412.* VECTOR ANALYSIS. 3; II: offered in 1958-59 and in alternate years. Vector and scalar algebra and geometry; differentiation, integration, and differential operators; general coordinates; harmonic functions; potentials; applications to electric theory and hydro-dynamics. Prerequisites: Mathematics 202; Physics 201; or consent of instructor. Mr. Krabill.

415.* CALCULUS OF FINITE DIFFERENCES. 3; offered on demand. Differencing; interpolation with equal and unequal intervals; finite integration; summation of series; approximate integration. Prerequisite: Mathematics 202. Staff.

MILITARY SCIENCE AND TACTICS

GENERAL MILITARY SCIENCE

PROFESSOR, LIEUTENANT COLONEL MYERS (CHAIRMAN); ASSISTANT PROFESSORS, CAPTAINS MENEFEE, SNYDER, FIRST LIEUTENANT BARTEL; INSTRUCTORS, CHIEF WARRANT OFFICER RALPH, SERGEANT FIRST CLASS SIKON, SERGEANT MURPHY.

101-102.* MILITARY SCIENCE AND TACTICS I. First Year Basic. 2 each semester; I, II. Introduction to military science, including military organization of the Army and ROTC; American military history; individual weapons and marksman ship; leadership, drill, and exercise of command. Staff.

201-202.* MILITARY SCIENCE AND TACTICS II. Second Year Basic. 2 each semester; I, II. Leadership, drill, and exercise of command; maps and aerial photograph reading; crew-served weapons and gunnery. Prerequisite: Military Science 102 or veteran with minimum of six months' active duty. Staff.

301-302.* MILITARY SCIENCE AND TACTICS III. First Year Advanced. 3 each semester; I, II. Leadership, drill, and exercise of command; military teaching methods; first aid; military sanitation; organization, functioning, and missions of the Army and Services; small unit tactics and communications. Prerequisite: Military Science 202 or veteran with 12 months or more of active duty. Staff.

401-402.* MILITARY SCIENCE AND TACTICS IV. Second Year Advanced. 3 each semester; I, II. Operations; logistics; military administration and personnel management; service orientation; leadership, drill, and exercise of command. Prerequisite: Military Science 302. Staff.

MUSIC

PROFESSORS MC EWEN (CHAIRMAN), KENNEDY; ASSOCIATE PROFESSORS ALLEM, FAILEY, HAVEN, HIMMEL, JENSEN, SPangler; ASSISTANT PROFESSORS ALEXANDER, WEGER; INSTRUCTORS BENSTOCK, ECKER, H. LAKOFsky**, LIETZ, WILcox; PART-TIME INSTRUCTORS BAUER, BOULKE, CURTIS, GLASmire, MC LauGHlin.

COURSES IN THEORY, HISTORY, AND APPRECIATION

101.* SIGHT SINGING AND EAR TRAINING. 2; I. Fundamental principles of pitch and rhythm as a basis for solfeggio; dictation for oral and written response. Four hours a week. Mr. Alexander.

201.* SIGHT SINGING AND EAR TRAINING. 1; I. Prepared and sight-reading of advanced choral material; melodic and harmonic dictation. Two hours a week. Prerequisite: Music 102. Mr. Alexander.

202.* SIGHT SINGING AND EAR TRAINING. 1; II. A continuation of Music 201. Two hours a week. Prerequisite: Music 201. Mr. Alexander.

205.* HARMONY. 3; I. Nonharmonic tones; altered chords; modulations; harmonic counterpoint. Prerequisite: Music 104 or equivalent. Miss Jensen.

206.* HARMONY. 3; II. A continuation of Music 205. Prerequisite: Music 205. Miss Jensen.

211. GENERAL MUSIC. 2; I, II. Fundamental music skills; theory; reading by syllables; pitch and rhythm dictation; music appreciation; song singing. Four hours a week. Not open for credit to music majors or minors. Staff.

212. GENERAL MUSIC. 2; II. A continuation of Music 211; methods of teaching music in the elementary grades. Four hours a week. Prerequisite: Music 211. Not open for credit to music majors or minors. Staff.

201.* CHORAL LITERATURE. 1; II. Reading and study of sacred and secular choral music from 16th to 20th century. Two hours a week. Prerequisite: Music 202. Mr. Allen.

205.* COUNTERPOINT. 2; I. Simple counterpoint; analysis of works of 16th century contrapuntists; use of modes and imitation. Prerequisite: Music 206 or equivalent. Mr. Kennedy.

206.* ANALYSIS OF FORM. 2; II. Analysis of the larger forms of musical composition. Prerequisite: Music 206 or equivalent. Miss Jensen.

301.* HISTORY OF MUSIC. 3; I. General course; readings, reports, and recorded music; survey of all periods. Miss Jensen.

302.* HISTORY OF MUSIC. 3; II. A continuation of Music 301. Miss Jensen.

305.* MODERN MUSIC. 2; offered on demand. An analysis course in recast and contemporary music. Prerequisites: Music 304, 306. Miss Jensen.

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**On leave of absence.
COURSES IN MUSIC EDUCATION

205. INTRODUCTION TO PUBLIC SCHOOL MUSIC. 2: II. Purpose and place of music in the general scheme of education; methods in public school music. Two hours a week. Mr. McEwen.

252. METHODS IN MUSIC APPRECIATION. 2: I. The basis of music appreciation; subject matter and methods; preparing and teaching typical lessons. Mr. McEwen.

255. METHODS IN SECONDARY MUSIC. 2: offered on demand. Subject matter and materials for music in junior and senior high schools. Prerequisite: Education 309. Mr. Fauley.

357. INSTRUMENTAL ORGANIZATION AND ADMINISTRATION. 2: II. For elementary and secondary schools. Mr. Weger.

COURSES IN APPLIED MUSIC

125. PERCUSION CLASS. 1. Mr. Boileau.

155. SMALL BRASS CLASS. 1. Mr. Wilcox.

185. LARGE BRASS CLASS. 1. Mr. Glasmore.

147. CLARINET AND FLUTE CLASS. 1. Mr. Ecker, Mr. Weger.

MUSIC

115. HIGH STRING CLASS. 1. Mr. Alexander.

116. LOW STRING CLASS. 1. Mr. Alexander.

216. OBOE AND BASSOON CLASS. 1. Mr. Ecker.

117. 221, 222, 224. PERCUSSION INSTRUMENTS. 1 or 2. Mr. Boileau.

119. 231-234. BRASS INSTRUMENTS. 1. Mr. Glasmore, Mr. Weger, Mr. Wilcox.

141. 414. WOODWIND. Mr. Bauer, Mr. Ecker, Mr. Weger.

151. 261-264. PIANO. Mr. Haven, Miss Jensen, Mr. Kennedy, Mr. Lietz, Mr. Spangler.

172. 271, 272, 274. VOICE. 1 or 2. Mr. Allen, Mr. Fauley, Mr. Himmel.

181. 189, 281-284. STRING INSTRUMENTS. 1. Mr. Alexander, Mr. Benstock, Mr. McLaughlin.

191. 291, 292, 391-394. ORGAN. 1 or 2. Mr. Curtis.

100. SMALL ENSEMBLES. 1 a semester; I, II. According to the talent available, small vocal and instrumental ensembles are formed under the supervision of the department. Admission is by try-out. May be taken more than once, but the total credit earned may not exceed 4 semester hours. Staff.

250. MUSICAL ORGANIZATIONS. 1 a semester; I, II. The Concert Band, Marching Band, A Cappella Choir, Symphony Orchestra, and Treble Clef Club are open to all students of the University with the necessary musical ability. All credit earned in Music 200 will be placed on the student's permanent academic record, but not more than 8 semester hours may apply toward degree requirements. Staff.

300. SMALL ENSEMBLES. 1 a semester; I, II. Similar to Music 100, but for juniors and seniors. May be taken more than once, but the total credit earned may not exceed 4 semester hours. Staff.

REQUIREMENTS

CREDIT REQUIREMENT. Twenty-seven to twenty-nine semester hours of applied music are required for students in public school music. All courses in applied music, including Music 100, 200, 300, may be used to meet this requirement.

INSTRUCTION. Study in applied music is offered in piano, voice, organ, and all orchestral and band instruments. All students enrolling in applied music courses for the first time are required to take a placement examination during registration week for purposes of classification based on ability and previous training. Studio class recitals will be held from time to time as deemed necessary by the instructor. Applied music students must pass satisfactorily an examination before a faculty committee at the end of the semester in order to receive full credit.
RECITAL ATTENDANCE. Students majoring in music are required to attend a minimum of 12 concerts a semester. This includes student and faculty recitals and concerts, and the University Artist Series. For less than 12 concerts attended, one-half hour of general credit will be deducted from the student’s total credit hours; for less than 7 concerts attended, one hour of general credit will be deducted.

MAJOR REQUIREMENTS. Students majoring in piano must have sufficient performing ability to begin with Music 261 or higher and must complete Music 364 for graduation. Students majoring in voice must complete Music 374 for graduation. Those majoring in violin must begin with Music 281 or higher and complete Music 388 for graduation. Students majoring in brass instruments must begin with Music 231 or higher and complete Music 338 for graduation. Those majoring in woodwind instruments must begin with Music 241 or higher and complete Music 348 for graduation. Students majoring in percussion must complete Music 324 for graduation.

FEES

A fee of $30 is charged for each semester hour of applied music, except in courses designated “cass.”

Students enrolled for applied music have access to practice rooms and equipment without charge, in accordance with schedules and regulations determined by the Department of Music.

PHILOSOPHY

PROFESSOR TUTTLE (CHAIRMAN).

201. INTRODUCTION TO PHILOSOPHY. 3: I, II. A study of the methods and problems of philosophy in relation to contemporary institutions. Mr. Tuttle.

202. ETHICS. 3: II. An inquiry into the meaning of good and bad, right and wrong; consideration of the views of outstanding Greek, Christian, and modern thinkers on the nature of the good life. Mr. Tuttle.

204. AESTHETICS. 3: II. The nature and meaning of “beauty,” approached historically and applied to present-day experience. Courses in the appreciation and history of art and music are of value in connection with this course. Mr. Tuttle.

206. PROBLEMS OF PHILOSOPHY. 3; offered on demand. A more extended study of some of the fundamental and persistent philosophical problems treated in Philosophy 201. Mr. Tuttle.

301. LOGIC. 3: I. Topics examined in this course are language analysis, including discussion of ambiguity, levels of meaning, figurative language; deductive reasoning; inductive reasoning; Mr. Tuttle.


321. HISTORY OF ANCIENT PHILOSOPHY. 3; I; offered in 1958-59 and in alternate years. The development of the concepts of stability, change, and interdependence from Thales to the fall of Rome; a study of the sources of modern economic, political, social, and religious ideas and practices. Mr. Tuttle.

322. HISTORY OF MEDIEVAL AND MODERN PHILOSOPHY. 3: II; offered in 1958-59 and in alternate years. A survey of major concepts in the philosophies of Catholic Europe; the humanistic emphasis of the Renaissance; the rise of empiricism in England, of rationalism on the continent, and the resulting philosophy of Kant and his followers. Mr. Tuttle.

323. HISTORY OF RELIGIONS. 3: I; offered in 1957-58 and in alternate years. A study of the “bibles” of seven major living religions of the Far East—Hinduism, Buddhism, Jainism, Confucianism, Taoism, Shintoism, and Sikhism—including inquiry into cultural backgrounds of India, China, and Japan. Mr. Tuttle.

324. HISTORY OF RELIGIONS. 3: II; offered in 1957-58 and in alternate years. A study of the “bibles” of the four major living religions of the Near East—Zoroastrianism, Hebraism, Christianity, and Islam—including inquiry into the cultural backgrounds of Egypt, Babylonia, Israel, Greece, and Rome. Mr. Tuttle.

402. PHILOSOPHY OF SCIENCE. 3; II; offered in 1957-58 and in alternate years. The nature and meaning of the presuppositions of science and the conclusions of the sciences as the data of philosophy. Mr. Tuttle.

412. EPISODEMIOLOGY. 3; offered on demand. The origin, content, and validity of knowledge; the authoritarian, empirical, rational, pragmatic, correspondence, coherence, and intuitive interpretations of truth. Prerequisite: Philosophy 201 or consent of instructor. Mr. Tuttle.

414. PHILOSOPHY OF BUSINESS. 3; offered on demand. A study of the underlying philosophies of business as applied by businessmen to the problems of management and labor, management and customers, and management and the community. Mr. Tuttle.

415. AMERICAN THOUGHT. 3: I; offered in 1957-58 and in alternate years. A survey of ideas of freedom from the earliest times through Thomas Paine, Thomas Jefferson, Ralph Waldo Emerson, Walt Whitman, and into the present. Mr. Tuttle.

417. PHILOSOPHY OF RELIGION. 3; II; offered in 1958-59 and in alternate years. An historical study of the religious thoughts of the philosophers from ancient to modern times, the nature of religious knowledge, the existence of God, and the relation of God to the world. Mr. Tuttle.
Students majoring in journalism must take Business Education 111 in the first year unless they have had typewriting in high school. Suggested minors: English, history, speech.

Minor: Same as above minus 7 semester hours of electives.

LATIN. Major: First year, Latin 101, 102. Second year, Latin 201, 202; Third, fourth years, 7 semester hours selected from 203, 204, 312, 301, 302, 312. (Total, 21 semester hours)

LIBRARY SCIENCE. Minor: Second year, Library Science 201, 202. Third and fourth years, Library Science 303, 304, 403, 404. (Total, 18 semester hours.)

Suggested majors: English, history, foreign language, social studies.

MATH. Major: First year, Mathematics 101, 102, 104, 103 or 105, or equivalent. Second year, Mathematics 201, 202. Third or fourth year, electives in mathematics, 9 semester hours to be recommended by the major adviser. (Total, 29 semester hours.)

Minor: First year, Mathematics 101, 102, 104, 105 or 105, or equivalent. Second year, Mathematics 201, 202. Third year, electives in mathematics, 3 semester hours. (Total, 23 semester hours.)

MUSIC. Major: See special curriculum, page 137.

Minor—Instrumental: First year, Music 101, 102, 103, 104, 107, 108; applied music in instruments, 2 semester hours. Second year, Music 201, 205, 206; applied music in instruments, 1 semester hour. Third or fourth year, Music 305, 306, 355. (Total, 27 semester hours.)

Minor—Vocal: First year, Music 101, 102, 103, 104, 107, 108; applied music in piano, voice, or both, 2 semester hours. Second year, Music 205. Third or fourth year, Music 305, 306, 355. (Total, 24 semester hours.)

Students interested in a minor in either instrumental or vocal music should consult the chairman of the Music Department with reference to proficiency requirements established by the State Department of Education. Students who do not meet these standards will be required to take additional courses in applied music. For a statement of fees for courses in applied music see Applied Music under the Department of Music in Description of Courses.

PHYSICAL SCIENCE. Major: First year, Chemistry 101, 102. Second year, Physics 201, 202; or 208, 204. Third or fourth year, Chemistry 201, 202; electives in science, 4 semester hours. (Total, 28 semester hours)

It is recommended that physical and comprehensive science majors elect Philosophy 402 to apply on group requirements in social science. Students interested in chemistry should elect Chemistry 203.

Minor: First year, Chemistry 101, 102. Second year, Physics 201, 202; or 208, 204. Third or fourth year, at least 5 semester hours chosen from Chemistry 201; Physics 302, 303, 304, 305, 308. (Total, 21 semester hours.)

SCIENCE. Major—Comprehensive: First year, Biology 101, 102, or Chemistry 101, 102; Mathematics 101, 103. Second year, Physics 201, 202, or 203, 204; Chemistry 101, 102, or Biology 101, 102. Third and fourth years, at least 12 semester hours in biology, chemistry or physics to make a minimum of 20 hours in one of these fields. In addition, credit in required course work or in related courses as astronomy, geology, meteorology, physiography, or mathematics to make a total of 45 semester hours. Those who choose the 20 semester hour field in physics also take Mathematics 102, 104, 201, and 202. (Total, 45 semester hours)

Minor—General: First year, Biology 101, 102 or Chemistry 101, 102. Second year, Chemistry 101, 102 or Biology 101, 102. Third year, Physics 201, 202 or Physics 205, 204. (Total, 24 semester hours)

SOCIAL STUDIES. Major—Comprehensive: First year, History 151, 152; Geography 101. Second year, History 205, 206; Sociology 201, 202; Political Science 201, 202. Third and fourth years, Economics 201 plus 15 hours in social studies of which 3 must be in American and 3 in European history on the 300-400 level. (Total, 45 semester hours)

SPANISH. Major: For students who begin Spanish in college—First year, Spanish 101, 102. Second year, Spanish 201, 202. Third or fourth year, Spanish 301, 302 or 303, 304; electives in Spanish, 14 semester hours. (Total, 56 semester hours.) For students who have had two years of Spanish in high school—First year, Spanish 201, 202. Second year, Spanish 301, 302 or 303, 304. Third or fourth year, electives in Spanish, 14 semester hours. (Total, 23 semester hours.) Students who have had four years of Spanish in high school begin with Spanish 301 and continue with Spanish 302, 303, 304, and 8 semester hours of electives in Spanish. (Total, 20 semester hours.)

Minor: For students who begin Spanish in college—First year, Spanish 101, 102. Second year, Spanish 201, 202. Third or fourth year, Spanish 301, 302; or 303, 304; electives in Spanish, 8 semester hours. (Total, 30 semester hours.) For students who have had two years of Spanish in high school—First year, Spanish 201, 202. Second year, Spanish 301, 302; or 303, 304. Third or fourth year, electives in Spanish, 8 semester hours. (Total, 22 semester hours.) Students who have had four years of Spanish in high school begin with Spanish 301, 302 or 303, 304 and elect 8 semester hours from 400-level courses in Spanish. (Total, 14 semester hours)

SPEECH. Major: See special curriculum, page 139.

Major: First year, Speech 102, 112, 141, 146; Second year, Speech 202, 203, 223, 243, 261; Third or fourth year, Speech 315, 341. (Total, 28 semester hours)

Minor: First year, Speech 102, 141; Second year, Speech 203, 223, 202 or 261; Third or fourth year, Speech 341. (Total, 18 semester hours)

SPEECH AND HEARING THERAPY. Major: See special curriculum, page 140.
INDUSTRIAL ARTS CURRICULUM

<table>
<thead>
<tr>
<th>FIRST YEAR</th>
<th>Second Semester</th>
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<tbody>
<tr>
<td>Art 101</td>
<td>Engineering Drawing 102</td>
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<tr>
<td>Engineering Drawing 101</td>
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<td>English 101</td>
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<td>Industrial Arts 103</td>
<td>Industrial Arts 111</td>
</tr>
<tr>
<td>Industrial Arts 121</td>
<td>Physics 100</td>
</tr>
<tr>
<td>Health-Physical Ed. 101</td>
<td>Speech 102</td>
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<td>Health-Physical Ed. 102</td>
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<thead>
<tr>
<th>SECOND YEAR</th>
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<tbody>
<tr>
<td>English 201</td>
<td>Industrial Arts 203</td>
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<td>Industrial Arts 211</td>
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<td>Industrial Arts 231</td>
<td>Industrial Arts 261</td>
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<tr>
<td>Psychology 101</td>
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<td>Science elective</td>
<td>Social studies elective</td>
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<td>Health-Physical Ed. 201</td>
<td>Health-Physical Ed. 202</td>
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<th>THIRD YEAR</th>
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<td>Art 263</td>
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<td>Graphic Arts 308</td>
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<td>Industrial Arts 347</td>
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<td>Industrial Arts 352</td>
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<td>Social studies elective</td>
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<td>16</td>
</tr>
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</table>

| FOURTH YEAR | Semester of professional concentration, including student teaching | 15 |
| Minor or electives | 15 |

MUSIC (PUBLIC SCHOOL) CURRICULUM

Four choices of emphasis offered in this curriculum are outlined on page 158. Each follows the general pattern below. In choices 1 and 2 the variations will be found in the requirements in applied music, minor applied music classes, and in student teaching experiences. In choices 3 and 4 academic subjects may be substituted for certain music courses, as indicated.

<table>
<thead>
<tr>
<th>FIRST YEAR</th>
<th>Second Semester</th>
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<tbody>
<tr>
<td>Applied music</td>
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<tr>
<td>English 101</td>
<td>Applied music</td>
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<tr>
<td>Music 101, 103</td>
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<tr>
<th>SECOND YEAR</th>
<th>Second Semester</th>
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<td>Music 107, 201, 205</td>
<td>English literature elective</td>
</tr>
<tr>
<td>Music 200</td>
<td>Minor applied music class</td>
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<tr>
<td>Science or mathematics elective</td>
<td>Music 108, 202, 203, 206</td>
</tr>
<tr>
<td>Health-Physical Ed. 201</td>
<td>Music 200</td>
</tr>
<tr>
<td></td>
<td>Health-Physical Ed. 202</td>
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<table>
<thead>
<tr>
<th>THIRD YEAR</th>
<th>Second Semester</th>
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<td>Applied music</td>
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<tr>
<td>Minor applied music class</td>
<td>Applied music</td>
</tr>
<tr>
<td>Music 305, 305, 315</td>
<td>Minor applied music class</td>
</tr>
<tr>
<td>Music 318, 352</td>
<td>Music 301, 304, 306, 357</td>
</tr>
<tr>
<td>Music 200</td>
<td>Music 200</td>
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<tr>
<td>Social studies elective</td>
<td>Music elective</td>
</tr>
<tr>
<td></td>
<td>Science elective*</td>
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</table>

| FOURTH YEAR | Semester of professional concentration, including student teaching | 15 |
|--------------|---------------------------------------------------------------|
| Applied music | 2 |
| Music 200 | 2 |
| Social studies electives | 6 |
| Electives (non-music) | 5 |
|                       | 15 |

*Recommended elective, Physics 350.
ALTERNATIVE PROGRAMS IN MUSIC EDUCATION

1. Vocal Major with Instrumental Minor

This curriculum will include the following:
Applied music and voice and/or piano with no less than 14 semester hours of credit.
Minor applied music classes with no less than 4 semester hours of credit which must include Music 185 or Music 187.
Music 200 with no less than 7 semester hours of credit in choral groups and 1 hour in Marching Band.
Vocal emphasis in student teaching.

2. Instrumental Major with Vocal Minor

This curriculum will include the following:
Applied music with no less than 14 semester hours of credit in an instrument approved by the instructor upon proof of a required degree of proficiency for major study and 4 hours of credit in piano or to grade four, whichever is reached first.

Students in this curriculum who major in piano will take not less than 4 semester hours of credit in private study on another instrument approved by the instructor.

Minor applied music classes with no less than 6 semester hours of credit which must include Music 172 and Music 185 or 197.

Students who major in this curriculum are not required to take Music 352.

Music 200 for wind and percussion players with no less than 7 semester hours of credit in band and one in a choral group. Music 200 for string players with no less than 7 semester hours of credit in orchestra and 1 hour in a choral group.

Instrumental emphasis in student teaching.

It is expected that qualified wind and percussion players will elect some orchestral experience.

3. Vocal Major with Academic Minor

This curriculum will provide for the substitution of academic subjects for the following music courses:
Music 200, 1 hour (for Marching Band); Music 315, 2 hours; Music 357, 2 hours.

No minor applied music classes will be required in this curriculum.
Student teaching experiences will include vocal and academic subjects.

4. Instrumental Major with Academic Minor

This curriculum will provide for the substitution of academic subjects for the following music courses:

Music 200, 1 hour (for choral group); Music 203, 2 hours; Music 301, 1 hour.
Applied music (voice) 1 hour.
Student teaching experiences will include instrumental and academic subjects.

Double Major. Students interested in a double major (vocal and instrumental) should consult with the department chairman for information concerning the requirements. Such a program will ordinarily require a time expenditure of more than nine semesters.

SPEECH CURRICULUM

FIRST YEAR

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
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<tbody>
<tr>
<td>Biology 101</td>
<td>4 Biology 102</td>
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<tr>
<td>English 101</td>
<td>3 English 102</td>
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<td>Speech 102</td>
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<td>2 Minor or elective</td>
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<tr>
<td>Health-Physical Ed. 101</td>
<td>1 Health-Physical Ed. 102</td>
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| Total | 16 | 16 |

SECOND YEAR

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<tr>
<th>First Semester</th>
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<tbody>
<tr>
<td>English 201</td>
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<td>Psychology 104</td>
<td>3 Speech 223</td>
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<td>Speech 203</td>
<td>3 Speech 243</td>
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<td>3 Speech 261</td>
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<td>3 Social studies elective</td>
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<tr>
<td>Health-Physical Ed. 201</td>
<td>1 Health-Physical Ed. 202</td>
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| Total | 16 | 16 |

THIRD YEAR

<table>
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<tr>
<th>First Semester</th>
<th>Second Semester</th>
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</thead>
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<tr>
<td>Social studies elective</td>
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<tr>
<td>Speech 226</td>
<td>3 Speech 315</td>
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<td>Speech 303</td>
<td>3 Speech 342</td>
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<td>Speech 312</td>
<td>1 Minor or electives</td>
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<td>Speech 341</td>
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<tr>
<td>Methods in major or minor</td>
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</table>

| Total | 16 |

FOURTH YEAR

Semester of professional concentration, including student teaching 15
Minor or electives 12
Social studies elective 3
Geology. Major (B.S.): First year, Geology 101, 102. Second year, Geology 204, 209. Third year, Geology 311, 316. Fourth year, electives in geology. Geology 493 (or the equivalent in field work) is also required. A student majoring in geology for the B.S. degree is required to complete Chemistry 101, 102; Engineering Drawing 101 or Geography 311; Mathematics 100 or 101, and 102; and one year of either biology or physics. A minor in another science or in mathematics is recommended.

A student in this program may elect to specialize in geophysics. Such a student may omit the following from the requirements above: Geology 311, 316; Chemistry 101, 102; and biology. This student would then take mathematics through the calculus; Physics 201, 202; Physics 303, 307, 308 and Geology 414.

Major (B.A.): First year, Geology 101, 102. Second, third, and fourth years, electives in geology, including Geology 493. A minor in English, business administration, economics, library science, or geography is recommended. Some outside science background is also recommended, especially in mathematics.

Minor: Geology 101, 102 and electives in geology.

German. For the student who begins German in college. Minor: First year, German 101, 102. Second year, German 201, 202 or 203. Third year, German 301, 302. For the student with two years of high school preparation in German. Minor: First year, German 201, 202 or 203. Second year, 301, 302. Third year, at least 6 semester hours chosen from the remaining courses in German.


A student taking the recreation minor should include the following courses among his electives: Art 343, Music 211, Speech 146. Health and Physical Education 322 is also recommended.

History. Major or Minor: First year, History 151, 152. Second year, History 205, 206. Third and fourth years, electives in history chosen in consultation with advisor. Three semester hours must be chosen in American history and 3 semester hours in European history.


Major—Clothing: First year, Home Economics 101, 102, 103, 104. Second year, Home Economics 125 or 201, 202; 203, 204. Third year, Home Economics 303, 304. Fourth year, Home Economics 310. Sufficient electives in home economics to total 32 semester hours.

Major—Foods: First year, Home Economics 103, 124. Second year, Home Economics 201, 202. Third year, Home Economics 307, 308. Fourth year, sufficient electives in home economics to total 32 semester hours. Biology 101, 206; Chemistry 101, 102 or 111, 112; Chemistry 203, 205, or equivalent, are required courses.


A student interested in merchandising of clothing, textiles, and house furnishings should take a major in clothing. The following additional courses are recommended: Accounting 121; Art 101, 345; Business Administration 102, 305; Economics 201, 202; Engineering Drawing 303; Marketing 330, 431, 433; Psychology 101; Sociology 201; Speech 102.

A student especially interested in interior decoration should take a major in clothing. The following additional courses should be included: Art 101, 111, 345; Home Economics 305; Engineering Drawing 303. As many electives as possible should be chosen from the field of business administration.

A student interested in becoming a professional costume designer should take a major in clothing. Art 101, 111, 205, 345 should be included.

A student interested in journalism in the field of home economics should take the general major in home economics and a minor in journalism.

Journalism. Major: First year, Journalism 103; a student majoring in journalism should complete Business Education 111 in the first year unless he has had typewriting in high school, or passes an efficiency test. Second year, Journalism 201, 210. Third and fourth years, Journalism 301, 302, 310, 315, 422, 401, 412; electives in journalism.

Minor: First year, Journalism 103. Second year, Journalism 201, 210. Third and fourth years, Journalism 301, 302; electives in journalism.

Latin. For the student with two years of high school preparation in Latin. Minor: First year, Latin 101, 102. Second year, Latin 201, 202. Third and fourth years, 6 semester hours from remaining courses in Latin.

For the student with four years of high school preparation in Latin. Minor: First year, Latin 201, 202. Second, third, and fourth years, 14 semester hours from remaining courses in Latin.

Library Science. Minor: Second year, Library Science 201, 202. Third and fourth years, Library Science 303, 304, 403, 404, 409. A minor in library science is open to all students. It combines well, however, with preparation in such fields as the sciences, business, social sciences, history, and English.


Minor: First year, Mathematics 101, 102, 104, 105 or 105, or equivalent. Second year, Mathematics 201, 202.

It will usually require 8 semester hours in piano to meet the requirements for a major in music theory. In some cases it may require more, or less, according to the technical proficiency of the student. A description of these standards may be obtained from the chairman of the department.


The requirement for a major in applied music is 16 semester hours in voice or in one instrument.


A student minoring in music must take a minimum of 8 semester hours in applied music. It is expected that all or most of this minimum requirement will be in piano.

Philosophy. Major: Second year, Philosophy 201, 202 or 204. Third year, Philosophy 321, 322; electives in philosophy. Fourth year, electives in philosophy.

Minor: Second year, Philosophy 201. Third and fourth years, Philosophy 321, 322; electives in philosophy.

Physics. Major: Second year, Physics 201, 202. Third and fourth years, courses on the 300 and 400 level, including Physics 401, to complete a minimum of 32 semester hours in physics. At least 8 semester hours in Physics 415 must be included in the fourth year.

Minor: Second year, Physics 201, 202. Third and fourth years, 12 semester hours from 300- or 400-level courses in physics.

A student majoring or minoring in physics must take Chemistry 101, 102; Engineering Drawing 101; and Mathematics 101, 102, 104, 105 or 105 in the first year, and Mathematics 201, 202 in the second year. Students entering with high school credit in mechanical drawing are not required to take Engineering Drawing 101.

Political Science. Major or Minor: Second year, Political Science 201, 202. Third and fourth years, electives in political science.

Psychology. Major: First year, Psychology 101. Second year, any two of the following: Psychology 210, 211, 212, 213; electives in psychology. Third year, remaining two of the following: Psychology 210, 211, 212, 213; electives in psychology. Fourth year, electives in psychology.

Minor: First year, Psychology 101. Second, third, and fourth years, electives in psychology.

Electives should be selected with the advice of the advisers in the department and in accordance with the student's background and objective. Majors must demonstrate proficiency in elementary statistics. This may be accomplished by passing a proficiency examination after the completion of Psychology 210, 211, 212, 213, or by electing Psychology 388. Biology 101, 102 should be completed in the first year.

Sociology. Major or Minor: Second year, Sociology 201, 206. Third year, Sociology 301, 303; electives in sociology. Fourth year, electives in sociology.

A student majoring or minoring in sociology is required to complete Psychology 101, 104 in the first or second year. Electives are to be chosen upon the advice of the department chairman. In special cases where the needs of the student require, limited substitutions of courses in related social science departments may be permitted in the major requirements.

Spanish. For the student who begins Spanish in college. Major: First year, Spanish 101, 102. Second year, Spanish 201, 202. Third and fourth years, Spanish 301, 302, or Spanish 303, 304 and 10 semester hours from remaining courses in Spanish.

Minor: First year, Spanish 101, 102. Second year, Spanish 201, 202. Third and fourth years, Spanish 301, 302 or Spanish 303, 304.

For the student with two years of high school preparation in Spanish. Major: First year, Spanish 201, 202. Second year, Spanish 301, 302 or Spanish 303, 304. Third and fourth years, at least 18 semester hours from remaining courses in Spanish.

Minor: First year, Spanish 201, 202. Second year, Spanish 301, 302 or Spanish 303, 304. Third and fourth years, 6 semester hours from remaining courses in Spanish.


A student in public address is also required to take Speech 112, 212, 214, 225, 303, 312, 401 or 402. Recommended courses: Economics 201; English 201, 202, 303, 304; History 205, 206; Political Science 201, 202; Psychology 101, 212; Philosophy 201, 301; Sociology 201, 202.

A student in radio is also required to take Speech 168, 226, 241, 341, 362, 368. Recommended courses: Business Administration 102, 359; English 201, 202, 307, 308; Journalism 103, 330; Music 317; Physics 350; Psychology 101, 212.

A student in theatre is also required to take Speech 146, 241, 245, 541, 542, 546. Recommended courses: Art 345; Engineering Drawing 101; English 201, 202, 301, 302, 313, 415, 414; Home Economics 310; Music 317; Health and Physical Education 309; Physics 350.


A student taking a major or minor in speech and hearing therapy must take Psychology 101, 104 in the first or second year.
THE FACULTY

RALPH W. MCDONALD, 1951. A.B., Hendrix College; M.A., Ph.D., Duke University; LL.D., Hendrix College.

LLOYD A. HELM, 1938. B.A., DePauw University; M.A., Ph.D., University of Illinois. 
Professor of Economics; Dean, Graduate School; Secretary of the Faculty

EMERITUS FACULTY

FRANK J. PRUIT, 1939. B.Litt., Ohio Wesleyan University; Ped.D., Ohio University; Ohio Wesleyan University; LL.D., Miami University.

President Emeritus

REE McCAIN, 1914. B.A., National Normal University; B.A., Antioch College; M.A., Columbia University; Ph.D., New York University.

Professor Emeritus of English

CAROLINE NIELSEN, 1918. B.A., M.A., University of Nebraska.
Professor Emeritus of Foreign Language

CHARLES H. OTIS, 1930. B.A., Ph.D., University of Michigan.

Professor Emeritus of Biology

JAMES ROBERT OVERMAN, 1914. B.A., Indiana University; M.A., Columbia University; Ph.D., University of Michigan; D.Sc., Bowling Green State University.

Dean Emeritus

CLAUDE D. PEERY, 1923. B.A., Ohio Wesleyan University.

Registrar Emeritus

WALTER A. ZAUG, 1923. B.A., Valparaiso University; B.A., Indiana University; M.A., Columbia University; Ph.D., New York University.

Professor Emeritus of Education

ACTIVE FACULTY

WILBUR J. ABELL, 1947. B.S., James Millikin University; M.S., University of Illinois; Chartered Life Underwriter.

Associate Professor of Business Administration

GERALD ACKER, 1946. A.B., Allegheny College; M.S., University of Oklahoma.

Assistant Professor of Biology

LOUIS ACUFF, 1956. A.B., Indiana University; M.A., Ph.D., University of Tennessee.

Assistant Professor of Business Administration

WILLIAM DON ALEXANDER, 1946. B.S.M., Mount Union College; M.S., North Texas State Teachers College.

Assistant Professor of Music

WARREN S. ALLEN, 1946. B.M., Southwestern College; M.M., University of Michigan; 
Student of Martial Singer, Juilliard School of Music.

Associate Professor of Music

†Date after each name indicates first full-time appointment.
STEWART BERRY, 1956. B.S., M.A., University of Alabama; Ed.D., University of Cincinnati.  
Assistant Professor of Industrial Arts

LAWRENCE BLAIR, 1955. B.S., M.A., Kent State University; Ph.D., Duke University.  
Instructor in Biology

EDWIN C. BOMELI, 1956. B.S. in Business Administration, Ohio State University;  
M.A., Butler University; Certified Public Accountant (Indiana).  
Associate Professor of Accounting

IRVING M. BONAWITZ, 1955. B.S. in Business Administration, Bowling Green State University;  
M.B.A., Northwestern University; Certified Public Accountant (Ohio, Illinois and District of Columbia).  
instructor in Accounting

Assistant Professor of Art

DONALD W. BOWMAN, 1943. B.A., Mount Union College; M.A., Ph.D., Ohio State University.  
Professor of Physics

HOWARD O. BROGAN, 1953. B.A., Grinnell College; M.A., State University of Iowa;  
Ph.D., Yale University.  
Professor of English; Chairman, Department of English

Assistant Professor of Geography

Associate Professor; Director of Residential and Plant Operations

Instructor, Admissions Officer

RICHARD C. CARPENTER, 1953. B.A., Tufts College; M.A., Ph.D., Boston University.  
Assistant Professor of English

ROBERT L. CHAMBERLAIN, 1956. B.A., Drew University; M.A., Ph.D., Syracuse University.  
Instructor in English

EDWARD SCOTT CLAYS, 1947. B.A., Oberlin College; M.A., Ph.D., Yale University.  
Associate Professor of Political Science

JOHN R. COASH, 1949. B.A., Colorado College; M.A., University of Colorado; Ph.D.,  
Yale University.  
Associate Professor of Geology; Chairman, Department of Geology

Professor of Health and Physical Education

JACOB COHEN, 1959. B.A., University of Manitoba; M.A., University of Cincinnati;  
Ph.D., University of Chicago.  
Associate Professor of Economics

*On leave of absence.
Assistant Professor of Education

ARCH B. CORNELL, 1939. B.S., College of Wooster; M.A., Columbia University.
Associate Professor; Dean of Men; Dean Emeritus of Students

GILBERT W. COOKE, 1957. B.S., M.A., University of Minnesota; Ph.D., University of Wisconsin.
Professor of Business Administration

SAMUEL M. COOPER, 1946. B.A., Oberlin College; M.A., New York University; Ed.D., Western Reserve University.
Professor of Health and Physical Education; Chairman, Department of Health and Physical Education; Head Swimming Coach

WAYNE F. CORNWELL, 1943. B.S. in Education, Bowling Green State University; M.A., Ohio State University.
Associate Professor of Mathematics

Assistant Professor of Engineering Drawing

FORREST CREASON, 1951. B.A., Findlay College; M.S. in Education, Bowling Green State University.
Assistant Professor of Health and Physical Education; Golf Coach

DANIEL J. CROWLEY, 1919. B.S., Columbia University; M.P.H., University of Wisconsin.
Professor of Graphic Arts

JESSE J. CURREY, 1940. B.A., Ohio Wesleyan University; M.A., Ohio State University.
Professor of Journalism; Chairman, Department of Journalism

Instructor in English

Instructor; Head Resident, Lowry Hall

Assistant Professor of Business Administration

JOHN R. DAVIDSON, 1946. B.S. in Education, Bowling Green State University; M.S., New York University.
Assistant Professor of Business Administration; Assistant to Dean, College of Business Administration

RUSSELL DECKER, 1962. B.A., State University of Iowa; J.D., Drake University.
Assistant Professor of Business Administration

MIRIAM SHARP DELARGEY, 1952. B.A., Flora Stone Mather College; M.S. in Library Science, Western Reserve University.
Instructor in Library Science; Librarian

RAYMOND W. DERR, 1992. B.S. in Education, Kansas State Teachers College, Pittsburg; M.A., University of Kansas; Ph.D., University of Missouri.
Associate Professor of Journalism

EUGENE DICKERMAN, 1936. B.A., Grand Island College; M.A., Ph.D., Northwestern University.
Professor of Biology

Associate Professor of Foreign Language

ROBERT E. DUBERY, 1955. B.S. in Education, Ohio State University.
Assistant Instructor in Health and Physical Education; Assistant Football Coach

GRACE DURKIN, 1925. B.A., Hope College; M.A., University of Michigan.
Associate Professor of English

Assistant Professor of Music

CATHARINE ELLIS, 1948. B.S. in Education, Ohio Northern University; B.S. in Library Science, Western Reserve University.
Instructor; Librarian

GERTRUDE EPPS, 1941. B.S., Michigan State Normal College; M.S., University of Michigan.
Associate Professor of Health and Physical Education

Assistant Professor of Foreign Language

LEON E. FAULKENBERG, 1950. B.A., Wichita University; B.M., University of Kansas; M.A., Columbia University.
Associate Professor of Music

EDWARD F. FERRELL, 1955. B.S., Western Kentucky State College; M.S., Ph.D., Vanderbilt University.
Instructor in Chemistry

Instructor in Education (Sandusky Branch)

LYLE REXFORD FLETCHER, 1946. B.A., Ohio University; M.A., Ohio State University.
Assistant Professor of Geography

GILES R. FLOYD, 1948. B.A., Wofford College; M.A., Vanderbilt University; Ph.D., State University of Iowa.
Associate Professor of English

RALPH W. FRANK, 1956. B.S., M.A., Kent State University; Ph.D., Northwestern University.
Associate Professor of Geography

Instructor; Head Resident, Rodgers Quadrangle

CECIL M. FREEMAN, 1948. B.S. in Education, Kansas State Teachers College, Emporia; M.A., Ph.D., State University of Iowa.
Associate Professor of Psychology

*On leave of absence.
THE FACULTY

EARL R. GUTHER, JR., 1954. B.S., M.A., Ball State Teachers College; Ph.D., University of Minnesota.

Assistant Professor of Business Education

W. HEINLEH HALI, 1956. B.A., Muskingum College; Ph.D., Ohio State University.

Professor of Chemistry; Chairman, Department of Chemistry

CARL W. HALBRECHT, 1951. B.S., M.S., Ph.D., University of Michigan.

Assistant Professor of Biology

ERNST S. HAMILTON, 1956. B.S., University of Massachusetts; M.S., Ph.D., Rutgers University.

Instructor in Biology

AVRELL J. HAMMER, 1946. B.S., Parsons College; M.S., Ph.D., Iowa State College of Agriculture and Mechanic Arts.

Professor of Chemistry

HAROLD T. HAMMER*, 1946. B.S., M.S., University of Wisconsin.

Assistant Professor of Biology

RALPH G. HARMON, 1938. B.S. in Education, Ohio Northern University; M.A., Ph.D., Ohio State University.

Professor of Business Administration; Vice President

DALE HAYN, 1946. B.S. in Education; M.A., Ohio State University.

Associate Professor of Music

HELEN W. HENDERSON, 1925. B.Ph., University of Chicago; M.A., Columbia University.

Associate Professor of Home Economics

ROBERT D. HENDERSON, 1954. B.B.A., Westminster College; M.B.A., Ohio State University; Ph.D., University of Pittsburgh.

Associate Professor of Business Administration; Chairman, Department of Business Administration


Instructor in Speech


Instructor in Health and Physical Education; Assistant Basketball Coach; Athletic Equipment Manager

LAURA E. HERTON, 1918. B.S., Ohio State University; M.S., University of Chicago.

Professor of Home Economics


Professor of Industrial Arts; Chairman, Department of Industrial Arts and Engineering Drawing

JOSEPH L. HAMMER, 1947. B.A., North Central College; M.M., Northwestern University; Study at the State Conservatory of Music, Munich, Germany, and University of Montreal, Canada; Student of Alexander Kipnis and Gerhard Huesch.

Associate Professor of Music

*On leave of absence.
CECIL N. HINMAN, 1996. B.A., Wooster College; M.B.A., Harvard University; Certified Public Accountant (Ohio).
Lecturer in Accounting

CLYDE HISSONG, 1928. B.S. in Education, Miami University; M.A., Columbia University; Ph.D., Ohio State University; L.L.D., Miami University.
Professor of Education

Instructor in Education

ADNE MARIE HOOLEY, 1954. B.S., Arnold College, Bridgewater University; M.A., Teachers College, Columbia University; Ph.D., University of Wisconsin.
Assistant Professor of Health and Physical Education

LOYAL E. HORTON, 1962. B.S., Michigan State University; M.S., Pennsylvania State University.
Assistant Professor of Home Economics; Supervisor of Food Services

ROBERT ROGERS HUBCHIN, 1947. B.A., University of Kansas City; M.A., University of Colorado; Ph.D., Indiana University.
Associate Professor of English

HOWARD B. HUFFMAN, 1948. B.S. in Education, Cincinnati College; M.B.A., University of Denver.
Assistant Professor of Business Administration

Associate Professor of History

Instructor in Chemistry

MELVIN HYMAN, 1952. B.A., Brooklyn College; M.A., Ph.D., Ohio State University.
Assistant Professor of Speech; Director, Speech and Hearing Clinic

NYRTLE JENSEN, 1958. B.M., St. Olaf College; B.M., American Conservatory of Music; M.M., Eastman School of Music of the University of Rochester.
Associate Professor of Music

OCHLICH JIKA, 1949. B.A., Western Reserve University; M.B.A., Harvard University.
Assistant Professor of Business Administration

MADGE E. JOHNSON, 1937. B.S., University of Arkansas; M.A., Columbia University.
Associate Professor of Home Economics

WILLIAM C. JORDAN, 1925. B.S. in Education, M.A., Ohio State University.
Associate Professor of Education

HOWARD H. KANE, 1946. B.S. in Business Administration, University of Dayton; B.S. in Education, M.A., Ohio State University.
Associate Professor of Accounting

PAUL B. KANOWSKI, 1956. B.S., M.S., University of North Dakota; Ph.D., University of Michigan.
Instructor in Biology

LOWAY B. KARNES, 1945. B.A., Muskingum College; M.A., Ph.D., Ohio State University.
Professor of Geography; Chairman, Department of Geography

THE FACULTY

Assistant Professor of Health and Physical Education; Tennis Coach

Professor of Music; Director of Choral Groups

RUTH KILMER, 1947. B.S. in Education, Duquesne University; B.S. in Library Science, Western Reserve University.
Instructor; Librarian

Assistant Professor; Librarian

DONALD C. KLECKNER, 1952. B.A., Heidelberg College; M.A., Ph.D., University of Michigan.
Associate Professor of Speech; Chairman, Department of Speech

JAMES KNAPE, 1956. A.B., Bowling Green State University.
Assistant Instructor in Health and Physical Education; Freshman Basketball Coach; Freshman Baseball Coach

DAVID M. KRAVICH, 1946. B.A., College of Wooster; M.A., Ph.D., Ohio State University.
Professor of Mathematics

Professor; Business Manager

Associate Professor of Art

HELEN DZIADER LAROFF, 1952. B.M., M.M., Artist's Diploma, Eastman School of Music of the University of Rochester.
Instructor in Music

Instructor in English

Professor of English; Chairman, Department of Library Science; Director of University Library

LOWELL P. LELAND, 1946. B.A., Colby College; M.A., University of Maine; Ph.D., Ohio State University.
Associate Professor of English

LOYD J. LIEZ, 1955. B.M., Oberlin College Conservatory of Music; Post-graduate Diploma, Juilliard School of Music.
Instructor in Music

*On leave of absence.
THE FACULTY

ROBERT E. MCKAY, 1944. B.A., M.S., Ohio State University.  
Assistant Professor of Physics; Financial Aid Counselor

VIRGINIA MERRELL, 1947. B.A., Bowling Green State University; M.A. in Library Science, University of Michigan.  
Instructor; Librarian

FRANK G. MESSER, 1945. B.A., University of Nebraska; M.A., Northwestern University; Ph.D., University of Nebraska.  
Associate Professor of Biology

FRANK L. MIESLE, 1948. B.A., M.A., Bowling Green State University; Ph.D., Ohio State University.  
Assistant Professor of Speech; Director, University Theatre

FRANK F. MILES, 1953. B.A., M.S.W., Ph.D., University of Washington.  
Assistant Professor of Sociology

Lecturer; Director, Mansfield Branch of College of Education

Instructor in Industrial Arts

Assistant Professor of Business Education

Intern Instructor in Psychology

Assistant Professor of English

EVERETT G. MYERS, 1947. B.A., Western Reserve University; Ph.D., Johns Hopkins University.  
Associate Professor of Biology

Associate Professor of English

BERNARD FREDERICK NORDMANN, 1929. B.A., Stanford University; M.A., Ph.D., University of Illinois.  
Professor of History

HAROLD B. OBER*, 1946. B.A., Adrian College; M.A., Ohio State University.  
Assistant Professor of Speech

Assistant Professor of Art

Assistant Professor of English

*On leave of absence.
THE FACULTY


C. GLENN SWANSON, 1934. B.A., M.A., Colorado State College of Education; Ph.D., New York University. Professor of Sociology; Chairman, Department of Sociology.

JACQUELINE E. TIMM, 1946. B.A., M.A., Ph.D., University of Texas. Associate Professor of Political Science.

MAE A. TINDALL, 1944. B.A., Willamette University; M.A., Columbia University. Assistant Professor of Education.

HAROLD E. TINNAPPEL, 1949. B.S. in Education; M.A., Ph.D., Ohio State University. Associate Professor of Mathematics.

AMY TORGERSON, 1948. B.S., Central Missouri State College; M.A., New York University. Instructor in Health and Physical Education.

ROLAND M. TORGERSON, 1947. B.S., M.A., University of Minnesota. Professor of Industrial Arts.

TOM HOLLINGWORTH TUTTLE, 1946. B.A., M.A., University of Texas; Ph.D., University of Southern California. Professor of Philosophy; Chairman, Department of Philosophy.

ROBERT W. TWYMAN, 1948. B.A., Indiana University; M.A., Ph.D., University of Chicago. Associate Professor of History.

LELAND S. VAN SCOYOC, 1946. B.S., M.S., Kansas State College; D.B.A., Indiana University. Associate Professor of Economics; Chairman, Department of Economics.

AGNES A. VAN WINKLE, 1953. B.A., Evansville College. Laboratory Instructor in Education.

HAROLD VAN WINKLE, 1953. B.S., Southeast Missouri State College; M.S., Ed.D., Indiana University. Assistant Professor; Director, University Publications and News Service.

GLENN I. VAN WORMER, 1947. B.S. in Education, M.Ed., Bowling Green State University. Instructor; Registrar and Director of Admissions.

JACOB VERDUIN, 1955. B.S., M.S., Ph.D., Iowa State College of Agriculture and Mechanic Arts. Associate Professor of Biology; Chairman, Department of Biology.


HARMON VOSSKUL, 1946. B.A., Hope College; M.A., University of Minnesota. Associate Professor of Economics.

WILLARD F. WANKELMAN, 1946. B.S. in Education, M.A., Ohio State University. Professor of Art; Chairman, Department of Art.

*On leave of absence.
MARY ARMSTRONG WATT, 1944. B.S., Simmons College; M.S., Wellesley College; Ph.D., State University of Iowa.
  Assistant Professor of Health and Physical Education

  Professor of Chemistry

MARTHA GESLING WEBER, 1946. B.A., Ohio Northern University; M.A., Ohio State University; Ph.D., Duke University.
  Professor of Education; Director, Education Clinic

  Assistant Professor of Music; Director of Bands

JOHN EVERETT WENRICH, 1947. B.A., M.A., Ph.D., Ohio State University.
  Professor of Psychology; Chairman, Department of Psychology

KARL E. WHINNERY, 1953. B.S., Mount Union College; M.A., University of Wisconsin.
  Lecturer in Education; Director, Sandusky Branch

EMMA WHITEFORD, 1955. B.S., North Dakota Agricultural College; M.S., Ed.D., University of Illinois.
  Associate Professor of Home Economics; Chairman, Department of Home Economics

MARY ELIZABETH WHITNEY, 1952. B.S., University of Michigan; M.S., New York University.
  Assistant Professor of Health and Physical Education

  Assistant Professor; Director of Residence Services

ROBERT H. WHITTAKER, 1941. B.S. in Education, Miami University; M.A., Bowling Green State University.
  Assistant Professor of Health and Physical Education; Track Coach

E. ELOISE WHITWER, 1946. B.A., Grand Island College; M.A., University of Nebraska.
  Assistant Professor of Biology

  Assistant Professor of Art

  Instructor in Music

  Assistant Professor of Economics

  Instructor; Head Resident, Alice Prout Residence Hall

FLORENCE J. WILLIAMSON, 1925. B.A., Cedarville College; M.A., Ph.D., Ohio State University.
  Professor of Education

THE FACULTY

E. Harvey Wohler, 1946. B.A., Wittenberg College; M.A., University of Toledo.
  Assistant Professor of Mathematics

  Intern Instructor in English

JAMES CLYDE WRIGHT, 1947. B.A., Muskingum College; M.A., Ph.D., Ohio State University.
  Associate Professor of Psychology; Director, Psychology Clinic

  Instructor; Assistant Dean of Men

RAYMOND YEAGER, 1950. B.S. in Education, M.A., Bowling Green State University; Ph.D., Ohio State University.
  Assistant Professor of Speech; Forensics Coach

MARGARET YOON, 1929. B.A., Oberlin College; B.S. in Library Science, Western Reserve University.
  Associate Professor of Library Science; Librarian

CHARLES W. YOUNG, 1945. B.A., Ohio Wesleyan University; M.A., Ph.D., Ohio State University.
  Professor of Education; Chairman, Department of Education

FACULTY IN MILITARY SCIENCE AND TACTICS*

HARRY M. MYERS, 1955. B.S., U.S. Military Academy; Artillery School; Command and General Staff College; Lieutenant Colonel, U.S. Army.
  Professor of Military Science and Tactics; Chairman, Department of Military Science and Tactics

ROBERT G. MENEFEE, JR., 1954. B.S. in Business Administration, Miami University; Officer Candidate School; Artillery Officers Advanced Course; Captain, U.S. Army.
  Assistant Professor of Military Science and Tactics

  Assistant Professor of Military Science and Tactics

  Assistant Professor of Military Science and Tactics

GEORGE F. RALPH, JR., 1956. Fenn College; University of California; Chief Warrant Officer, U.S. Army.
  Instructor in Military Science and Tactics

  Instructor in Military Science and Tactics

  Instructor in Military Science and Tactics

*Listed in order of military rank.
FACULTY IN AIR SCIENCE* 
Professor of Air Science; Chairman, Department of Air Science

TOM B. FOULKE, 1956. B.S. in Engr., U.S. Military Academy; Millard Preparatory School; Bethany College; Academic Instructors School; Major, U.S. Air Force.
Assistant Professor of Air Science

JACK O. HORTON, 1956. B.S. in Military Science, University of Maryland; Air Force
Academic Instructors School; Major, U.S. Air Force.
Assistant Professor of Air Science

Assistant Professor of Air Science

Assistant Professor of Air Science

Instructor in Air Science

Instructor in Air Science

Instructor in Air Science

Instructor in Air Science

PART-TIME FACULTY

DOROTHY H. ABEILL. B.S., University of Illinois; M.A., Columbia University.
Instructor in English, Sandusky Branch

AMY ALLEN. B.S., M.A., Columbia University.
Extension Instructor in Education

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JOHN BERTA.** B.A., Miami University. Speech

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JAMES A. FRISH. A.B., Ohio Northern University. Education

ANTONIO S. GIANNINI. I.L.L., University of Padova, Italy. Psychology

LARRY EUGENE GRIEVARD. B.A., University of Toledo. Speech

HARRY T. GROAT*. B.S. in Education, Bowling Green State University. Sociology

JOANN HALCKER. B.S., Bowling Green State University. Biology

PHILIP HALCKER. B.A., Bowling Green State University. Biology

*Second semester.
**First semester.
who wish to try out for roles in plays or participate as technical workers. The Theatre serves as a laboratory for theatre and speech students, and through its presentations, the Theatre also enriches the cultural experience of the student body and community.

Play production activity is organized so as to provide training for beginners as well as for more experienced students. Plays produced during the winter include a large number of one-acts, studio plays which are often experimental in nature, and from four to six major productions ranging from recent Broadway successes to theatre masterpieces of earlier periods. Seven full-length plays are produced each summer at the Summer Theatre.

The University Theatre possesses one of the finest physical plants in the state, with well-equipped workshops and stages. The Main Auditorium has a large and well-designed stage and a seating capacity of 1,200.

Gate Theatre in the Speech Building, with its smaller stage and house, is ideally suited to more intimate productions. Students build, paint, and light each production under the supervision of the faculty.

A children’s play and the Family Play Series of the Ohio Department of Mental Health tour northwest Ohio annually.

RADIO STATION WBGU

The University’s educational FM station, WBGU, provides a laboratory for students whose academic work calls for preparation and presentation of radio programs. The programs include other students who wish to participate on a talent or resource basis.

The station, which carries a regular daily schedule of programs, is licensed by the Federal Communications Commission to broadcast on a frequency of 88.1 megacycles. A large portion of the programs are prepared and presented by students in radio production; drama, music, news, speeches, interviews, and special events are included.

PUBLIC ADDRESS AND DEBATE

A broad program in public address, including public speaking, discussion, debate, extempeor speaking, and interpretative reading, is sponsored by the Department of Speech, with large numbers of students participating. Among activities are programs and contests on the campus, appearances before civic, cultural, and educational groups in neighboring cities, and participation in intercollegiate speech contests.

Varsity debate teams traveled 7,500 miles last year to take part in 90 intercollegiate debates with 40 colleges and universities in 10 states. In addition, debates and speech students took part in intramural forensic tournaments on the campus, and presented talks, discussions, and debates over radio and before numerous service club and high school audiences in northwest Ohio.

MUSIC ORGANIZATIONS

A number of excellent music organizations, some nationally known, are sponsored by the Department of Music. These organizations are open to all students whether they are majoring in music or not, with selection made on the basis of tryouts. Most of them are composed of both men and women.

A Cappella Choir, a nationally known vocal group of 200 students, has performed in every state east of the Mississippi River on concert tours. For a number of years the Choir has presented a special program over the NBC network at the opening or during the Christmas season. In addition to local appearances, major tours are scheduled in odd numbered years and alternate with tours of the Treble Clef Club.

Treble Clef Club is a vocal group of 100 girls. The club presents concerts on the campus and in neighboring cities in addition to taking major tours on an alternating basis with the A Cappella Choir.

The Choral Society is composed of members of the A Cappella Choir, Treble Clef Club, other students, and citizens of the Bowling Green community. It presents the “Messiah” in December in even-numbered years, alternating with the Christmas program by the two campus and choral groups. It also gives an oratorio or other major choral work in the spring except when an occasional opera is performed.

Marching Band, open to both men and women, takes the limelight each fall with its halftime shows on the football field. The band has over 100 members as well as majorettes and a drum major. A group drawn from this band comprises the Pep Band which plays at home basketball games.

Concert Band takes up when the Marching Band ends its season in November. This 100-piece band presents a series of concerts on the
campus, including outdoor concerts in the spring, and goes on tour each spring.

*University Symphony Orchestra* is a full symphonic ensemble and is open to all qualified men and women students, music majors and non-music majors alike. The orchestra appears in several home concerts each year and from time to time gives concerts in neighboring cities, performing standard works from the symphonic repertoire.

*The String Orchestra* is a smaller organization drawn from the personnel of the University Symphony Orchestra, with membership on the same basis as the Symphony Orchestra. It, too, is heard in concerts of ensemble music in the course of the year.

Besides these organizations, the Department of Music also sponsors a number of vocal and instrumental ensembles which are open to qualified students.

**STUDENT PUBLICATIONS**

*The B-G News*, the University newspaper, is published twice a week by students. It offers a variety of experience in writing, editing, and advertising.

*The Key*, the University yearbook, is produced by a student staff under the guidance of the journalism faculty. It offers opportunity for expression of a variety of talents in writing, art, photography, and business management.

Both of these publications have consistently received high ratings in annual competitions of national scholastic press associations.

*Eyes*, a literary magazine, is published twice a year by students. Contributions of essays, short stories, poetry, editorials, and criticism are submitted by students, with selections to be published chosen by the staff.

**PHYSICAL EDUCATION AND INTRAMURAL SPORTS**

The University has excellent facilities for instruction in health and physical education and maintains an outstanding program in athletics for both men and women. The program includes a very large percentage of the student body and a great variety of activities, which range from badminton to swimming and from golf to modern dance. Facilities include the Men's Physical Education Building, Women's

*S T U D E N T  L I F E  A N D  A C T I V I T I E S* 75

Physical Education Building, Natatorium, Stadium with football field and track, golf course, tennis courts, and playing fields for baseball, hockey, soccer, archery, and softball.

The program in health and physical education consists of (1) courses required of students in the freshman and sophomore years; (2) a large number of advanced courses for students who wish additional instruction or who plan to teach health and physical education; (3) voluntary participation in intramural sports by all who are interested; and (4) intercollegiate athletics for those who are specially talented.

The intramural program, one of the most extensive and active to be found anywhere, includes from 15 to 20 sports for men and women. Among these sports are archery, badminton, basketball, golf, handball, hockey, horseshoes, softball, swimming, table tennis, touch football, track, and volleyball. From 30 to 50 per cent of the student body take an active part in this intramural program.

**INTERCOLLEGIATE ATHLETICS**

Intercollegiate athletic teams of Bowling Green State University, named the Falcons, compete with teams of other colleges and universities in football, basketball, baseball, golf, tennis, swimming, track, cross-country, and wrestling. Women's hockey and swimming teams compete in a schedule of contests with teams from other colleges and universities.

The University is a member of the Mid-American Conference*, in which it competes for championships in all the Conference sports. In 1956 the Falcons won the Mid-American Conference championships in swimming, golf, and football. Intercollegiate competition, however, is not limited to teams in the Conference.

Only students who are in good scholastic standing are eligible to compete in interscholastic contests. When a student becomes a candidate for a position on any of the teams that compete in intercollegiate contests, it is presumed that he does so with the knowledge and consent of his parents or guardian. Every precaution is taken to safeguard the health of students who participate in intercollegiate sports. A physician is always present at intercollegiate contests in the more rigorous sports. Although the University carries a restricted type of insurance on team members, it can guarantee to pay only the cost of first-aid treatment in the event of injury.

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*Other MAC members: Kent State University, Ohio University, Miami University, the University of Toledo, Western Michigan College, and Marshall College.*