr>
<tr>
<td>Sherry, Vera</td>
<td>Hamden, Conn.</td>
</tr>
<tr>
<td>Shingler, Maurice</td>
<td>Seward, Pa.</td>
</tr>
<tr>
<td>Saunders, Hylen</td>
<td>Bucyrus</td>
</tr>
<tr>
<td>Sowards, G. Wesley</td>
<td>Spencerstown</td>
</tr>
<tr>
<td>Spencer, Lawrence</td>
<td>Syracuse, N. Y.</td>
</tr>
<tr>
<td>Spon, John R.</td>
<td>Steubenville</td>
</tr>
<tr>
<td>Stanfield, Joan</td>
<td>Ada</td>
</tr>
<tr>
<td>Stanfield, Mollie</td>
<td>Ada</td>
</tr>
<tr>
<td>Sterritt, Cyrus</td>
<td>Lima</td>
</tr>
<tr>
<td>Stone, Walter</td>
<td>Crestline</td>
</tr>
<tr>
<td>Swain, Mary E.</td>
<td>Marion</td>
</tr>
<tr>
<td>Teets, William</td>
<td>High Bridge, N. J.</td>
</tr>
<tr>
<td>Thompson, Erie</td>
<td>Lima</td>
</tr>
<tr>
<td>Thompson, Leslie</td>
<td>Lima</td>
</tr>
<tr>
<td>Thompson, Robert</td>
<td>Adena</td>
</tr>
<tr>
<td>Tissari, Harry A.</td>
<td>Ashtabula</td>
</tr>
<tr>
<td>Underwood, John</td>
<td>Alger</td>
</tr>
<tr>
<td>Webber, Clauris</td>
<td>Bellefontaine</td>
</tr>
<tr>
<td>Wedgewood, Margaret</td>
<td>Decatur</td>
</tr>
<tr>
<td>Wenner, Robert H</td>
<td>Carey</td>
</tr>
<tr>
<td>White, Dorothy</td>
<td>Piqua</td>
</tr>
<tr>
<td>White, Walter</td>
<td>Lima</td>
</tr>
<tr>
<td>Williamson, Joy</td>
<td>Cairo</td>
</tr>
<tr>
<td>Yagsoor, Harry</td>
<td>Newburgh, N. Y.</td>
</tr>
<tr>
<td>Young, Clyde E.</td>
<td>Ravenswood, Ind.</td>
</tr>
<tr>
<td>Zimpfer, Vincent</td>
<td>Anna</td>
</tr>
</tbody>
</table>

**College of Engineering**

<table>
<thead>
<tr>
<th>Name</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbe, Francis</td>
<td>Toledo</td>
</tr>
<tr>
<td>Bosse, Earl</td>
<td>Ada</td>
</tr>
<tr>
<td>Bowden, John Robert</td>
<td>Mineral Ridge</td>
</tr>
<tr>
<td>Bricker, Frank E.</td>
<td>Perryville</td>
</tr>
<tr>
<td>Brogan, Jack A.</td>
<td>Lima</td>
</tr>
<tr>
<td>Buess, Craig Allen</td>
<td>Forest</td>
</tr>
<tr>
<td>Clark, Joe</td>
<td>Alger</td>
</tr>
<tr>
<td>De Lamater, Paul</td>
<td>Norwalk</td>
</tr>
<tr>
<td>Doehla, H. Jack</td>
<td>Mansfield</td>
</tr>
<tr>
<td>Doty, Warren</td>
<td>Findlay</td>
</tr>
<tr>
<td>Downing, Richard M.</td>
<td>Columbus Grove</td>
</tr>
<tr>
<td>Fett, Elmer</td>
<td>Ada</td>
</tr>
<tr>
<td>Froncowski, Ted A.</td>
<td>Cleveland</td>
</tr>
<tr>
<td>Gard, Forrest Glenwood</td>
<td>East Sparta</td>
</tr>
<tr>
<td>Getz, John</td>
<td>Navarre</td>
</tr>
<tr>
<td>Huston, Charles</td>
<td>Lisbon</td>
</tr>
<tr>
<td>Huston, Edwin H.</td>
<td>Lisbon</td>
</tr>
<tr>
<td>Kaufman, Max</td>
<td>Youngstown</td>
</tr>
</tbody>
</table>
Kline, Raymond V. ..................................... Osborn
Lloyd, Walter W. ...................................... Marion
Lyman, Robert J. ........................................ Port Allegheny, Pa.
Mobberly, Thomas ...................................... Cincinnati
Myers, Harry S. ........................................... Galion
Nichols, Gene A. ......................................... Ashtabula
Noble, James V. .......................................... Buffalo, N. Y.
Opydyke, A. Leonard .................................... Bryan
Orr, Walter .................................................. Ada
Quinn, Robert A. .......................................... Canton
Quinn, William J. ......................................... Lima
Rogers, Eileen ............................................. Huntsville
Rogers, Robert ........................................... Lyndhurst
Roivas, Leo B. ............................................. Mather, Pa.
Runner, Jack ............................................... Sandusky
Scharer, Merlin ............................................. Pasadena, Calif.
Schauweker, Jack ......................................... Nevada
Schick, Harold P. .......................................... Bluffton
Shook, William M. ........................................ Bay Village
Thomas, James A. .......................................... Port Allegheny, Pa.
Thompson, Edson B. ...................................... Berea
Troup, Earl W. ............................................. Canton
Vliet, Richard I. .......................................... Canton
West, Phillip ............................................... Huntsdale
Wyatt, Harold W. .......................................... Cincinnati

College of Pharmacy

Armstrong, Ross .......................................... Lisbon
Beham, Lawrence ......................................... Akron
Bender, Thomas ........................................... Maumee
Brickner, George ......................................... Akron
Carlson, Raymond R. .................................... Ashtabula
Cole, George ............................................... West Valley, N. Y.
Finke, Emerson ........................................... Oak Harbor
Floyd, Willard M. .......................................... Ada
Harmon, Wilbur B. ....................................... Oakwood
Hurst, John E. ............................................. Akron
Keiter, Richard ........................................... Petersburg, W. Va.
Kubasak, Rudolph ......................................... Lorain
Marshall, Dane ........................................... Ansonia
Mathews, Mary Margaret ................................ East Liverpool
Newman, John Robert .................................... West Mansfield
Rubin, Elmer Stanley .................................... Cleveland
Shelton, William R. ....................................... Orrs ville
Sutherlin, William ........................................ East Palestine
Thomas, John J. ........................................... McGuffey
Thompson, Alfred .......................................... Lima
Ver, Helen ................................................... Dayton
Verdine, Joseph ........................................... Bloomfield, N. J.
Warden, Richard C. ...................................... Akron
Warren, Alvin D. .......................................... Cleveland

College of Law (First Year)

Beery, Roland E. .......................................... Sidney
Blackburn, Robert S. .................................... Martins Ferry
Bracy, Burton N. .......................................... Norwalk
Dorman, William G. ...................................... Youngstown
Elder, Guy P. ............................................... Millersburg
English, Robert L. ....................................... Van Wert
Foster, William C. ........................................ Findlay
Guyton, William H., Jr. ................................ Lima
Haines, Roland ........................................... Ada
Harrington, Robert L. ................................... Alger
Kissner, John Edward ................................... Defiance
Lea, James Duane ......................................... Warren
Newcomer, Arthur S. ..................................... Bryan
O’Brien, James B. ......................................... Gallipolis
Platz, Norman C. .......................................... Toledo
Quatman, Philip A. ........................................ Lima
Rhode, Edward W. ........................................ Sandusky
Runyan, Thomas B. ....................................... Ada
Saiter, Dan .................................................. Marion
Siri, Ironium ............................................... Youngstown
Spurlock, Robert B. ....................................... Bucyrus
Stansel, Marijayne ........................................ Dayton
Tait, Robert ............................................... Lima
White, Paul .................................................. Detroit, Mich.
Wormer, Fred ............................................... Marion
Worman, Philip H., Jr. .................................... Dayton

Juniors

College of Liberal Arts

Arthur, Phyllis ........................................... Cherry Tree, Pa.
Arthur, Gilbert F. ....................................... Harrod
Ayres, Wayne ............................................. Van Wert
Bailey, Thomas C. ........................................ Patterson
Baker, Robert ............................................. Bryan
Bashore, Mary ........................................... Cortland
Bahtel, Betty Jane ........................................ Lima
Baum, Leila Mae .......................................... Ada
Benedict, Dean J. .......... North Jackson
Berger, Robert F. .......... Ada
Bretz, Margaret .......... Okeana
Chojnicki, Edward .......... Cleveland
Clark, Doris .......... Alger
Conroy, George .......... Marion
Coppersmith, Ruth .......... Cincinnati
Cottrell, Richard H. .......... Harpster
Crawmer, Curtis .......... Johnston
Cress, David J. .......... Van Wert
Epstein, Stanley M. .......... Cleveland
Feinerer, Paul .......... Dayton
Fields, Homer .......... Versailles
Gilbert, Joseph .......... Xenia
Gocek, Catherine .......... Lima
Gossard, Harry .......... Ada
Huber, Frances Armada .......... Elgin, Ill.
Huber, William Evan .......... Ada
King, Carl C. .......... Cleveland
Kiser, William H. .......... Marion
Klotman, Robert H. .......... Cleveland
LaBarge, Gerald .......... Potsdam, N. Y.
Lewis, Rachel Cargil .......... Amboy, Ill.
Lindabury, Nathan L. .......... Lebanon, N. Y.
Linden, Irving .......... Cleveland
Lingrel, LaMoynie .......... Mt. Victory
Lintz, Robert .......... Kenton
Lora, Duane .......... Lima
Lust, Luther B. .......... McCutcheonville
McCurdy, Dick .......... Lima
McDonough, Daniel .......... Elmira, N. Y.
McTaggart, Wilson .......... Buffalo, N. Y.
Marling (Mrs.) Vivian .......... McGuirey
Marshall, Reade .......... Lima
Miller, George A. .......... Cloverdale
Minard, Robert M. .......... Marion
Needy, John Alfred .......... Ada
Nieswander, Evalyn .......... Ada
Novak, Robert .......... Elyria
Okeley, Daphne .......... Continental
Parish, Leon .......... Ada
Parker, Evelyn .......... Ada
Parrino, Thomas J. .......... Cleveland
Peterson, Paul .......... Celina
Pond, James .......... Akron
Rabberman, John A. .......... Forest
Rame, Marjorie .......... Kenton
Ransbottom, Bettie .......... Celina
Redner, Charles .......... Montour Falls, N. Y.
Ritterspach, Edwin L. .......... Nevada
Roberson, Donald C. .......... Lima
Royon, Josephine .......... Houston
Ruby, Dwight .......... Marion
Rutten, Robert W. .......... Lima
Seeley, William .......... Lodi
Siverling, William H. .......... Salamanca, N. Y.
Smith, Lenore .......... Dola
Spitzer, Howard .......... Springville, N. Y.
Sulmonetti, Gloria .......... Millburn, N. J.
Tallman, Constance .......... Binghamton, N. Y.
Tipple, Robert .......... Ada
Treheme, Alfred .......... Byesville
Tucker, Ralph .......... Alger
Walters, John S. .......... Lima
Warner, John .......... Marion
Weber, Barbara .......... Ada
Winegardner, Carl .......... Waynesfield
Winters, Harry .......... Marion
Wolff, Frederick .......... Buffalo, N. Y.
Woodworth, Laurence .......... Fredericktown

COLLEGE OF ENGINEERING

Arthur, Chester A. .......... Cherry Tree, Pa.
Ash, Robert .......... Lima
Billing, William .......... Jackson Center
Clark, Lloyd H. .......... Alger
Ebersbach, Frederick .......... Lima
Edsall, Howard .......... Marion
Feth, William J. .......... Lakewood
Fudge, Francis .......... Xenia
Hanline, Charles .......... Vaughnsville
Lovett, Elmer .......... New Metamora
Mann, Kenneth .......... West Mansfield
Messersmith, Robert .......... Brookfield
Metcalf, Coburn C. .......... Toledo
Nagy, Charles .......... Masury
Nave, Joe .......... Lima
Papenhausen, Richard W. .......... Brooklyn, N. Y.
Philpport, Wade .......... Ada
Rath, Rexford .......... Defiance
Reich, William W. .......... Cleveland
Richardson, Joe .......... Willoughby
Rogers, Eugene Leroy .......... Jackson Center
Roth, Robert .......... Nevada
Stalter, Robert E. .......... Lima
Wertheimer, Joseph J. .......... Ada
### College of Pharmacy

<table>
<thead>
<tr>
<th>Name</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bennett, Thomas</td>
<td>Salem</td>
</tr>
<tr>
<td>Berneath, Alphonse</td>
<td>Akron</td>
</tr>
<tr>
<td>Caris, Richard E.</td>
<td>Jenera</td>
</tr>
<tr>
<td>Chesler, Edward H.</td>
<td>Cleveland</td>
</tr>
<tr>
<td>Cook, Paul L.</td>
<td>Ada</td>
</tr>
<tr>
<td>Hensler, Donald</td>
<td>Lima</td>
</tr>
<tr>
<td>Johnson, Edward A.</td>
<td>Dayton</td>
</tr>
<tr>
<td>Landis, Robert</td>
<td>Brookville</td>
</tr>
<tr>
<td>Lazzars, Walter J.</td>
<td>Bellaire</td>
</tr>
<tr>
<td>Long, James Edgar</td>
<td>Somerset</td>
</tr>
<tr>
<td>Madorsky, Meyer</td>
<td>Cleveland</td>
</tr>
<tr>
<td>Morgan, John Adrian</td>
<td>Urbana</td>
</tr>
<tr>
<td>Payne, Robert G.</td>
<td>Ada</td>
</tr>
<tr>
<td>Pesselman, Harold S.</td>
<td>Cleveland</td>
</tr>
<tr>
<td>Roberts, Sam</td>
<td>Sophia, W. Va.</td>
</tr>
<tr>
<td>Rosser, Duane</td>
<td>McArthur</td>
</tr>
<tr>
<td>Schomburg, Roy</td>
<td>Ft. Wayne, Ind.</td>
</tr>
<tr>
<td>Shields, Halbert D</td>
<td>Cleveland</td>
</tr>
<tr>
<td>Siegel, Harry W.</td>
<td>Cleveland Heights</td>
</tr>
<tr>
<td>Strauss, Morton</td>
<td>Cleveland Heights</td>
</tr>
<tr>
<td>Tyson, Jack L.</td>
<td>Rusells Point</td>
</tr>
<tr>
<td>Vincent, James W.</td>
<td>Lima</td>
</tr>
<tr>
<td>White, Ralph</td>
<td>Youngstown</td>
</tr>
<tr>
<td>Zimmerman, Walter R.</td>
<td>Youngstown</td>
</tr>
<tr>
<td>Zipp, Jack</td>
<td>Cleveland</td>
</tr>
</tbody>
</table>

### College of Law

<table>
<thead>
<tr>
<th>Name</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burns, David C.</td>
<td>Portsmouth</td>
</tr>
<tr>
<td>Cooke, Betty V.</td>
<td>Youngstown</td>
</tr>
<tr>
<td>Flynn, Michael</td>
<td>Crestline</td>
</tr>
<tr>
<td>Ford, Otis</td>
<td>Coal Grove</td>
</tr>
<tr>
<td>Gordon, Richard H.</td>
<td>Nevada</td>
</tr>
<tr>
<td>Helbert, Lewis P.</td>
<td>Ashland</td>
</tr>
<tr>
<td>Husted, Stanley</td>
<td>Springfield</td>
</tr>
<tr>
<td>Hyman, Harvey</td>
<td>Paulding</td>
</tr>
<tr>
<td>Kelley, LeRoy</td>
<td>Newark</td>
</tr>
<tr>
<td>Kennedy, Paul</td>
<td>Bucyrus</td>
</tr>
<tr>
<td>Labadie, John R.</td>
<td>Ottawa</td>
</tr>
<tr>
<td>Leopold, Harry</td>
<td>Ottawa</td>
</tr>
<tr>
<td>Lawrence, Wayne</td>
<td>Fresno</td>
</tr>
<tr>
<td>McBride, Wilbert B.</td>
<td>Youngstown</td>
</tr>
<tr>
<td>O'Brien, F. Harmon</td>
<td>Gallipolis</td>
</tr>
<tr>
<td>Phelps, David R.</td>
<td>London</td>
</tr>
<tr>
<td>Purdy, Clarence</td>
<td>Celina</td>
</tr>
<tr>
<td>Reid, Robert</td>
<td>Harpster</td>
</tr>
<tr>
<td>Sturgeon, James</td>
<td>Steubenville</td>
</tr>
<tr>
<td>Ugan, James R.</td>
<td>Rocky River</td>
</tr>
<tr>
<td>Walters, Summer</td>
<td>Van Wert</td>
</tr>
<tr>
<td>Weiss, Shorhurt S.</td>
<td>Youngstown</td>
</tr>
<tr>
<td>Williams, Henry E.</td>
<td>Bloomville</td>
</tr>
<tr>
<td>Wright, Robert E.</td>
<td>Madison</td>
</tr>
</tbody>
</table>

### Seniors

### College of Liberal Arts

<table>
<thead>
<tr>
<th>Name</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auger, William</td>
<td>Kenton</td>
</tr>
<tr>
<td>Bailey, Nellie Mae</td>
<td>Van Wert</td>
</tr>
<tr>
<td>Bannister, Mrs. J. K.</td>
<td>Lima</td>
</tr>
<tr>
<td>Banyas, John</td>
<td>Martins Ferry</td>
</tr>
<tr>
<td>Berke, Morris S.</td>
<td>Cleveland</td>
</tr>
<tr>
<td>Binkley, Ludwell</td>
<td>Ada</td>
</tr>
<tr>
<td>Bixel, Harold</td>
<td>Ada</td>
</tr>
<tr>
<td>Burr, Floretta Fae</td>
<td>Cardington</td>
</tr>
<tr>
<td>Cadwallader, Harold</td>
<td>Payne</td>
</tr>
<tr>
<td>Chrispin, John W.</td>
<td>Marion</td>
</tr>
<tr>
<td>Coats, Vaughn</td>
<td>Celina</td>
</tr>
<tr>
<td>Condron, Martha Ellen</td>
<td>Ada</td>
</tr>
<tr>
<td>Copeland, Richard</td>
<td>St. Johns</td>
</tr>
<tr>
<td>Creps, Patil</td>
<td>Westminster</td>
</tr>
<tr>
<td>Delrosso, Stephen</td>
<td>Youngstown</td>
</tr>
<tr>
<td>Dieffenbacher, Lucylle</td>
<td>Columbiana</td>
</tr>
<tr>
<td>Downing, Ronald</td>
<td>New Hampshire</td>
</tr>
<tr>
<td>Ehlen, John Henry</td>
<td>Kenton</td>
</tr>
<tr>
<td>Enterline, Jack M.</td>
<td>Lima</td>
</tr>
<tr>
<td>Fly, Catharine</td>
<td>Lima</td>
</tr>
<tr>
<td>George, Louis E.</td>
<td>Cincinnati</td>
</tr>
<tr>
<td>Goble, Robert I.</td>
<td>Ada</td>
</tr>
<tr>
<td>Gray, Norma</td>
<td>Ada</td>
</tr>
<tr>
<td>Greene, Jane Marie</td>
<td>Lima</td>
</tr>
<tr>
<td>Hindall, Carey-bob</td>
<td>Ada</td>
</tr>
<tr>
<td>Hover, Marie</td>
<td>Ada</td>
</tr>
<tr>
<td>Howison, William</td>
<td>Marion</td>
</tr>
<tr>
<td>Ickes, Marcella</td>
<td>Forest</td>
</tr>
<tr>
<td>Irwin, Clara May</td>
<td>Lima</td>
</tr>
<tr>
<td>Jones, Margaret Lillian</td>
<td>Venedocia</td>
</tr>
<tr>
<td>Kahler, Richard</td>
<td>Lima</td>
</tr>
<tr>
<td>Kane, Harry J.</td>
<td>Lorain</td>
</tr>
<tr>
<td>Keel, LeRoy A.</td>
<td>Kenton</td>
</tr>
<tr>
<td>Klingler, Sarahbel</td>
<td>Ada</td>
</tr>
<tr>
<td>Leatherman, Gerald</td>
<td>Lima</td>
</tr>
<tr>
<td>Lemon, Carol</td>
<td>Magnetic Springs</td>
</tr>
<tr>
<td>McBride, Gertrude</td>
<td>Ada</td>
</tr>
<tr>
<td>McClellan, Doris</td>
<td>Schenectady, N. Y.</td>
</tr>
<tr>
<td>Mallone, Joseph P.</td>
<td>Geneva</td>
</tr>
<tr>
<td>Miley, Walter M.</td>
<td>Marion</td>
</tr>
<tr>
<td>Miller, James W.</td>
<td>Lima</td>
</tr>
<tr>
<td>Mills, John Howard</td>
<td>Caledonia</td>
</tr>
<tr>
<td>Name</td>
<td>College</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Minich, Margaret</td>
<td>Wall, Pa.</td>
</tr>
<tr>
<td>Mohr, Mary Margaret</td>
<td>Ada</td>
</tr>
<tr>
<td>Morehouse, Paul</td>
<td>Bidwell</td>
</tr>
<tr>
<td>Orwick, Harvey</td>
<td>Ada</td>
</tr>
<tr>
<td>Owens, Ronald Cash</td>
<td>Cambridge</td>
</tr>
<tr>
<td>Pennisten, Walter K.</td>
<td>Waverly</td>
</tr>
<tr>
<td>Peters, Mary Elizabeth</td>
<td>Upper Sandusky</td>
</tr>
<tr>
<td>Pounds, Martha C.</td>
<td>Ostrander</td>
</tr>
<tr>
<td>Rendin, Larry James</td>
<td>Boston, Pa.</td>
</tr>
<tr>
<td>Rhoten, Edith Irene</td>
<td>Mowrystown</td>
</tr>
<tr>
<td>Salvo, Charles</td>
<td>Jamestown, N. Y.</td>
</tr>
<tr>
<td>Schneider, Kathryn</td>
<td>Marion</td>
</tr>
<tr>
<td>Sheidler, Robert G.</td>
<td>Leipsic</td>
</tr>
<tr>
<td>Shilling, Myron</td>
<td>Ada</td>
</tr>
</tbody>
</table>

**College of Engineering**

<table>
<thead>
<tr>
<th>Name</th>
<th>College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adam, Paul</td>
<td>Canton</td>
</tr>
<tr>
<td>Augsburger, Herbert</td>
<td>Columbus Grove</td>
</tr>
<tr>
<td>Brame, Vinton</td>
<td>Ada</td>
</tr>
<tr>
<td>Campbell, Lawrence</td>
<td>Medway</td>
</tr>
<tr>
<td>Casselman, Daniel</td>
<td>Sanborn, N. Y.</td>
</tr>
<tr>
<td>Chester, Paul F.</td>
<td>Antwerp</td>
</tr>
<tr>
<td>Forney, Everett</td>
<td>Forest</td>
</tr>
<tr>
<td>Freund, Paul F.</td>
<td>Ft. Jennings</td>
</tr>
<tr>
<td>Hale, Donald</td>
<td>Westfield, N. J.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reich, Robert A., Jr.</td>
<td>Berea</td>
</tr>
<tr>
<td>Roose, James F.</td>
<td>Akron</td>
</tr>
<tr>
<td>Salo, Earl I.</td>
<td>Ashtabula</td>
</tr>
<tr>
<td>Shannon, Wilbur R.</td>
<td>Marion</td>
</tr>
<tr>
<td>Sloan, Herbert W.</td>
<td>Morris, N. Y.</td>
</tr>
<tr>
<td>Stump, Clare</td>
<td>Lima</td>
</tr>
<tr>
<td>Vickio, Louis</td>
<td>Montour Falls, N. Y.</td>
</tr>
<tr>
<td>Youngman, Edward</td>
<td>St. Louis, Mo.</td>
</tr>
</tbody>
</table>

**College of Pharmacy**

<table>
<thead>
<tr>
<th>Name</th>
<th>College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahlert, Mary Alice</td>
<td>Massillon</td>
</tr>
<tr>
<td>Bair, Willis W.</td>
<td>Celina</td>
</tr>
<tr>
<td>Bishop, John R.</td>
<td>Amsterdam</td>
</tr>
<tr>
<td>Derr, Oliver Wylie</td>
<td>Apple Creek</td>
</tr>
<tr>
<td>Federman, Ben</td>
<td>Cleveland</td>
</tr>
<tr>
<td>Kipp, Albert W.</td>
<td>McComb</td>
</tr>
<tr>
<td>Keogler, Helen</td>
<td>Dayton</td>
</tr>
<tr>
<td>Kniaowski, Ray S.</td>
<td>Cleveland</td>
</tr>
<tr>
<td>McNeal, Mary</td>
<td>Bucyrus</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morgan, William</td>
<td>Lisbon</td>
</tr>
<tr>
<td>Mounier, Frank</td>
<td>Yorkville</td>
</tr>
<tr>
<td>Ortiz, Elsie</td>
<td>Mayaguez, P. R.</td>
</tr>
<tr>
<td>Perriella, Barton R.</td>
<td>Yorkville</td>
</tr>
<tr>
<td>Rae, William</td>
<td>Youngstown</td>
</tr>
<tr>
<td>Rebol, Elmer</td>
<td>Cleveland</td>
</tr>
<tr>
<td>Schmittke, Leo</td>
<td>Cleveland</td>
</tr>
<tr>
<td>Wolman, Morton</td>
<td>Columbus</td>
</tr>
</tbody>
</table>

**College of Law**

<table>
<thead>
<tr>
<th>Name</th>
<th>College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beery, Hubert A.</td>
<td>Sidney</td>
</tr>
<tr>
<td>Bender, Oliver K.</td>
<td>Ada</td>
</tr>
<tr>
<td>Blake, Rodney</td>
<td>Sidney</td>
</tr>
<tr>
<td>Bowers, Anthony</td>
<td>Lima</td>
</tr>
<tr>
<td>Caulfield, Aloysius</td>
<td>Piqua</td>
</tr>
<tr>
<td>Dollison, Charles</td>
<td>Fairmont, W. Va.</td>
</tr>
<tr>
<td>Hendy, Harry</td>
<td>Cincinnati</td>
</tr>
<tr>
<td>Johnston, Ronald</td>
<td>Crenshaw, Pa.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jones, Wilbur P.</td>
<td>Columbus</td>
</tr>
<tr>
<td>Kopiinski, Francis</td>
<td>Youngstown</td>
</tr>
<tr>
<td>Levine, Jack</td>
<td>Cleveland</td>
</tr>
<tr>
<td>Miller, Homer Klee</td>
<td>Conneaut</td>
</tr>
<tr>
<td>Openlander, Willard</td>
<td>Erie, Pa.</td>
</tr>
<tr>
<td>Pierce, Charlton</td>
<td>Coal Grove</td>
</tr>
<tr>
<td>Redmond, Charles</td>
<td>Cleveland</td>
</tr>
<tr>
<td>Stern, Hyman</td>
<td>Steubenville</td>
</tr>
</tbody>
</table>
SPECIAL STUDENTS

COLLEGE OF LIBERAL ARTS

Alay, Aurora Chang .......... Habana, Cuba
Alay, Teresa Chang .......... Habana, Cuba
Davidson, Mrs. Harold ...... Ada
Dawe, Mary Ann ............ Lima
Downing, Ronald ............ New Hampshire
Dreier, John R. ............. Coldwater
Edwards, Loraine ............ Findlay
Fagiale, Thomas J. .......... Warren
Fish, Oren .................. Cleveland
Fleshman, Loskiet A. ......... Uniontown
Ginsburg, Sylvia ............. Cleveland
Grady, Robert E. ............ Defiance
Hall, F. Eleanor ............. Dunkirk
Hanna, Lucille .............. Ada
Harbin, Virginia .......... Youngstown
Hafer, Rosemary .......... Ada
Kimble, Lenore .............. Ada
King, Gwendolyn .......... Lima
Lloyd, Peris ................ Lima
McCurdy, Flora ............. Ada
McKibben, Harriet .......... Ada
Moore, Austin .............. Jerusalem
Pratte, Catherine .......... Ada
St. Aubin, William ......... Akron
Shuster, Willa .............. Ada
Smith, Esther Gay ........... Ada
Whitworth, Dorothy ......... Ada
Wohl, Esther ................. Lima

COLLEGE OF ENGINEERING

Mitchell, Howard .......... Ada

COLLEGE OF LAW

Arnold, William .............. Woodsfield
Woliński, Thaddeus .......... Toledo

COLLEGE OF PHARMACY

Cusma, Constantino ......... Canton

SUMMARY 1938-39

<table>
<thead>
<tr>
<th>Freshmen</th>
<th>Soph.</th>
<th>Juniors</th>
<th>Seniors</th>
<th>Special</th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberal Arts</td>
<td>169</td>
<td>124</td>
<td>83</td>
<td>72</td>
<td>27</td>
<td>156</td>
<td>475</td>
</tr>
<tr>
<td>Engineering</td>
<td>59</td>
<td>43</td>
<td>26</td>
<td>17</td>
<td>2</td>
<td>146</td>
<td>147</td>
</tr>
<tr>
<td>Law</td>
<td>27</td>
<td>24</td>
<td>16</td>
<td>2</td>
<td>67</td>
<td>2</td>
<td>69</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>36</td>
<td>25</td>
<td>26</td>
<td>17</td>
<td>1</td>
<td>94</td>
<td>105</td>
</tr>
<tr>
<td>Total</td>
<td>264</td>
<td>219</td>
<td>159</td>
<td>122</td>
<td>32</td>
<td>626</td>
<td>796</td>
</tr>
</tbody>
</table>

EXTENSION STUDENTS 1938-39

COLLEGE OF LIBERAL ARTS

Baumgardner, LaDonna .... Lima
Beery, Naomi .............. Lima
Benroth, May .............. Lima
Blattner, Jerome .......... Lima
Borland, Ralph O. .......... Pemberton
Brenneman, Wallace ......... Lima
Carlton, Leah C. .......... Lima
Chalfin, Lloyd ............ McGuffey
Clark, Dolly .............. Lima
Clark, Ellen .............. Beaverdam
Clem, Donna ............... Lima
Colton, Merritt .......... Lima
Conrad, Marjorie .......... Lima
Copeilan, Richard ......... St. Johns
Crider, Wendell .......... Beaverdam
Daw, Mary Ann ........... Lima
Daughton, Lucile .......... Bryan
Earl, Mrs. Rhea ........... Wayne
Edstrand, Helen M. ....... Lima
Eibling, Cora ............. Dunkirk
Folk, Marie ................................................. Wapakoneta
Gorby, Mrs. Dale .............................................. Rawson
Grady, Teresa ..................................................... Lima
Hadding, D. H. ............................................... Lima
Hageman, Bernice ........................................... Sidney
Hall, F. Eleanor ............................................. Dunkirk
Harbison, C. B. ............................................... Lima
Hornish, Donald ............................................. Jewell
Jones, H. Herbert ........................................... Lima
Kelly, Mabel A. ............................................... Ada
Kidd, Lenore .................................................. Bluffton
Koch, William ................................................ Lima
Kramer, Iness ................................................ Lima
Kubek, Frank .................................................. Lima
Leahey, Thomas ............................................. Lima
Lewis, Lucille ................................................ Lima
McClellan, Hazel ............................................ Lima
Mahan, Grace ................................................... Lima
Miller, George A. ............................................ Cloverdale
Miller, John O. ................................................ Lima
Parrot, Frank ................................................ Delphos
Reese, Pauline ............................................... Ada
Ruf, Alice ...................................................... Lima
Shambaugh, Margaret .................................... Ada
Shanely, Edith ................................................ Sidney
Shank, Milton ................................................ Columbus
Shenk, Noah .................................................. Delphos
Silverstein, Irving ......................................... Lima
Smith, Roy .................................................... Wapakoneta
Stover, Bess .................................................. Lima
Wagner, Helen ................................................ Ada
Wehe, Linna ................................................... Ada
Winegardner, D. E. ......................................... Waynesfield
Winegardner, Jane ......................................... Lima
Winget, Flo .................................................... Wapakoneta
Young, Dee ................................................... Lima
Youngman, Walter .......................................... LaFayette
Zirkle, Viola .................................................. Lima
Zupan, Francis ............................................ Lima

SUMMARY OF EXTENSION STUDENTS

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberal Arts</td>
<td>24</td>
<td>34</td>
<td>58</td>
</tr>
</tbody>
</table>

GEOGRAPHICAL DISTRIBUTION
JUNE, 1938—JUNE, 1939

BY COUNTIES OF THE STATE OF OHIO

<table>
<thead>
<tr>
<th>County</th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allen</td>
<td>158</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ashland</td>
<td>3</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Ashtabula</td>
<td>13</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Auglaize</td>
<td>14</td>
<td></td>
<td>160</td>
</tr>
<tr>
<td>Belmont</td>
<td>6</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Brown</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Butler</td>
<td>3</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Carroll</td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Champaign</td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Clark</td>
<td>5</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Columbiana</td>
<td>8</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>Coshocton</td>
<td>1</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Crawford</td>
<td>15</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Cuyahoga</td>
<td>60</td>
<td></td>
<td>24</td>
</tr>
<tr>
<td>Darke</td>
<td>8</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Defiance</td>
<td>6</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Delaware</td>
<td>4</td>
<td></td>
<td>24</td>
</tr>
<tr>
<td>Erie</td>
<td>7</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Fairfield</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Franklin</td>
<td>5</td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>Fulton</td>
<td>5</td>
<td></td>
<td>34</td>
</tr>
<tr>
<td>Gallia</td>
<td>3</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Greene</td>
<td>5</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Guernsey</td>
<td>7</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Hamilton</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hancock</td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hardin</td>
<td>160</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harrison</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Henry</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highland</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Holmes</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Huron</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jackson</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jefferson</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knox</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lake</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lawrence</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Licking</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logan</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lorain</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lucas</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Madison</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mahoning</td>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marion</td>
<td>34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medina</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mercer</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miami</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monroe</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>County</td>
<td>Number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>--------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Montgomery</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morgan</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morrow</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muskingum</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noble</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ottawa</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paulding</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perry</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pike</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portage</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preble</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Putnam</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Richland</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sandusky</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scioto</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seneca</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shelby</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stark</td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summit</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trumbull</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuscarawas</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Union</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Van Wert</td>
<td>26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vinton</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washington</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warren</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wayne</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Williams</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wood</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wyandot</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Ohio</td>
<td>886</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

By States

<table>
<thead>
<tr>
<th>State</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>1</td>
</tr>
<tr>
<td>Connecticut</td>
<td>1</td>
</tr>
<tr>
<td>Illinois</td>
<td>3</td>
</tr>
<tr>
<td>Indiana</td>
<td>5</td>
</tr>
<tr>
<td>Michigan</td>
<td>12</td>
</tr>
<tr>
<td>Mississippi</td>
<td>1</td>
</tr>
<tr>
<td>Missouri</td>
<td>1</td>
</tr>
<tr>
<td>New Jersey</td>
<td>7</td>
</tr>
<tr>
<td>New York</td>
<td>57</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>35</td>
</tr>
<tr>
<td>West Virginia</td>
<td>4</td>
</tr>
</tbody>
</table>

By Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Puerto Rico</td>
<td>1</td>
</tr>
<tr>
<td>Cuba</td>
<td>2</td>
</tr>
</tbody>
</table>

SUMMER, 1939

College of Liberal Arts

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams, James E.</td>
<td>Lima</td>
</tr>
<tr>
<td>Alsphas, Marie</td>
<td>Vanlue</td>
</tr>
<tr>
<td>Ansley, Nancy Ann</td>
<td>Rushsylvania</td>
</tr>
<tr>
<td>Antoszewski, Eugene</td>
<td>Cleveland</td>
</tr>
<tr>
<td>Auten, Phyllis</td>
<td>Rawson</td>
</tr>
<tr>
<td>Bathelt, Betty Jane</td>
<td>Lima</td>
</tr>
<tr>
<td>Baumgardner, Aaron</td>
<td>Jenena</td>
</tr>
<tr>
<td>Beattie, Dora</td>
<td>Galena</td>
</tr>
<tr>
<td>Beatty, Lawrence</td>
<td>McKeesport, Pa.</td>
</tr>
<tr>
<td>Beery, Naomi</td>
<td>Lima</td>
</tr>
<tr>
<td>Berger, Robert</td>
<td>Ada</td>
</tr>
<tr>
<td>Berneath, Alphonse</td>
<td>Akron</td>
</tr>
<tr>
<td>Bigler, Neva</td>
<td>Bluffton</td>
</tr>
<tr>
<td>Billing, Dorothy</td>
<td>Anna</td>
</tr>
<tr>
<td>Bischoff, Mrs. Margaret</td>
<td>Ada</td>
</tr>
<tr>
<td>Bischoff, Martha</td>
<td>Ada</td>
</tr>
<tr>
<td>Bixel, Harold E.</td>
<td>Ada</td>
</tr>
<tr>
<td>Boyer, Rodney</td>
<td>Convooy</td>
</tr>
<tr>
<td>Borden, Genevieve</td>
<td>Van Wert</td>
</tr>
<tr>
<td>Borders, Virginia</td>
<td>Lima</td>
</tr>
<tr>
<td>Borland, Ralph</td>
<td>Sidney</td>
</tr>
<tr>
<td>Bowers, Lowell</td>
<td>Union City</td>
</tr>
<tr>
<td>Brogan, Jack A.</td>
<td>Lima</td>
</tr>
<tr>
<td>Brookshire, Lela May</td>
<td>Marion</td>
</tr>
<tr>
<td>Brown, Ida</td>
<td>Wapakoneta</td>
</tr>
<tr>
<td>Burkart, Lois</td>
<td>Kenton</td>
</tr>
<tr>
<td>Burns, Ruby S.</td>
<td>Ansonia</td>
</tr>
<tr>
<td>Burns, Welcome</td>
<td>Yorkshire</td>
</tr>
<tr>
<td>Carlson, Leah</td>
<td>Lima</td>
</tr>
<tr>
<td>Carmean, Evelyn</td>
<td>Kenton</td>
</tr>
<tr>
<td>Carmody, Alice</td>
<td>Van Wert</td>
</tr>
<tr>
<td>Chalfin, Lloyd</td>
<td>McGuffey</td>
</tr>
<tr>
<td>Chojnicki, Edward</td>
<td>Cleveland</td>
</tr>
<tr>
<td>Clark, Dolly</td>
<td>Lima</td>
</tr>
<tr>
<td>Clark, Ellen</td>
<td>LaFayette</td>
</tr>
<tr>
<td>Clum, Helen</td>
<td>Celina</td>
</tr>
<tr>
<td>Coats, Hazel</td>
<td>Celina</td>
</tr>
<tr>
<td>Coats, Vaughn</td>
<td>Celina</td>
</tr>
<tr>
<td>Conner, Edith</td>
<td>Ada</td>
</tr>
<tr>
<td>Cook, Helen M.</td>
<td>Paulding</td>
</tr>
<tr>
<td>Cook, Paul L.</td>
<td>Ada</td>
</tr>
<tr>
<td>Coon, Mrs. Daisy</td>
<td>Lima</td>
</tr>
<tr>
<td>Copeland, Richard</td>
<td>St. Johns</td>
</tr>
<tr>
<td>Coppersmith, Ruth</td>
<td>Cincinnati</td>
</tr>
</tbody>
</table>
Crawford, Imogen .......... Ada
Crawford, Jessie .......... Wapakoneta
Creman, Warren .......... Lima
Cullen, Arthur .......... Lima
Culleton, Catherine .......... Wapakoneta
Culver, Margery .......... Cridersville
Curtis, Marie .......... Anna
Cusma, Constantino .......... Canton
Davies, David John .......... Bellefontaine
Davis, Lawrence .......... Van Wert
Dawe, Mary Anne .......... Lima
Deemer, Agnes .......... Lima
De Long, Hazel .......... Ada
Delph, Elizabeth .......... Malinta
Dempster, Grace .......... Lima
Dempster, Rosemary .......... Kenton
Dillon, Mildred F .......... Belle Center
Dilts, Betty .......... Ada
Dilts, Mae Ruth .......... Ada
Dolby, Margaret .......... Delphos
Dotson, Matt .......... Cridersville
Doughton, Lucille .......... Bryan
Downing, Ronald .......... New Hampshire
Duck, Jerry June .......... Cleveland
Duvall, Lula .......... Wapakoneta
Earl, Dora .......... Marion
Earl, Mrs. Rhea .......... Wayne
Edstrand, Helen .......... Lima
Eibling, Cora .......... Dunkirk
Eversole, Margaret .......... Lima
Fahl, Beatrice .......... Arlington
Fanger, Louis J .......... Kalida
Farmer, Eva .......... Arlington
Fields, Homer .......... Versailles
Fish, Oren .......... Cleveland
Foster, Charles .......... Sidney
Foy, Norman .......... Paulding
Fregonowski, Ted A .......... Cleveland
Garvin, Violet .......... Forest
Geist, Wanda .......... Malinta
Giesler, Theophilus .......... Convo
Giffin, Nellie .......... Canton
Gilliland, Mabel .......... Van Wert
Gobrecht, Earl S .......... Arlington
Goecke, Catherine .......... Lima
Gray, Starling .......... Mt. Victory
Greedig, Ruth .......... Bluffton
Greene, Jane Marie .......... Lima
Grosh, Harry .......... Lima
Guthrie, Elizabeth .......... Lafayette
Hahn, Albert C .......... Kenton
Hall, Charles .......... Ada
Hardin, Helen .......... Lima
Hartle, Edna .......... Greenville
Hecholt, Albert C .......... Elizabeth, Pa.
Henkle, Laura .......... Dormont, Pa.
Henniesy, Veronica .......... Lima
Hetzel, Zora .......... Dayton
Hill, Adaline .......... Lima
Hiner, Nellie .......... Continental
Hoard, Kenneth .......... Cleveland
Hornish, Donald .......... Jewell
Hover, Marie .......... Ada
Howard, Mary .......... Toledo
Huffman, Dorothy .......... Columbus Grove
Huggins, Irene .......... Ada
Hull, Helen .......... Ada
Hullinger, Lenore .......... Beavercreek
Hunt, Lola Jane .......... Lima
Huston, Charles .......... Lisbon
Huston, Rosemary .......... Alger
Ickes, Marcella .......... Forest
Iler, Lloyd .......... Paulding
Ireland, Edith .......... Lima
Jeffrey, Frank J .......... Paulding
Jennings, Betty .......... Lima
Jobson, Phyllis .......... Ridgley
Jolliff, Rachel .......... West Mansfield
Jolliff, Thelma .......... Toledo
Jones, Margaret .......... Venedocia
Jones, Pauline .......... Cairo
Judson, Robert S .......... Ada
Kelly, Mabel A .......... Ada
Kidd, Lenore .......... Bluffton
Kimble, Lenore .......... Ada
Kinsey, Barbara .......... Kenton
Kipp, Albert .......... McComb
Kirchenbaum, Lester .......... Van Wert
Kramer, Mary Ellen .......... Pickerington
Kreischer, LeRoy .......... Van Wert
Kritzer, Clayton .......... Kenton
Kubhs, Francis W .......... Mt. Gilead
Kuchenbrither, Genevieve .......... Elyria
La Beau, Flossie .......... Africa
Lanino, Mrs. Ola .......... Greencamp
Lawrence, Wayne M .......... Fresno
Lemon, Carol .......... Magnetic Springs
Lewis, Rachel Carrig .......... Amboy, Ill.
Lightfoot, Alice .......... LaRue
Lloyd, Ellis .......... Gomer
Lucas, Virgil .......... Kalida
Lynch, Mildred .......... Lima
McAdams, Helen .......... Cleveland
McAtee, Mabel .......... Wapakoneta
McBride, Elizabeth .......... Ada
McClellan, Hazel .......... Lima
McCracken, C. Harry .......... Peoria
McTaggart, Wilson .......... Buffalo, N. Y.
McWilliams, Agnes .......... Ada
<table>
<thead>
<tr>
<th>Name</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann, Kenneth</td>
<td>West Mansfield</td>
</tr>
<tr>
<td>Marling, Mrs. Vivian B.</td>
<td>McGuffey</td>
</tr>
<tr>
<td>Marty, Maxine</td>
<td>Madison</td>
</tr>
<tr>
<td>Metcalf, Coburn</td>
<td>Toledo</td>
</tr>
<tr>
<td>Mikessell, Paul</td>
<td>New Paris</td>
</tr>
<tr>
<td>Miller, George</td>
<td>Cloverdale</td>
</tr>
<tr>
<td>Miller, James F.</td>
<td>Bluffton</td>
</tr>
<tr>
<td>Miller, John O.</td>
<td>Lima</td>
</tr>
<tr>
<td>Miller, Leora</td>
<td>Kenton</td>
</tr>
<tr>
<td>Milroy, Louise</td>
<td>Huntsville</td>
</tr>
<tr>
<td>Miltonberger, Emil</td>
<td>Lima</td>
</tr>
<tr>
<td>Mitchell, Howard</td>
<td>Ada</td>
</tr>
<tr>
<td>Mohr, Sabina</td>
<td>Van Wert</td>
</tr>
<tr>
<td>Morehouse, Paul</td>
<td>Bidwell</td>
</tr>
<tr>
<td>Morrison, James</td>
<td>Mt. Cory</td>
</tr>
<tr>
<td>Mort, Roberta</td>
<td>Lima</td>
</tr>
<tr>
<td>Mosher, Burrell</td>
<td>Richwood</td>
</tr>
<tr>
<td>Munn, Gerald</td>
<td>New Weston</td>
</tr>
<tr>
<td>Nemec, Louis</td>
<td>Neff</td>
</tr>
<tr>
<td>Noffsinger, Robert</td>
<td>Defiance</td>
</tr>
<tr>
<td>Nutter, Helen</td>
<td>Richwood</td>
</tr>
<tr>
<td>Nye, Ethel</td>
<td>Lima</td>
</tr>
<tr>
<td>Okuley, Daphna</td>
<td>Continental</td>
</tr>
<tr>
<td>Oliphant, Effie</td>
<td>Marion</td>
</tr>
<tr>
<td>Opfer, Mary</td>
<td>Berlin Heights</td>
</tr>
<tr>
<td>Parish, Leon</td>
<td>Ada</td>
</tr>
<tr>
<td>Park, Helen</td>
<td>Painesville</td>
</tr>
<tr>
<td>Pennisten, Walter K.</td>
<td>Waverly</td>
</tr>
<tr>
<td>Pfautz, Howard</td>
<td>Sidney</td>
</tr>
<tr>
<td>Pierce, Ray</td>
<td>Fulton, Miss.</td>
</tr>
<tr>
<td>Plack, Alice</td>
<td>Galion</td>
</tr>
<tr>
<td>Pond, James</td>
<td>Akron</td>
</tr>
<tr>
<td>Randolph, Juanita</td>
<td>Ashley</td>
</tr>
<tr>
<td>Ratcliff, Gladys</td>
<td>Fort Jennings</td>
</tr>
<tr>
<td>Reed, Helen</td>
<td>Unionville Center</td>
</tr>
<tr>
<td>Reed, Margaret</td>
<td>East Belaccel</td>
</tr>
<tr>
<td>Reese, Pauline</td>
<td>Ada</td>
</tr>
<tr>
<td>Rimer, Elizabeth</td>
<td>Coal Grove</td>
</tr>
<tr>
<td>Robinson, Bettie</td>
<td>Fredercktown</td>
</tr>
<tr>
<td>Roivas, Leo B.</td>
<td>Mather, Pa.</td>
</tr>
<tr>
<td>Royer, Kathryn</td>
<td>Anna</td>
</tr>
<tr>
<td>Rupp, Josephine</td>
<td>Delta</td>
</tr>
<tr>
<td>Rupricht, Grace</td>
<td>Dunkirk</td>
</tr>
<tr>
<td>Rutter, Thelma</td>
<td>Lima</td>
</tr>
<tr>
<td>Sambuchini, P. R.</td>
<td>Jamestown, N. Y.</td>
</tr>
<tr>
<td>Sautter, Mary Lois</td>
<td>Ada</td>
</tr>
<tr>
<td>Sawyer, Thomas</td>
<td>Lima</td>
</tr>
<tr>
<td>Scarbrough, Carl</td>
<td>Haviland</td>
</tr>
<tr>
<td>Schahel, Harold</td>
<td>Cleveland</td>
</tr>
<tr>
<td>Schott, Hazel R.</td>
<td>Lima</td>
</tr>
<tr>
<td>Scott, Aileen</td>
<td>Lima</td>
</tr>
<tr>
<td>Shaffer, Florice</td>
<td>Bloomfield</td>
</tr>
<tr>
<td>Shambaugh, Margaret</td>
<td>Ada</td>
</tr>
<tr>
<td>Shank, Milton</td>
<td>Columbus</td>
</tr>
<tr>
<td>Sheffer, Paul</td>
<td>Cygnet</td>
</tr>
<tr>
<td>Shenk, Noah O.</td>
<td>Delphos</td>
</tr>
<tr>
<td>Shepherd, Clarence</td>
<td>Kenton</td>
</tr>
<tr>
<td>Shook, Donna</td>
<td>Toledo</td>
</tr>
<tr>
<td>Sidener, Mary E.</td>
<td>Lima</td>
</tr>
<tr>
<td>Skillen, Ethel</td>
<td>Houston</td>
</tr>
<tr>
<td>Smith, Lillian</td>
<td>Kenton</td>
</tr>
<tr>
<td>Smith, Lucille</td>
<td>Richwood</td>
</tr>
<tr>
<td>Smith, Lucy</td>
<td>Kenton</td>
</tr>
<tr>
<td>Solomon, Ruth</td>
<td>Kenton</td>
</tr>
<tr>
<td>Spitler, Howard</td>
<td>Springfield, N. Y.</td>
</tr>
<tr>
<td>Stanfield, Joan</td>
<td>Alger</td>
</tr>
<tr>
<td>Stanfield, Mollie</td>
<td>Alger</td>
</tr>
<tr>
<td>Stover, Bess</td>
<td>Lima</td>
</tr>
<tr>
<td>Stower, Jack</td>
<td>Tiffany</td>
</tr>
<tr>
<td>Strait, Marea</td>
<td>Greenville</td>
</tr>
<tr>
<td>Tillman, Paul A.</td>
<td>West Mansfield</td>
</tr>
<tr>
<td>Taylor, Delbert</td>
<td>Ohio City</td>
</tr>
<tr>
<td>Teeter, Robert F.</td>
<td>Crestline</td>
</tr>
<tr>
<td>Temple, Mildred</td>
<td>Conoy</td>
</tr>
<tr>
<td>Thatcher, Rushie</td>
<td>Delphos</td>
</tr>
<tr>
<td>Thomas, Grant</td>
<td>Akron</td>
</tr>
<tr>
<td>Thompson, Agnes</td>
<td>Richwood</td>
</tr>
<tr>
<td>Thompson, Ernest</td>
<td>Glennville</td>
</tr>
<tr>
<td>Tschanan, Charles</td>
<td>Upper Sandusky</td>
</tr>
<tr>
<td>Tucker, Ralph</td>
<td>Alger</td>
</tr>
<tr>
<td>Underwood, Pearl</td>
<td>Ada</td>
</tr>
<tr>
<td>Varner, Hope</td>
<td>Continental</td>
</tr>
<tr>
<td>Warren, Alvin D.</td>
<td>Cleveland</td>
</tr>
<tr>
<td>Watts, Charlene</td>
<td>Ada</td>
</tr>
<tr>
<td>Weaver, Wanda</td>
<td>Bryan</td>
</tr>
<tr>
<td>Weible, Ruth V.</td>
<td>Haviland</td>
</tr>
<tr>
<td>Wenger, Donald</td>
<td>Bluffton</td>
</tr>
<tr>
<td>Wiedeman, Ernestine</td>
<td>Ada</td>
</tr>
<tr>
<td>Wilson, Charles</td>
<td>Lima</td>
</tr>
<tr>
<td>Wilson, Robert E.</td>
<td>Ada</td>
</tr>
<tr>
<td>Windle, Joseph</td>
<td>Miller City</td>
</tr>
<tr>
<td>Winemiller, G. M.</td>
<td>Lima</td>
</tr>
<tr>
<td>Winters, Harry</td>
<td>Marion</td>
</tr>
<tr>
<td>Wirt, Ora</td>
<td>Ada</td>
</tr>
<tr>
<td>Woolford, Dwight</td>
<td>Westminster</td>
</tr>
<tr>
<td>Woody, Don E.</td>
<td>Liberty Center</td>
</tr>
<tr>
<td>Wright, Inez</td>
<td>Spencerville</td>
</tr>
<tr>
<td>Young, Iva</td>
<td>Anna</td>
</tr>
<tr>
<td>Younkman, Freda</td>
<td>LaFayette</td>
</tr>
<tr>
<td>Younkman, Walter</td>
<td>LaFayette</td>
</tr>
<tr>
<td>Zuber, Gene</td>
<td>Bluffton</td>
</tr>
</tbody>
</table>
College of Law

Arnold, William J. .......... Woodsfield
Bell, Rex .................. Piqua
Blackburn, Robert S. ...... Martins Ferry
Ford, Otis ................ Coal Grove
Husted, Stanley .......... Springfield
Jones, Wilbur D. .......... Columbus
Kelley, Leroy ............... Newark

Koch, Charles .......... Ohio City
Labadie, John R. ........ Ottawa
Lady, Joseph ............... Ridgeway
McHugh, Harold .......... Smithfield
Newcomer, Arthur .......... Bryan
Owens, Ronald ............. Cambridge
Pierce, Charlton .......... Coal Grove

SUMMARY OF SUMMER STUDENTS, 1939

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberal Arts</td>
<td>106</td>
<td>158</td>
<td>264</td>
</tr>
<tr>
<td>Law</td>
<td>15</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>121</td>
<td>158</td>
<td>179</td>
</tr>
</tbody>
</table>

SUMMARY OF STUDENTS, 1938-39

September to June

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberal Arts</td>
<td>319</td>
<td>156</td>
<td>475</td>
</tr>
<tr>
<td>Engineering</td>
<td>146</td>
<td>1</td>
<td>147</td>
</tr>
<tr>
<td>Law</td>
<td>67</td>
<td>2</td>
<td>69</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>94</td>
<td>11</td>
<td>105</td>
</tr>
<tr>
<td>Total</td>
<td>626</td>
<td>170</td>
<td>796</td>
</tr>
</tbody>
</table>

Extension

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberal Arts</td>
<td>24</td>
<td>34</td>
<td>58</td>
</tr>
</tbody>
</table>

Summer Session

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberal Arts</td>
<td>106</td>
<td>158</td>
<td>264</td>
</tr>
<tr>
<td>Law</td>
<td>15</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>121</td>
<td>158</td>
<td>279</td>
</tr>
<tr>
<td>Grand Net Total</td>
<td>771</td>
<td>362</td>
<td>1133</td>
</tr>
<tr>
<td>Minus Duplicates</td>
<td>705</td>
<td>331</td>
<td>1036</td>
</tr>
<tr>
<td>Activity Fee</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration Officers</td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admissions and Entrance:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering</td>
<td>130</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Law</td>
<td>168</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liberal Arts</td>
<td>46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmacy</td>
<td>147</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admission Form</td>
<td>197</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advisers</td>
<td>41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affiliations</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aims and Objectives</td>
<td>23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alumni Associations</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applied Music</td>
<td>75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts-Dental Curriculum</td>
<td>56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts-Law Curriculum</td>
<td>58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts-Medicine Curriculum</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts-Nursing Curriculum</td>
<td>51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assemblies</td>
<td>27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Athletics</td>
<td>33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Athletic Field</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attendance</td>
<td>41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Band</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biblical Literature</td>
<td>101</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>79, 152</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology Fees</td>
<td>38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board and Rooms</td>
<td>39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board of Trustees</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botany</td>
<td>79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Administration</td>
<td>87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calendar</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campus Buildings and Equipment</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>80, 153</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry Fees</td>
<td>38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry Majors Curriculum</td>
<td>52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>138, 153</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choral Society</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class Periods</td>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classification of Students:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering</td>
<td>131</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Law</td>
<td>170</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liberal Arts</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmacy</td>
<td>148</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial Education</td>
<td>114</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Committee of:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trustees</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contents, Table of</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Courses, Description of:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering</td>
<td>138</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Law</td>
<td>172</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liberal Arts</td>
<td>62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmacy</td>
<td>152</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debating and Dramatics</td>
<td>31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degrees</td>
<td>43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departments of Instruction</td>
<td>43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departmental Honors</td>
<td>35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Division of Liberal Arts:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language, Literature and Art</td>
<td>62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Sciences</td>
<td>87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Training</td>
<td>103</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economics and Business Administraion</td>
<td>87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>103</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education, Principles and History of</td>
<td>123</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational Psychology</td>
<td>123</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electives in Colleges</td>
<td>48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>140</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary Education</td>
<td>103</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eligibility</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Endowed Scholarships</td>
<td>33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering, College of</td>
<td>129</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>62, 156</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English Language, Literature and Speech</td>
<td>62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English Literature</td>
<td>63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrance (See Admission)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examinations</td>
<td>42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expenses</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extension Courses</td>
<td>43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty</td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fees:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laboratories</td>
<td>38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuition</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Language and Literature</td>
<td>67, 159</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fraternities</td>
<td>32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>French</td>
<td>67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General and Departmental Honors</td>
<td>35, 177</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Information</td>
<td>27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geographical Distribution</td>
<td>189</td>
<td></td>
<td></td>
</tr>
<tr>
<td>German</td>
<td>69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td>35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade Marks and Quality Points</td>
<td>36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduates, List of</td>
<td>178</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduation, Requirements for:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering</td>
<td>132</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Law</td>
<td>169</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liberal Arts</td>
<td>49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmacy</td>
<td>148</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health and Physical Education</td>
<td>91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Service</td>
<td>33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>History</td>
<td>96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topic</td>
<td>Page</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honorary Degrees</td>
<td>178</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honorary Societies</td>
<td>31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honors Students, List of</td>
<td>177</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial Arts</td>
<td>117</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercollegiate Athletics</td>
<td>33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intramural Sports</td>
<td>92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laboratories</td>
<td>26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latin</td>
<td>69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Law, College of</td>
<td>165</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lectures and Concerts</td>
<td>29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liberal Arts, College of</td>
<td>45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Law</td>
<td>167</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library Fee</td>
<td>38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loan Fund</td>
<td>34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Majors and Minors</td>
<td>48, 111</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>82, 158</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matriculation</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>142</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modern Languages</td>
<td>67, 159</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td>70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Musical Organizations</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses Training</td>
<td>51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observation and Participation</td>
<td>126</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organ</td>
<td>77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmacy, College of</td>
<td>145</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmaceutical Chemistry</td>
<td>154</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmacognosy</td>
<td>159</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmacology</td>
<td>161</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmacy</td>
<td>162</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philosophy</td>
<td>101</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td>85, 164</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Piano</td>
<td>76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Points, Quality</td>
<td>36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Science</td>
<td>98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practice Court</td>
<td>168</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practice Teaching</td>
<td>126</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Professional Courses:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts-Dental</td>
<td>56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts-Law</td>
<td>58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts-Medicine</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts-Nursing</td>
<td>51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Administration and Law</td>
<td>54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry Majors</td>
<td>52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economics and Business Administration</td>
<td>53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Dental</td>
<td>56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Chemical Engineering</td>
<td>131</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Journalism</td>
<td>57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Law</td>
<td>57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Pharmacy</td>
<td>151</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Theological</td>
<td>58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physics Majors Curriculum</td>
<td>55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secretarial</td>
<td>59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Registration</td>
<td>41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prizes Awarded</td>
<td>177</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Probation</td>
<td>36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td>99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Publications, Student</td>
<td>32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public School Music</td>
<td>120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recitals</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reed and Brass Instruments</td>
<td>78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refunding</td>
<td>39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registration</td>
<td>41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religion</td>
<td>102</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Help</td>
<td>35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secretarial Course</td>
<td>90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Honors</td>
<td>44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scholarships</td>
<td>33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sciences:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural</td>
<td>79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sociology</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speech</td>
<td>65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students, Register of:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Year</td>
<td>180</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extension</td>
<td>188</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer</td>
<td>190</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special</td>
<td>188</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summary of Students:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Year</td>
<td>188</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extension</td>
<td>189</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer</td>
<td>193</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer School</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical Organizations</td>
<td>31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuition</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Training:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Division of</td>
<td>103</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Description of Courses</td>
<td>123</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary Education</td>
<td>103</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial Arts</td>
<td>117</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observation and Participation</td>
<td>126</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Courses</td>
<td>124</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public School Music</td>
<td>120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary Education</td>
<td>106</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Methods</td>
<td>126</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Requirements</td>
<td>108</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buildings</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>History of</td>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organization</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Violin</td>
<td>77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voice</td>
<td>75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Withdrawals</td>
<td>42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women, Residences for</td>
<td>26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women, Organizations for</td>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zoology</td>
<td>79</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Application for Admission

I hereby apply for admission to Ohio Northern University at the opening of ______________ Quarter, 19__

Fall, Winter, Spring, Summer

Name in full ____________________________

Street Address ____________________________

Postoffice __________________ State ____________

Parent or Guardian ____________________________

Parent or Guardian’s Address ____________________________

Date of Birth ______________ Church Preference ____________

Race __________________ Nationality ____________

High School ____________________________

Address of High School ____________________________

Date of Graduation ____________________________

Previous College attendance ____________________________

Write “None” or Name of College with Date of Attendance ____________________________

Check the department in which you are interested:

LIBERAL ARTS

General ______________ Teacher Training ______________

Pre-Professional ______________

Arts-Nursing ______________ Business Admin. ______________ Pre-Dental ______________ Pre-Journalism ______________ Pre-Law ______________ Pre-Medical ______________ Pre-Theological ______________ Secretarial ______________

Commercial ______________ Junior High School ______________ Industrial Arts ______________ Intermediate ______________ Music ______________ Physical Education ______________ Primary ______________ Senior High School ______________

ENGINEERING

Civil ______________ Electrical ______________ Mechanical ______________ Pre-Chemical ______________

LAW ______________

PHARMACY ______________

What degree do you expect to receive? ____________________________

If you have selected your major field, check below:

Biology ______________

Chemistry ______________

English ______________

Foreign Language ______________

Economics ______________

History and Political Science ______________

Mathematics ______________

Physics ______________

Psychology and Sociology ______________

Speech ______________