1953-1954 Bulletin

Follow this and additional works at: http://ecommons.udayton.edu/bulletin

Recommended Citation
http://ecommons.udayton.edu/bulletin/53

This Book is brought to you for free and open access by the Office of the Registrar at eCommons. It has been accepted for inclusion in Undergraduate Bulletins by an authorized administrator of eCommons. For more information, please contact frice1@udayton.edu, mschlangen1@udayton.edu.
The provisions of this catalogue are to be considered directive in character, and not as an irrevocable contract between the student and the University. The University reserves the right to change any provision or requirement of this catalogue.

For catalogue and information, address:

The Director of Admissions
University of Dayton
Dayton 9, Ohio
## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calendar</td>
<td>4</td>
</tr>
<tr>
<td>Governing Boards</td>
<td>11</td>
</tr>
<tr>
<td>Administration</td>
<td>12</td>
</tr>
<tr>
<td>Standing Committees</td>
<td>14</td>
</tr>
<tr>
<td>Faculty</td>
<td>16</td>
</tr>
<tr>
<td>General Information</td>
<td>42</td>
</tr>
<tr>
<td>Admission</td>
<td>47</td>
</tr>
<tr>
<td>Curriculum</td>
<td>48</td>
</tr>
<tr>
<td>Academic Requirements</td>
<td>49</td>
</tr>
<tr>
<td>Expenses</td>
<td>53</td>
</tr>
<tr>
<td>College of Arts and Sciences</td>
<td>55</td>
</tr>
<tr>
<td>Courses of Instruction</td>
<td>102</td>
</tr>
<tr>
<td>College of Engineering</td>
<td>188</td>
</tr>
<tr>
<td>Technical Institute</td>
<td>211</td>
</tr>
<tr>
<td>Courses of Instruction</td>
<td>215</td>
</tr>
<tr>
<td>Degrees and Awards</td>
<td>221</td>
</tr>
<tr>
<td>Enrollment</td>
<td>231</td>
</tr>
<tr>
<td>Index</td>
<td>232</td>
</tr>
<tr>
<td></td>
<td>1953 SEPTEMBER</td>
</tr>
<tr>
<td>----------</td>
<td>-------------------------</td>
</tr>
<tr>
<td></td>
<td>S M T W T F S</td>
</tr>
<tr>
<td></td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td></td>
<td>6 7 8 9 10 11 12</td>
</tr>
<tr>
<td></td>
<td>13 14 15 16 17 18 19</td>
</tr>
<tr>
<td></td>
<td>27 28 29 30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1954 OCTOBER</th>
<th>1954 FEBRUARY</th>
<th>1954 JUNE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S M T W T F S</td>
<td>S M T W T F S</td>
<td>S M T W T F S</td>
</tr>
<tr>
<td></td>
<td>1 2 3</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td></td>
<td>4 5 6 7 8 9 10</td>
<td>7 8 9 10 11 12 13</td>
<td>6 7 8 9 10 11 12 13 14 15</td>
</tr>
<tr>
<td></td>
<td>11 12 13 14 15 16 17</td>
<td>14 15 16 17 18 19 20</td>
<td>13 14 15 16 17 18 19 16</td>
</tr>
<tr>
<td></td>
<td>18 19 20 21 22 23 24</td>
<td>21 22 23 24 25 26 27</td>
<td>20 21 22 23 24 25 26</td>
</tr>
<tr>
<td></td>
<td>25 26 27 28 29 30 31</td>
<td>28</td>
<td>27 28 29 30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1954 NOVEMBER</th>
<th>1954 MARCH</th>
<th>1954 JULY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S M T W T F S</td>
<td>S M T W T F S</td>
<td>S M T W T F S</td>
</tr>
<tr>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5</td>
<td>1 2 3</td>
</tr>
<tr>
<td></td>
<td>8 9 10 11 12 13 14</td>
<td>7 8 9 10 11 12 13</td>
<td>4 5 6 7 8 9 10</td>
</tr>
<tr>
<td></td>
<td>15 16 17 18 19 20 21</td>
<td>14 15 16 17 18 19 20</td>
<td>11 12 13 14 15 16 17</td>
</tr>
<tr>
<td></td>
<td>22 23 24 25 26 27 28</td>
<td>21 22 23 24 25 26 27</td>
<td>18 19 20 21 22 23 24</td>
</tr>
<tr>
<td></td>
<td>29 30</td>
<td>28 29 30</td>
<td>25 26 27 28 29 30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1954 DECEMBER</th>
<th>1954 APRIL</th>
<th>1954 AUGUST</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S M T W T F S</td>
<td>S M T W T F S</td>
<td>S M T W T F S</td>
</tr>
<tr>
<td></td>
<td>1 2 3 4 5</td>
<td>1 2 3</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td></td>
<td>6 7 8 9 10 11 12</td>
<td>4 5 6 7 8 9 10</td>
<td>8 9 10 11 12 13 14</td>
</tr>
<tr>
<td></td>
<td>13 14 15 16 17 18 19</td>
<td>11 12 13 14 15 16 17</td>
<td>15 16 17 18 19 20 21</td>
</tr>
<tr>
<td></td>
<td>20 21 22 23 24 25 26</td>
<td>18 19 20 21 22 23 24</td>
<td>22 23 24 25 26 27 28</td>
</tr>
<tr>
<td></td>
<td>27 28 29 30 31</td>
<td>25 26 27 28 29 30</td>
<td>29 30 31</td>
</tr>
</tbody>
</table>
Six. 8, 9, Tuesday, Wednesday, 8:20 a.m.

Sept. 8, Tuesday
Sept. 9, Wednesday
Sept. 10, Thursday
Sept. 11, Friday
Sept. 12, Saturday
Sept. 14, Monday
Sept. 17, Thursday
Sept. 19, Saturday
Oct. 5, Monday
Oct. 6, 7, 8, Tuesday, Wednesday, Thursday
Nov. 7, Saturday
Nov. 25, Wednesday
Nov. 29, Sunday
Nov. 30, Monday
Dec. 8, Tuesday
Dec. 19, Saturday

Introduction:
Placement tests for all new students, including transfer students, who have not already taken these tests at the University of Dayton Guidance Center.
Registration for upperclassmen of Dayton area.
Registration for all transfer students, including U. D. students changing to a different division.
Registration for all beginning freshmen, A to L.
Registration for all beginning freshmen, M to Z.
Registration for boarding students and those whose permanent residence is not in Dayton. (Breakfast on this day is first meal served in campus dining room.)
Classes begin at 8:00 a.m.
Mass in honor of the Holy Ghost.
Last day for late registration or change in schedules.
As of this date, all withdrawals are recorded as WP or WF.
Annual Retreat.
Mid-term progress reports.
Thanksgiving recess begins at noon.
Campus students return before 11:50 p.m.
Classes resume at 8:00 a.m.
Feast of the Immaculate Conception. No day classes.
Christmas recess begins at noon.

1954

Jan. 3, Sunday
Jan. 4, Monday
Jan. 22, Friday
Jan. 25-29
Monday-Friday

Campus students return before 11:50 p.m. (First meal served on following day in campus dining room.)
Classes resume at 8:00 a.m.
Chaminade Day.
Semester examinations.
SECOND SEMESTER

Feb. 1, 2, Monday,
Tuesday, 8:20 a.m.
Feb. 3, Wednesday
Feb. 4, Thursday
Feb. 5, Friday
Feb. 8, Monday
Feb. 13, Saturday
March 1, Monday
March 3, Wednesday
April 3, Saturday
April 14, Wednesday
April 19, Monday
April 20, Tuesday
May 27, Thursday
May 28, Friday
May 30, Sunday
May 31, Monday
June 1-June 4
Tuesday-Friday
June 5, Saturday

Placement tests for all new students, including transfer students, who have not already taken these tests at the University of Dayton Guidance Center.

Registration for students of Dayton area.

Consultation and registration for all new students, and for U. D. students transferring to a different division.

Registration for boarding students and those whose permanent residence is not in Dayton.

Classes begin at 8:00 a.m.

Last day for late registration or change in schedules.

As of this date, all withdrawals are recorded as WP or WF.

Ash Wednesday.

Mid-term progress reports.

Easter recess begins at noon.

Campus students return before 11:50 p.m.

Classes resume at 8:00 a.m.

Feast of the Ascension. No day classes.

Honors Convocation.

Baccalaureate service.

Memorial Day observance. No day classes.

Semester examinations.

Commencement, 2:30 p.m.
### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept. 16-19</td>
<td>Registration. Wednesday, Thursday, Friday, 6:00 p.m. to 9:00 p.m.</td>
</tr>
<tr>
<td></td>
<td>Saturday, 8:00 a.m. to 12:00 noon.</td>
</tr>
<tr>
<td>Sept. 21, Monday</td>
<td>Evening classes begin on campus and at Wright-Patterson Air Force Base.</td>
</tr>
<tr>
<td>Sept. 26, Saturday</td>
<td>Last day for late registration or change of classes.</td>
</tr>
<tr>
<td>Nov. 7, Saturday</td>
<td>Mid-term progress reports.</td>
</tr>
<tr>
<td>Nov. 25, Wednesday</td>
<td>No evening classes; beginning of Thanksgiving recess.</td>
</tr>
<tr>
<td>Nov. 30, Monday</td>
<td>Evening classes resume.</td>
</tr>
<tr>
<td>Dec. 8, Tuesday</td>
<td>Feast of the Immaculate Conception. No evening classes.</td>
</tr>
<tr>
<td>Dec. 21, Monday</td>
<td>No evening classes; beginning of Christmas recess.</td>
</tr>
</tbody>
</table>

### 1954

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 4, Monday</td>
<td>Evening classes resume.</td>
</tr>
<tr>
<td>Jan. 25-30</td>
<td>Final examinations. (Examinations are to be given on the evening of the last scheduled class meeting of this week.)</td>
</tr>
<tr>
<td>Monday-Saturday</td>
<td></td>
</tr>
</tbody>
</table>

### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb. 3-6</td>
<td>Registration. Wednesday, Thursday, Friday, 6:00 p.m. to 9:00 p.m.</td>
</tr>
<tr>
<td></td>
<td>Saturday, 8:00 a.m. to 12:00 noon.</td>
</tr>
<tr>
<td>Feb. 8, Monday</td>
<td>Evening classes begin on campus and at Wright-Patterson Air Force Base.</td>
</tr>
<tr>
<td>Feb. 13, Saturday</td>
<td>Last day for late registration or change of classes.</td>
</tr>
<tr>
<td>April 3, Saturday</td>
<td>Mid-term progress reports.</td>
</tr>
<tr>
<td>April 14, Wednesday</td>
<td>No evening classes; beginning of Easter recess.</td>
</tr>
<tr>
<td>April 20, Tuesday</td>
<td>Evening classes resume.</td>
</tr>
<tr>
<td>May 27, Thursday</td>
<td>Feast of the Ascension. No evening classes.</td>
</tr>
<tr>
<td>May 31, Monday</td>
<td>Memorial Day observance. No evening classes.</td>
</tr>
<tr>
<td>June 1-June 5</td>
<td>Final examinations. (Examinations are to be given on the evening of the last scheduled class meeting of this week.)</td>
</tr>
<tr>
<td>Tuesday-Saturday</td>
<td></td>
</tr>
</tbody>
</table>

### Summer School

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 21-August 1, 1954</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1954</td>
</tr>
<tr>
<td>-------</td>
<td>--------------</td>
</tr>
<tr>
<td><strong>SEPTEMBER</strong></td>
<td></td>
</tr>
<tr>
<td>S M T W T F S</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td></td>
<td>5 6 7 8 9 10 11</td>
</tr>
<tr>
<td></td>
<td>12 13 14 15 16 17 18</td>
</tr>
<tr>
<td></td>
<td>19 20 21 22 23 24 25</td>
</tr>
<tr>
<td></td>
<td>26 27 28 29 30</td>
</tr>
</tbody>
</table>

| **OCTOBER** |            |              |
| S M T W T F S | 1 2 3 4 5 6 | 1 2 3 4 5 6 7 |
|            | 3 4 5 6 7 8 9 | 5 6 7 8 9 10 11 |
|            | 10 11 12 13 14 15 16 | 12 13 14 15 16 17 18 |
|            | 17 18 19 20 21 22 23 | 19 20 21 22 23 24 25 |
|            | 24 25 26 27 28 29 30 | 26 27 28 29 30 |
|            | 31 | |

| **NOVEMBER** |            |              |
| S M T W T F S | 1 2 3 4 5 6 | 1 2 3 4 5 6 7 |
|            | 7 8 9 10 11 12 13 | 3 4 5 6 7 8 9 |
|            | 14 15 16 17 18 19 20 | 10 11 12 13 14 15 16 |
|            | 21 22 23 24 25 26 27 | 17 18 19 20 21 22 23 |
|            | 28 29 30 | 24 25 26 27 28 29 30 |
|            |           | 31 |

| **DECEMBER** |            |              |
| S M T W T F S | 1 2 3 4 5 6 | 1 2 3 4 5 6 7 |
|            | 5 6 7 8 9 10 11 | 7 8 9 10 11 12 13 |
|            | 12 13 14 15 16 17 18 | 14 15 16 17 18 19 20 |
|            | 19 20 21 22 23 24 25 | 21 22 23 24 25 26 27 |
|            | 26 27 28 29 30 31 | 28 29 30 31 |

| **JANUARY** |            |              |
| S M T W T F S | 1 2 3 4 5 6 | 1 2 3 4 5 6 7 |
|            | 2 3 4 5 6 7 8 | 8 9 10 11 12 13 14 |
|            | 9 10 11 12 13 14 15 | 15 16 17 18 19 20 21 |
|            | 16 17 18 19 20 21 22 | 22 23 24 25 26 27 28 |
|            | 23 24 25 26 27 28 29 | 29 30 31 |

| **MARCH** |            |              |
| S M T W T F S | 1 2 3 4 5 6 | 1 2 3 4 5 6 7 |
|            | 6 7 8 9 10 11 12 | 3 4 5 6 7 8 9 |
|            | 13 14 15 16 17 18 19 | 10 11 12 13 14 15 16 |
|            | 20 21 22 23 24 25 26 | 17 18 19 20 21 22 23 |
|            | 27 28 29 30 31 | 24 25 26 27 28 29 30 |

| **MAY** |            |              |
| S M T W T F S | 1 2 3 4 5 6 7 | 1 2 3 4 5 6 7 8 |
|            | 8 9 10 11 12 13 14 | 9 10 11 12 13 14 15 |
|            | 15 16 17 18 19 20 21 | 16 17 18 19 20 21 22 |
|            | 22 23 24 25 26 27 28 | 23 24 25 26 27 28 29 |
|            | 29 30 31 | 30 31 |

| **JUNE** |            |              |
| S M T W T F S | 1 2 3 4 5 6 | 1 2 3 4 5 6 7 |
|            | 5 6 7 8 9 10 11 | 3 4 5 6 7 8 9 |
|            | 12 13 14 15 16 17 18 | 10 11 12 13 14 15 16 |
|            | 19 20 21 22 23 24 25 | 17 18 19 20 21 22 23 |
|            | 26 27 28 29 30 | 24 25 26 27 28 29 30 |
|            | 31 | |

| **APRIL** |            |              |
| S M T W T F S | 1 2 3 4 5 6 | 1 2 3 4 5 6 7 |
|            | 3 4 5 6 7 8 9 | 7 8 9 10 11 12 13 |
|            | 10 11 12 13 14 15 16 | 14 15 16 17 18 19 20 |
|            | 17 18 19 20 21 22 23 | 21 22 23 24 25 26 27 |
|            | 24 25 26 27 28 29 30 | 28 29 30 31 |

| **AUGUST** |            |              |
| S M T W T F S | 1 2 3 4 5 6 | 1 2 3 4 5 6 7 |
|            | 7 8 9 10 11 12 13 | 7 8 9 10 11 12 13 |
|            | 14 15 16 17 18 19 20 | 14 15 16 17 18 19 20 |
|            | 21 22 23 24 25 26 27 | 21 22 23 24 25 26 27 |
|            | 28 29 30 31 | 28 29 30 31 |
Day Classes, 1954-1955

FIRST SEMESTER

Sept. 7, 8, Tuesday, Wednesday, 8:20 a.m. Placement tests for all new students, including transfer students, who have not already taken these tests at the University of Dayton Guidance Center.

Sept. 7, Tuesday Registration for upperclassmen of Dayton area.

Sept. 8, Wednesday Registration for all transfer students, including U. D. students changing to a different division.

Sept. 9, Thursday Registration for all beginning freshmen, A to L.

Sept. 10, Friday Registration for all beginning freshmen, M to Z.

Sept. 11, Saturday Registration for boarding students and those whose permanent residence is not in Dayton. (Breakfast on this day is first meal served in campus dining room.)

Sept. 13, Monday Classes begin at 8:00 a.m.

Sept. 16, Thursday Mass in honor of the Holy Ghost.

Sept. 18, Saturday Last day for late registration or change in schedules.

Oct. 4, Monday As of this date, all withdrawals are recorded as WP or WF.

Oct. 5, 6, 7, Tuesday, Wednesday, Thursday Annual Retreat.

Nov. 1, Monday Feast of All Saints. No day classes.

Nov. 6, Saturday Mid-term progress reports.

Nov. 24, Wednesday Thanksgiving recess begins at noon.

Nov. 28, Sunday Campus students return before 11:50 p.m.

Nov. 29, Monday Classes resume at 8:00 a.m.

Dec. 8, Wednesday Feast of the Immaculate Conception. No day classes.

Dec. 18, Saturday Christmas recess begins at noon.

1955

Jan. 2, Sunday Campus students return before 11:50 p.m. (First meal served on following day in campus dining room.)

Jan. 3, Monday Classes resume at 8:00 a.m.

Jan. 22, Saturday Chaminade Day.

Jan. 24-28 Semester examinations.
SECOND SEMESTER

Jan. 31, Feb. 1  Placement tests for all new students, including transfer students, who have not already taken these tests at the University of Dayton Guidance Center.

Mon., Tues., 8:20 a.m.

Feb. 2, Wednesday  Registration for students of Dayton area.
Feb. 3, Thursday  Consultation and registration for all new students, and for U. D. students transferring to a different division.

Feb. 4, Friday  Registration for boarding students and those whose permanent residence is not in Dayton.

Feb. 7, Monday  Classes begin at 8:00 a.m.
Feb. 12, Saturday  Last day for late registration or change in schedules.
Feb. 23, Wednesday  Ash Wednesday.
Feb. 28, Monday  As of this date, all withdrawals are recorded as WP or WF.

April 2, Saturday  Mid-term progress reports.
April 6, Wednesday  Easter recess begins at noon.
April 11, Monday  Campus students return before 11:50 p.m.
April 12, Tuesday  Classes resume at 8:00 a.m.
May 19, Thursday  Feast of the Ascension. No day classes.
May 27, Friday  Honors Convocation.
May 29, Sunday  Baccalaureate service.
May 30, Monday  Memorial Day. No day classes.
May 31-June 3  Semester examinations.
Tuesday-Friday

June 4, Saturday  Commencement, 2:30 p.m.
GOVERNING BOARDS

BOARD OF TRUSTEES

Very Rev. John A. Elbert, S.M., Chairman
Rev. George J. Renneker, S.M., Secretary
Rev. William J. Ferree, S.M. Francis X. Neubeck, S.M.
Paul A. Sibbing, S.M.

ASSOCIATE BOARD OF LAY TRUSTEES

S. C. Allyn, President
Walter H. J. Behm, Treasurer
James M. Cox, Jr.
Victor C. Emanuel
Harry F. Finke
Michael J. Gibbons
Clarence H. Gosiger
Carroll A. Hochwalt
Martin C. Kuntz
Kenneth C. Long
Robert Oelmann

Samuel L. Finn, Vice-President
Edwin G. Becker, Secretary
George Quatman
David L. Rike
Mason M. Roberts
Merle P. Smith
M. A. Spayd
George E. Walther
Dwight Young
Very Rev. J. A. Elbert, S.M.
Rev. George J. Renneker, S.M.
Jerome A. McAvoy, S.M.

ADMINISTRATIVE COUNCIL

Fathers Renneker, Kobe, Collins, Leimkuhler; Brothers Gross, Lackner, Holian, McAvoy, Faerber.

ACADEMIC COUNCIL

Fathers Renneker, Kobe, Collins, Friedel, Rhodes; Brothers Faerber, Mervar, Nagel, Salethel, J. A. Wehrle.
ADMINISTRATION

ADMINISTRATIVE OFFICERS

REV. GEORGE J. RENNEKER, S.M., President

REV. HENRY J. KOBE, S.M., Vice-President, Dean of the University

REV. CHARLES L. COLLINS, S.M., Dean of Students, Director of Admissions

REV. EDWIN M. LEIMKUHLER, S.M., Chaplain

REV. FRANCIS J. FRIEDEL, S.M., Dean, College of Arts and Sciences

J. ALBERT WEHRLE, S.M., Dean, College of Engineering

LOUIS J. FAERBER, S.M., Associate Dean, Education

GEORGE W. NAGEL, S.M., Associate Dean, Business Administration

LOUIS A. SALETEL, S.M., Associate Dean, Science

REV. EDMUND L. RHODES, S.M., Assistant Dean, Arts

R. KATHLEEN WHETRO, Dean of Women

JOSEPH J. MERVAR, S.M., Registrar, Director of Evening Classes

ELMER C. LACKNER, S.M., Development Director

CLEMENT A. GROSS, S.M., Business Manager

AUSTIN J. HOLIAN, S.M., Assistant Business Manager

JEROME A. MCAVOY, S.M., Comptroller

WILLIAM BUSCH, S.M., Treasurer

JAMES H. KLINE, S.M., Purchasing Agent

HARRY C. BAUJAN, Athletic Director
ADMINISTRATIVE ASSISTANTS

DONALD C. METZ, Director, Technical Institute
Robert E. Donovan, Assistant to Director of Evening Classes,
Evening Classes Representative at Wright-Patterson Air Force Base,
Director of Veterans' Affairs
Mary Tuite, Assistant Registrar
James E. Gallico, Assistant to Director of Admissions
James F. Wilson, Publicity
James F. Clarke, Publicity
Mary Shay, Alumni Secretary

Eugene J. Burg, Athletic Ticket Manager
Rev. Charles J. Hofstetter, s.m., Supervisor, St. Joseph Hall
Sr. M. Bartholomew, m.s.c., r.n., Infirmary
E. J. McLaughlin, M.D., Consulting Physician
Ralph J. Miller, s.m., Manager, U. D. Book Store
John R. Perz, s.m., Supervisor, Alumni Hall
Mrs. Joseph Unger, Student Union Counselor

SECRETARIAL STAFF

Julie Timmer, Dean of the University; Rose Stephan, Treasurer; Katharine Angst, Director of Admissions; Patricia Hickey, Dean of Students; Mrs. Lawrence Shute, Dean of the College of Arts and Sciences; Mary Carey, Dean of the College of Engineering; Ruth Nartker, Dean of Business Administration; Mrs. William C. Monday, Dean of Education; Buena Greer, Director of Veterans' Affairs; Mrs. William Kehl, Registrar; Dolores McAnespie, Publicity; Mrs. Louise Gibson, Information.

GUIDANCE CENTER STAFF

Lloyd A. Rensel, Director; Frank Hustmyer, Counselor; Gloria Gantz, Counselor and Administrative Supervisor; Roberta McMahon, Psychometricist; Eileen Myers, Secretary; Beverly Kraft, Scoring Technician; Jacqueline Link, Scoring Technician; Edward E. Rieck, Veterans Administration Advisor; George Coffroad, Veterans Administration Training Officer.
STANDING COMMITTEES

ADMISSIONS AND DEGREES

FATHER COLLINS, Chairman (for Admissions); FATHER KOBE, Chairman (for Degrees); FATHER FRIEDEL; Brothers FAERBER, MERVAR, NAGEL, SALETEL, J. A. WEHRLE.

CATALOGUE AND CURRICULUM

FATHER KOBE, Chairman

Fathers COLLINS, FRIEDEL; Brothers FAERBER, MERVAR, NAGEL, SALETEL, J. A. WEHRLE.

STUDENT AID

FATHER COLLINS, Chairman

FATHER KOBE, BROTHER GROSS

FACULTY AFFAIRS

FATHER KOBE, Secretary for the Faculty, Chairman

MR. CHAMBERLAIN, MR. LEARY, MRS. MILLER, BROTHER NAGEL, MR. SCHRAUT, MR. SNYDER.

RELIGIOUS ACTIVITIES

FATHER LEIMKUHLER, Chairman

Fathers HOFSTETTER, MONHEIM

PUBLIC RELATIONS

FATHER RENNEKER, Chairman

BROTHER LACKNER, MR. CLARKE, MR. WILSON, MISS SHAY
RESOLUTIONS

Brother W. O. Wehrle, Chairman
Sr. Genevieve Marie, Brother Price

HONORARY DEGREES

Father Kobe, Chairman; Brother W. O. Wehrle, Secretary
Father Collins, Mr. O'Leary, Miss Whetro, Brother Wohlleben

ATHLETICS

Faculty Representatives
Father Collins, Chairman; Mr. Baujan, Athletic Director
Brothers Bellmer, McAvo, Wohlleben

Representatives at Large
Simon Burick, Gerard Faust, Bernard L. Ketter, Louis R. Mahrt,
J. Ellis Mayl, Paul Wagner, Charles W. Whalen, Jr.

BUDGET

Brother Gross, Chairman
Father Kobe; Brothers Holian, Lackner, McAvo, Nagel

BUILDINGS AND GROUNDS

Father Kobe, Chairman
Father Collins; Brothers Brunner, Holian, Lackner, McAvo, Saletel
Faculty

(Day and Evening Classes)

The year appearing in parenthesis indicates the date of the first appointment to the University.

Russell G. Alberts (1950)
Assistant Professor of Mechanical Engineering, 1952.
B.A.Sc., University of Toronto, 1947.

Claude E. Allen, M/Sgt. (1948)
Assistant Instructor in Military Science and Tactics, 1948.

Charles R. Andrews (1952)
Part-time Instructor in Mechanical Engineering, 1952.
B.M.E., University of Dayton, 1951.

Richard A. Anduze (1951)
Part-time Instructor in Spanish, 1951.
B.S., University of Dayton, 1945.

Richard Russell Baker (1947)
Associate Professor of Philosophy, 1948.
A.B., University of Notre Dame, 1931; M.A., University of Notre Dame, 1934; Ph.D., University of Notre Dame, 1941.

Edward J. Baldinger (1947)
Assistant Professor, 1950, and Acting Head of Department of Civil Engineering, 1952.
B.S., Civil Engineering, University of Notre Dame, 1940; M.C.E., University of Michigan, 1951; Prof. Eng.

Walter Charles Barnes (1945)
Part-time Instructor in Accounting, 1945.
A.B., Coe College, 1929.

John S. Barney (1949)
Part-time Instructor in Biology, 1953.
B.S., Ohio University, 1945; M.S., Ohio University, 1947.

Rev. George B. Barrett, S.M. (1952)
Instructor in Education, 1952.

Rev. James W. Bartholomew, S.M. (1949)
Assistant Professor of Classical Languages and Religion, 1951.
A.B., University of Dayton, 1929; M.A., The Catholic University of America, 1942.
HARRY CLIFFORD BAUJAN (1922)
Associate Professor of Physical and Health Education, 1939; Athletic Director, 1947.
Ph.B. of C., University of Notre Dame, 1917.

ERVING EDWARD BEAUREGARD (1947)
Assistant Professor of History, 1930.
A.B., University of Chicago, 1942; M.A., University of Massachusetts, 1944.

WILLIAM ANTHONY BECK, S.M. (1912)
Professor of Biology, 1926.
B.S., University of Dayton, 1908; M.S., University of Fribourg (Fribourg, Switzerland), 1912; Ph.D., University of Fribourg, 1926.

WILLIAM JOSEPH BELLMER, S.M. (1927)
Head of Department and Professor of Mathematics, 1935.
B.S., University of Dayton, 1921; M.A., The Catholic University of America, 1932.

CHARLES JOHN BELZ, S.M. (1928)
Professor of Civil Engineering, 1937.
B.S., University of Dayton, 1912; B.C.E., University of Dayton, 1928; M.C.E., The Catholic University of America, 1934; Prof. Eng.

FREEMAN F. BENTLEY (1952)
Part-time Instructor in Chemistry, 1952.
B.S., University of Georgia, 1947; M.S., University of Georgia, 1949.

FERNE R. BERNER (1945)
Assistant Professor of Nursing Education, 1949.
B.S., University of Dayton, 1945; R.N.

RICHARD E. BIEDENBENDER (1949)
Part-time Instructor in Mathematics, 1949.
B.S., University of Dayton, 1950; M.S., Michigan State College (Lansing, Michigan), 1951.

GEORGE C. BIERSAK (1952)
Instructor in Speech, 1952.
B.S., University of Dayton, 1952

LEONARD THOMAS BLACKBURN (1947)
Instructor in Physical and Health Education and Head Basketball Coach, 1947.
A.B., Wilmington College, 1931

STANLEY J. BLACKLEDGE (1952)
Part-time Instructor in Psychology, 1952.
A.B., University of Dayton, 1949.
REV. CHARLES C. BLOEMER, S.M. (1948)
Assistant Professor of Philosophy, 1951.
A.B., University of Dayton, 1930; M.A., University of Fribourg (Fribourg, Switzerland), 1936; M.A., The Catholic University of America, 1950.

LAWRENCE LEO BOLL, S.M. (1927)
Professor of English, 1927.
A.B., University of Dayton, 1912; M.A., The Catholic University of America, 1925; Ph.D., The Catholic University of America, 1929.

JOHN BOONE (1950)
Part-time Instructor in Economics, 1950.

ALICE HILDA BORGH (1951)
Part-time Instructor in Art, 1951.
Francis Harrington Professional School of Interior Decorating, Chicago Art Institute; R.N.

ROBERT C. BOthe (1952)
A.B., Temple University, 1939; M.B.A., The Ohio State University, 1951.

SCOTT T. Bowers (1946)
Assistant Professor of Psychology, 1949.
B.S., Ohio University, 1936; M.Ed., Ohio University, 1945.

LLOYD P. BRENBERGER (1951)
Part-time Instructor in Business Organization, 1951.
B.S. in I.E., General Motors Institute, 1951.

J. THEODORE BROWN (1952)
Part-time Instructor in Technical Institute, 1952.
B.Ch.E., University of Dayton, 1945.

REV. JOSEPH S. BRUDEr, S.M. (1948)
Assistant Professor of Philosophy, 1949.
A.B., University of Dayton, 1922; S.T.D., University of Fribourg (Fribourg, Switzerland), 1935; M.A., The Catholic University of America, 1949.

ROBERT K. BURNS (1952)
Part-time Instructor in Technical Institute, 1952.
B.I.E., General Motors Institute, 1948.

EDWARD ROBBINS BURROUGHS (1938)
Assistant Professor of Art, 1941; Dean, School of the Dayton Art Institute, 1937.
Graduate, Maryland Institute of Fine and Applied Art, 1926.
WILLIAM FRANCIS CAHALAN (1946)
Assistant Professor of Psychology, 1949.
A.B., Fordham University, 1935; M.A., Columbia University, 1941; Certified Psychologist and Counselor, 1948.

CHARLES W. CASSEL (1946)
Part-time Instructor in Mathematics, 1952.
A.B., Wittenberg College, 1943.

JOSEPH JENKS CHAMBERLAIN, JR. (1937)
Professor of Civil Engineering, 1948.
C.E., Cornell University, 1911; M.C.E., Harvard University, 1912; Prof. Eng.

CLETUS CHARLES CHUDD, S.M. (1947)
Instructor in Chemistry, 1947.
B.S., University of Dayton, 1935; M.S., Western Reserve University, 1948; Ph.D., Western Reserve University, 1952.

MARY CLAIRE CIVILLE (1947)
Assistant Professor of Secretarial Studies, 1950.
B.S., Ohio University, 1934; M.Ed., University of Cincinnati, 1952.

EVA LOUISE CLARK (1950)
Part-time Instructor in English and Speech, 1950.
B.S., Ashland College (Ashland, Ohio), 1942.

REV. CHARLES LEO COLLINS, S.M. (1941)
Professor of Psychology, 1945; Director of Admissions and Dean of Students, 1946.
A.B., University of Dayton, 1925; Ph.D., Fordham University, 1941.

ORVILLE COMER (1950)
Assistant Professor of Business Organization, 1950.
B.S. in Ret., Washington University (St. Louis, Missouri), 1948; M.S. in Ret., Washington University, 1949.

IRVING J. DALIN (1951)
Part-time Instructor in Russian, 1951.
B.C.S., New York University, 1944.

ADDIS H. DALY (1951)
Assistant Professor of Education, 1951.
A.B., St. Bonaventure University, 1931; Ed.M., Tufts College, 1949.

ROBERT L. DAVISON, SFC. (1953)
Assistant Instructor in Military Science and Tactics, 1953.

URBAN A. DEGER (1939)
Part-time Instructor in Music, 1939.
Studied music under Michael Lurz, S.M., 1899-1902; under Dr. W. J. Blumenschein, Dayton, Ohio, 1901-1903; under Dr. W. J. Elsenheimer and Professor W. S. Sterling, College of Music, Cincinnati, Ohio, 1906-1908.
JAMES B. DESCH (1951)
Part-time Instructor in English, 1951.
A.B., University of Dayton, 1950.

VICTOR M. DILGARD (1951)
Part-time Instructor in Psychology, 1951.
A.B., University of Dayton, 1948.

VINCENzo DiPasquale (1952)
Part-time Instructor in Education, 1952.
A.B., University of Michigan, 1933; M.A., University of Dayton, 1945.

REV. RICHARD J. DOMBRO, S.M. (1952)
Instructor in Philosophy, 1952.
A.B., University of Dayton, 1929; M.A., Fordham University, 1950.

REV. JAMES E. DONNELLY, S.M. (1947)
Assistant Professor of English, 1948.
A.B., University of Dayton, 1925.

ROBERT EMMETT DONOVAN (1946)
Assistant Professor of Mathematics, 1948; Assistant Professor of General Engineering, 1951; Evening Classes Representative at Wright-Patterson Air Force Base and Director of Veterans' Affairs, 1951.
B.S., University of Dayton, 1932.

JOHN J. DRERUP, S.M. (1952)
Assistant Librarian, 1952.
A.B., University of Dayton, 1935; B.S. in L.S., Western Reserve University, 1943.

ELWOOD DRYDEN (1952)
Part-time Instructor in Accounting, 1952.
B.S., University of Dayton, 1941; C.P.A.

CHARLES E. DUGAN (1948)
Part-time Instructor in Economics, 1951.
B.S., The Ohio State University, 1938; M.B.A., The Ohio State University, 1948.

ORVILLE E. DUNN, JR. (1949)
Assistant Professor of Electrical Engineering, 1952.
B.S. in E.E., University of Notre Dame, 1948; Prof. Eng.

REV. FLORIAN JOSEPH ENDERS, S.M. (1942)
Assistant Professor of Philosophy, 1945.
A.B., University of Dayton, 1928.

ORION WHEELER ENGLAND (1952)
Instructor in Biology, 1952.
B.S., University of Dayton, 1953.
NICHOLAS A. ENGLER (1952)
Assistant Professor of Physics, 1952.
B.S., University of Dayton, 1947; M.S., University of Cincinnati, 1949.

ROBERT A. Enoch (1940)
Part-time Instructor in Music, 1940.
Instruction in clarinet under Joseph Elliott of the Cincinnati Symphony Orchestra, 1939-1940; piano and composition under Dr. L. W. Sprague, 1939-1941.

SOPHIA ERNST (1952)
Instructor in Nursing Education, 1952.
B.S., University of St. Louis, 1940; M.S., University of Minnesota, 1947; R.N.

ALBERT R. Evans, SFC. (1951)
Assistant Instructor in Military Science and Tactics, 1951.

JULIA CAREY EVERETT (1940)
Assistant Professor of Nursing Education, 1946.
B.S., University of Dayton, 1940; R.N.

SYLVESTER EVESLAGE (1948)
Assistant Professor of Chemistry, 1951.
B.S., University of Notre Dame, 1944; M.S., University of Notre Dame, 1945; Ph.D., University of Notre Dame, 1953.

LOUIS JOSEPH FAERBER, S.M. (1948)
Associate Professor, 1949, and Head of the Department of Education, 1951; Associate Dean, Head of the Division of Education, 1951.

PETER JOSEPH FASO (1946)
Associate Professor of Biology, 1950.
B.S., Villanova College, 1936; M.S., Villanova College, 1941.

GEORGE FAULKNER (1952)
Part-time Instructor in Economics, 1952.
B.S., University of Dayton, 1949.

CON JOHN FECHER (1935)
Lecturer in Economics, 1935.
A.B., Miami University (Oxford, Ohio), 1924; M.A., The Catholic University of America, 1925; Ph.D., The Catholic University of America, 1927.

HENRY LEO FERRAZZA (1950)
Instructor in Physical and Health Education, 1950.
B.S., University of Dayton, 1949; M.A., Western Reserve University, 1950.
  Assistant Professor of Religion, 1948.
  A.B., University of Dayton, 1929; B.Th., University of Fribourg (Fribourg, Switzerland), 1937.

L. HOWARD FLATTER (1951)
  Part-time Instructor in Psychology, 1951.

DONALD C. FLISCHEL (1951)
  Part-time Instructor in Mathematics, 1951.
  B.S., University of Dayton, 1949; M.S., Michigan State College (Lansing, Michigan), 1951.

THOMAS H. FOGT (1951)
  Part-time Instructor in General Engineering, 1951.
  B.S. in M.E., The Ohio State University, 1948.

JOSEPH FOOTE (1952)
  Part-time Instructor in Mathematics, 1952.
  B.S., Texas Technological College (Lubbock, Texas), 1940; Ph.D., Massachusetts Institute of Technology, 1949.

WALTER G. FREMONT, Sr. (1947)

REV. FRANCIS J. FRIEDEL, S.M. (1927)
  Professor of Sociology, 1935; Dean of the College of Arts and Sciences, 1950.
  A.B., University of Dayton, 1917; S.T.B., S.T.L., University of Fribourg (Fribourg, Switzerland), 1925; S.T.D., University of Fribourg, 1926; M.A., The Catholic University of America, 1935; Ph.D., University of Pittsburgh, 1950.

WILLIAM S. FRY (1951)
  Part-time Instructor in Accounting, 1951.
  B.B.A., Sinclair College, 1940; B.S., Miami University (Oxford, Ohio), 1941; C.P.A.

ELLSWORTH M. GABRIEL, M/Sgt. (1950)
  Administrative Assistant, Department of Military Science and Tactics, 1950.

JAMES EDWARD GALLICO (1947)
  Assistant to Director of Admissions, 1949.
  B.S., Fordham University, 1935.

MARGARET WILSON GALLICO (1948)
  Assistant Professor of Psychology, 1949.
  A.B., New Rochelle College, 1937; M.A., Fordham University, 1939; Certified Clinical Psychologist, 1947; Fellowship of American Association of Mental Deficiency.
JOSEPH JOHN GAVIN (1947)
Instructor in Physical and Health Education and Head Football Coach, 1947.
A.B., University of Notre Dame, 1931.

JOHN J. GEDION (1947)
Assistant Professor of Psychology, 1950.
B.Litt., Xavier University (Cincinnati, Ohio), 1943; Ph.L., West Baden (Indiana), 1946.

SISTER GENEVIEVE MARIE, S.N.D., de N. (1940)
Associate Professor of English, 1951.
A.B., Trinity College (Washington, D.C.), 1913; M.A., University of Notre Dame, 1936.

MICHAEL BENEDICT GRANDY, S.M. (1926)
Head of Department and Professor of Physics, 1927.
B.S., University of Dayton, 1916; M.S., University of Fribourg (Fribourg, Switzerland), 1925; Ph.D., University of Fribourg, 1926.

LAWRENCE L. GRIER (1951)
Part-time Instructor in Business Organization, 1951.
B.S., Ohio University, 1938.

WILLIAM J. GUENSCHIE, JR. (1947)
Assistant Professor of Business Organization, 1951.
B.S., University of Dayton, 1947.

CHRIS R. HANSEN (1952)
Part-time Instructor in Economics, 1952.
B.S.S., Georgetown University, 1941; LL.B., Georgetown University, 1944; M.S., Fordham University, 1949; LL.M., New York University, 1951.

EDWARD WILLIAM HARKENRIDER (1952)
Instructor in Philosophy, 1952.

NELSON N. HARPER, JR. (1947)
Associate Professor of Music, 1952.
B.S., The Ohio State University, 1942; M.A., The Ohio State University, 1947.

WILLIAM F. HARRIGAN, major (1950)
Assistant Professor of Military Science and Tactics, 1950.

BERTRAND B. HECKEL (1949)
GERTRUDE D. HECKMAN (1949)

Assistant Professor of Biology, 1951.
B.S., Mary Manse College (Toledo, Ohio), 1945; M.S., University of Detroit, 1948.

THEODORE HEIMANN (1939)

Assistant Professor of Music, 1947.
Graduate of the College of Oslo, Norway, and Koenigstaditisches Gymnasium in Berlin; Special studies, University of Berlin; studied under Lilli Lehmann, Umlauf, Lieban and Albini.

HELMUT G. HEINRICH (1951)

Part-time Instructor in General Engineering, 1951.
B.M.E., Stettin (Germany), 1931; B.A.E., Institute of Technology (Stuttgart, Germany), 1937; M.A.E., Institute of Technology, 1938; D.E.S. (Doctor of Engineering Science), Institute of Technology, 1943.

NORRIS D. HELLWIG (1952)

Part-time Instructor in Speech, 1952.
B.S., University of Dayton, 1949; M.A., Northwestern University, 1951.

JOHN RICHARD HERRON (1947)

Part-time Instructor in Geology, 1947.
A.B., The Ohio State University, 1938.

RAYMOND G. HIEBER (1924)

Assistant Professor of Physics, 1933.
B.S., University of Dayton, 1922; M.S., The Ohio State University, 1924.

JAMES C. HODGETTS (1952)

Assistant Professor of Business Organization, 1952.
B.S., University of Kentucky, 1947; M.S., University of Louisville, 1949.

ALBERT M. HOFFMAN (1946)

Part-time Instructor in General Engineering, 1946.
B.S., Miami University (Oxford, Ohio), 1927; M.A., Miami University, 1932.

REV. CHARLES J. HOFSTETTER, S.M. (1952)

Instructor in Philosophy, 1952.
B.S., University of Dayton, 1940.

AUSTIN JOSEPH HOLIAN, S.M. (1944)

Associate Professor of Electrical Engineering, 1946; Assistant Business Manager, 1952.
B.S., University of Dayton, 1931; B.S.E.E., Case Institute of Technology, 1942; M.S.E.E., Case Institute of Technology, 1944.

CARL HOLTON (1952)

Part-time Instructor in Mathematics, 1952.
B.S., University of Nebraska, 1930; M.A., University of Nebraska, 1931; Ph.D., University of Chicago, 1942.
MARY ELIZABETH HORRIGAN (1940)
Associate Director of St. Elizabeth School of Nursing and Associate Professor of Nursing Education, 1948.
B.S., University of Dayton, 1935; M.A., University of Dayton, 1942.

CONSTANTINE HOUPIS (1953)
Part-time Instructor in Mathematics, 1953.

MARGARET HOWLAND (1950)
Part-time Instructor in Art Education, 1950.

EDWARD ANDREW HUTH (1939)
Head of Department, 1946, and Professor of Sociology, 1950.
A.B., Heidelberg College (Tiffin, Ohio), 1921; M.A., University of Notre Dame, 1928; Ph.D., Western Reserve University, 1943.

LOIS K. ITTELSON (1953)
Part-time Instructor in Home Economics, 1953.
A.B., Smith College, 1939; M.A., Columbia University, 1940.

JOSEPH WILLARD JACKSON (1948)
Part-time Instructor in Accounting, 1951.
B.S., Ball State Teachers College, 1947; M.B.A., Indiana University, 1948.

LAWRENCE ANDREW JEHN (1946)
Assistant Professor of Mathematics, 1950.
B.M.E., University of Dayton, 1943; M.Sc., University of Michigan, 1949.

RUSSELL ALBERT JOLY, S.M. (1941)
Head of Department, 1949, and Associate Professor of Biology, 1951.
B.S., University of Dayton, 1930; M.S., Institutum Divi Thomae (Cincinnati, Ohio), 1940.

WILLIAM A. JONES, MAJOR (1951)
Assistant Professor of Military Science and Tactics, 1951.
B.S., West Virginia University, 1938.

NICHOLAS C. KARAS (1951)
Part-time Instructor in Business Organization, 1951.
LL.B., University of Cincinnati, 1950; B.S., University of Dayton, 1953.

NICHOLAS G. KASCHAK (1952)
Instructor in Sociology, 1952.
A.B., College of Steubenville, 1950; M.A., St. Louis University, 1953.

PAUL KATZ (1939)
Part-time Instructor in Music, 1939.
Juilliard Scholarship with Leopold Auer, 1922-1924; studied also with Hermann, Seveik, Ysaye; Theory with Reigger, Elwell, and Boulanger; B.Mus., Cleveland Institute of Music.
PHILIP KIELAWA (1952)
  Part-time Instructor in Technical Institute, 1952.
  B.Arch., Cornell University, 1936.

OLIVER G. KINNEY, LT. COLONEL (1951)
  Professor of Military Science and Tactics, 1951.
  A.B., University of California, 1936.

MARJORIE KLINE (1950)
  Part-time Instructor in Music, 1950.

REV. HENRY JOHN KOBE, S.M. (1933)
  Associate Professor of History, 1943; Dean of the University, 1949.
  A.B., University of Dayton, 1925.

GEORGE FRANCIS KOHLES, S.M. (1935)
  Associate Professor of English, 1941.
  A.B., University of Dayton, 1922; M.A., The Catholic University of America, 1932.

DOROTHY KOGLE (1950)
  Part-time Instructor in Education, 1950.
  B.S., University of Dayton, 1946.

MORRIS JAMES KREIDER (1947)
  Associate Professor of Mathematics, 1952.
  B.S., Miami University (Oxford, Ohio), 1933; M.A., Miami University, 1941.

DONALD J. KREITZER (1948)
  Part-time Instructor in Political Science, 1948.
  A.B., University of Dayton, 1946; M.A., University of Cincinnati, 1948.

ROBERT J. KREMPE (1952)
  Part-time Instructor in Psychology, 1952.
  B.S., Miami University (Oxford, Ohio), 1948; M.S., Western Reserve University, 1950.

ROBERT E. KRIEGBAUM (1950)
  Assistant Professor of Secretarial Studies, 1951.
  A.B., Wittenberg College, 1939; M.A., The Ohio State University, 1950.

ELMER CHARLES LACKNER, S.M. (1940)
  Associate Professor of History, 1946; Development Director, 1952.
  A.B., University of Dayton, 1927; M.A., Western Reserve University, 1941.

DANIEL LEO LEARY (1937)
  Professor of Education, 1937; Director of Student Teaching, 1951.
  A.B., Creighton University, 1917; M.A., Peabody College, 1928; Ph.D., Colorado State University, 1934.
REV. CHARLES J. LEES, S.M. (1952)
Instructor in English, 1952.
A.B., University of Dayton, 1943; M.A., University of Pittsburgh, 1952.

CHARLES LEES (1951)
Part-time Instructor in Business Organization, 1951.
B.S., Gettysburg College, 1924; M.B.A., University of Pennsylvania, 1925;
Ph.D., University of Pennsylvania, 1929.

REV. EDWIN MATTHIAS LEIMKUHLER, S.M. (1934)
Head of Department and Professor of Religion, 1934.
A.B., The Catholic University of America, 1927; M.A., The Catholic University of America, 1940.

RICHARD ALLEN LIEBLER, S.M. (1949)
Assistant Professor of Political Science and History, 1951.
B.S., University of Dayton, 1939; M.A., Western Reserve University, 1947.

Gerald B. Liszak (1951)
Part-time Instructor in Industrial Engineering, 1951.
B.S. in I.E., General Motors Institute, 1949.

Theodore Llana, Jr., Captain (1952)
Assistant Professor of Military Science and Tactics, 1952.
B.S., Columbia University, 1942.

William C. Long, Warrant Officer S.G. (1952)
Assistant Professor of Military Science and Tactics, 1952.

Clinton E. Lott, SFC. (1951)
Assistant Instructor in Military Science and Tactics, 1951.

Bartlett C. Lubbers (1949)
Assistant Professor of Education, 1952.
B.S., University of Dayton, 1947; M.A., The Ohio State University, 1949.

John Joseph Lucier, S.M. (1945)
Assistant Professor of Chemistry, 1952.
B.S., University of Dayton, 1937; M.S., Western Reserve University, 1950;
Ph.D., Western Reserve University, 1951.

Carleton Lundquist (1952)
Part-time Instructor in English, 1952.

Francis Glenn McGovern (1947)
Associate Professor of Economics, 1952.
B.S., Providence College, 1938; M.B.A., Boston University, 1941.

Francis H. McGovern (1951)
Part-time Instructor in English, 1951.
JOHN IRA McGRATH (1946)
  Director of University Players, 1946; Associate Professor of Speech, 1951.

JAMES L. McGRaw (1952)
  Part-time Instructor in Technical Institute, 1952.
  B.S., Lafayette College, 1951.

SISTER M. MINALIA, S.P.S.F. (1940)
  Director of St. Elizabeth School of Nursing, 1936; Head of Department, 1941, and Associate Professor of Nursing Education, 1948.
  B.S., University of Dayton, 1934; M.A., University of Dayton, 1942; R.N.

JOHN DeWITT MACOMBER (1952)
  Part-time Instructor in Economics, 1952.
  B.S., Yale University, 1950; M.B.A., Harvard University, 1952.

ROBERT J. MAINS (1951)
  Part-time Instructor in Accounting, 1951.
  B.S., University of Dayton, 1949.

SISTER MARIE EMILIE, S.N.D. de N. (1949)
  Assistant Professor of English, 1951.

SISTER MARY PELAGIA, M.S.C. (1943)
  Associate Professor of Education, 1946.
  A.B., Villanova College, 1927; M.A., Villanova College, 1935; Ph.D., The Catholic University of America, 1946.

STANLEY MATHEWS, S.M. (1951)
  Assistant Librarian, 1951.
  A.B., University of Dayton, 1945; M.A., Western Reserve University, 1949.

ROBERT E. MAUSHARDT, M/Sgt. (1952)
  Assistant Instructor in Military Science and Tactics, 1952.

JOSEPH J. MERVAR, S.M. (1951)
  Director of Evening Classes and Registrar, 1951.

DONALD C. METZ (1951)
  Associate Professor and Director of Technical Institute, 1951.
  B.S.E.E., Purdue University, 1930; M.S.I.E., Purdue University, 1949; Prof. Eng.
MILDRED HUNTER MILES (1948)
Part-time Instructor in Music, 1948.
B.S., Wittenberg College, 1929; M.A., The Ohio State University, 1939.

EDWIN J. MILLER (1952)
Part-time Instructor in Technical Institute, 1952.
B.S., Allegheny College, 1950; M.S., University of Delaware, 1952.

GRAY E. MILLER (1950)
B.S., Pennsylvania State College, 1908.

VELMA MAE MILLER (1940)
Head of Department, 1944, and Associate Professor of Secretarial Studies, 1947.
B.C.S., Ohio Northern University, 1930; M.Ed., University of Cincinnati, 1937.

GORDON W. MILLS (1952)
Part-time Instructor in Technical Institute, 1952.

MARY MITCHELL (1952)
Instructor in Nursing Education, 1952.
B.S., University of Dayton, 1949; M.Ed., Xavier University (Cincinnati, Ohio), 1953; R.N.

REV. LAWRENCE WILLIAM MONHEIM, S.M. (1937)
Associate Professor of Religion, 1941.
A.B., University of Dayton, 1925; M.A., The Catholic University of America, 1942.

PATRICIA A. MONNETTE (1949)
Assistant Professor of Physical and Health Education, 1952.
B.S., The Ohio State University, 1949.

ADRIAN J. MORGAN (1948)
Assistant Professor of Electrical Engineering, 1952.
B.S.E.E., Purdue University, 1948.

JOSEPH MOYLAN (1951)
Part-time Instructor in Psychology, 1951.
A.B., University of Dayton, 1950; M.A., Bowling Green State University (Ohio), 1951.

HARRY C. MURPHY (1950)
Assistant Professor of Business Organization, 1950.
B.B.A., University of Minnesota, 1948; B.S., University of Minnesota, 1949; M.A., University of Minnesota, 1951.
ANDRE J. NADEAU (1948)
Assistant Professor of Physical and Health Education, 1950.
B.S., Appalachian State Teachers College, 1940; M.A., New York University, 1947.

GEORGE WILLIAM NAGEL, S.M. (1941)
Associate Professor of History, 1947; Associate Dean, Head of the Division of Business Administration, 1949.
B.S., University of Dayton, 1922; M.A., Western Reserve University, 1941.

GLADYS LOUISE NIELSEN (1946)
Part-time Instructor in Sociology, 1951.
A.B., Wellesley College, 1927; Certificat d'Etanger, Universite de Lyon (France), 1928; M.A., University of Chicago, 1929; M.S. in Social Service, Fordham University, 1949.

HAROLD NIELSON (1946)
Part-time Instructor in Mechanical Engineering, 1951.
B.S., U. S. Naval Academy, 1929.

GEORGE NIXON (1952)
Part-time Instructor in Psychology, 1952.
A.B., University of Pittsburgh, 1949; M.A., University of Pittsburgh, 1951.

ROBERT J. O'BRIEN (1952)
Part-time Instructor in General Engineering, 1952.

ROBERT B. O'DONNELL (1951)
Assistant Professor of History, 1951.
A.B., St. Mary's College (Halifax, N.S.), 1927; M.A., Fordham University, 1930.

FRANK R. OGLESBY (1951)
Part-time Instructor in Business Organization, 1951.

EDMUND BERNARD O'LEARY (1924)
Head of Department of Business Organization, 1938, and of Department of Economics, 1941; Professor of Economics and Business Organization, 1924.
B.S., The Ohio State University, 1924; M.A., University of Chicago, 1928; Ph.D., The Ohio State University, 1939.

JOHN C. ONDERCIN (1952)
B.S., University of Dayton, 1951; M.S., Western Reserve University, 1952.

ANDREW P. ORTH (1951)
Lecturer in Business Organization, 1951.
JEROME HENRY PARR, S.M. (1947)
Head of Department, 1948, and Associate Professor of Mechanical Engineering, 1951.

KENNETH R. PARTINGTON (1952)
Part-time Instructor in Technical Institute, 1952.
B.M.E., University of Cincinnati, 1947.

ELIZABETH PAYNE (1950)
Instructor in Home Economics, 1950.
B.S., Mount St. Joseph-on-the-Ohio, 1942.

CYRIL GEORGE PECKHAM (1941)
Associate Professor of Mathematics, 1949.
A.B., University of Illinois, 1936; M.S., University of Illinois, 1939.

LENA PEDROTTI (1952)
Part-time Instructor in Technical Institute, 1952.

JOHN RAYMOND PERZ, S.M. (1926)
Professor of German and Spanish, 1931; Head of Department of Modern Languages, 1936.
A.B., University of Dayton, 1921; M.A., The Catholic University of America, 1929; Ph.D., The Catholic University of America, 1934.

THOMAS LEO POITRAS, S.M. (1905)
Professor of French, 1934.
B.S., University of Dayton, 1907; A.B., University of Dayton, 1911; B.S. Music, Extension Conservatory of Chicago, 1928; M.A., The Catholic University of America, 1934; Diplome de professeur de francais a l'Etranger, The Sorbonne (Paris), 1938; Diplome d'Etudes francaises superieures, University of Besancon, 1938; Diplome d'Etudes de Civilisation francaise, The Sorbonne, 1939.

ALBERTA GINSTIE PRATHER (1946)
Assistant Professor of Mathematics, 1949.
A.B., Miami University (Oxford, Ohio), 1925; B.S., Miami University, 1926; M.A., Miami University, 1937.

REV. CHARLES VINCENT PREISINGER, S.M. (1926)
Associate Professor of History and Speech, 1943; Head of Department of Speech, 1946.
A.B., University of Dayton, 1918; M.A., The Catholic University of America, 1934.
THOMAS JOSEPH PRICE, S.M. (1926)

*Professor of English, 1948.*

A.B., University of Dayton, 1911; M.A., The Catholic University of America, 1935.

EDWIN KEMP PRUGH (1946)

*Part-time Instructor in Mathematics, 1951.*

B.S., Monmouth College (Monmouth, Ill.), 1943.

DOROTHY E. PRYOR (1951)

*Part-time Instructor in Secretarial Studies, 1952.*

B.S., The Ohio State University, 1932.

JOSEPH DANIEL QUINN (1946)

*Instructor in Physical and Health Education and Assistant Football Coach, 1946.*

B.S., University of Dayton, 1942.

STEPHEN RAYMOND QUINN (1948)

*Part-time Instructor in Economics, 1948.*

B.S., University of Notre Dame, 1942; LL.B., University of Notre Dame, 1947.

MARY C. QUIRK (1946)

*Part-time Instructor in Speech, 1946.*

B.S., The Ohio State University, 1936; M.A., The Ohio State University, 1938.

ELIZABETH D. REEL (1950)

*Instructor in Physical and Health Education, 1950.*

B.S., The Ohio State University, 1946; M.A. in Ed., The Ohio State University, 1947.

JOHN A. REGER (1946)

*Part-time Instructor in Music, 1946.*

Musical Training: Trombone, Illmari Ronka; Composition and Piano, Dr. L. W. Sprague.

MAURICE RICHARD REICHARD (1929)

*Head of Department of Music, 1938; Associate Professor of Music, 1946.*

A.B., University of Dayton, 1935; M.A., The Ohio State University, 1945.

REV. GEORGE JOSEPH RENNEKER, S.M. (1920)

*Professor of Philosophy, 1924; President of the University, 1944.*

A. B., University of Dayton, 1910; M.A., University of Dayton, 1915; Ed.D., University of Dayton, 1944.

LLOYD ALOYSIUS RENSEL (1946)

*Director of Guidance Center and Instructor in Psychology, 1946.*

A.B., University of Dayton, 1943; Chief Examiner, Educational Testing Service, 1946.
KLARA REYST (1947)
Associate Professor of French and German, 1952.
A.B., University of Geneva (Switzerland), 1908; M.Ed., University of Pittsburgh, 1934; Ph.D., University of Pittsburgh, 1940.

REV. EDMUND LEO RHODES, S.M. (1947)
Assistant Professor, 1948, and Acting Head of Department of Philosophy, 1951; Assistant Dean, Division of Arts, 1952.
A.B., University of Dayton, 1934; S.T.L., The Catholic University of America, 1942.

WALTER ROEBUCK, M/Sgt. (1952)
Assistant Instructor in Military Science and Tactics, 1952.

REV. RAYMOND AUGUST ROESCH, S.M. (1951)
Head of Department and Assistant Professor of Psychology, 1952.
A.B., University of Dayton, 1936; M.A., The Catholic University of America, 1946.

WALTER A. ROESCH, S.M. (1946)
Instructor in History and English, 1932.
A.B., University of Dayton, 1947; B.S. in L.S., Western Reserve University, 1948; M.A., Western Reserve University, 1952.

LLOYD W. ROOT (1949)
Assistant Professor of Physics, 1949.
A.B., Lawrence College (Appleton, Wis.), 1929.

ALBERT H. ROSE, S.M. (1945)
Head of Department, 1950, and Associate Professor of Political Science, 1951.
B.S., University of Dayton, 1927; M.A., Western Reserve University, 1942.

EITHEL ROSE (1946)
Head of Department, 1949, and Associate Professor of Home Economics, 1950.
B.S., Indiana State Teachers College (Terre Haute, Ind.), 1928; M.S., Indiana State Teachers College, 1938.

LOUIS HERMAN ROSE, S.M. (1933)
Head of Department and Professor of Electrical Engineering, 1948.
B.S., University of Dayton, 1923; M.S., University of Fribourg (Fribourg, Switzerland), 1933; B.E.E., University of Dayton, 1935; Prof. Eng.

JUSTUS ROSENBERG (1946)
Associate Professor of French and German, 1952.
Graduate of the Gymnasium in Danzig, 1938; Diplome de Civilisation francaise, University of Paris, 1939; Diplome d'Etudes francaises superieures, University of Paris, 1940; Licence es Lettres, University of Paris, 1946; Ph.D., University of Cincinnati, 1950.
FRANCIS HERMAN RUHLMAN, S.M. (1920)
Librarian, 1920.
A.B., University of Dayton, 1924; B.S. in L.S., Our Lady of the Lake College (San Antonio, Tex.), 1956.

REV. GABRIEL J. RUS, S.M. (1947)
Assistant Professor of French, 1953.
A.B., University of Dayton, 1931; M.A. Western Reserve University, 1952.

THOMAS RYAN (1950)
Part-time Instructor in Education, 1950.
A.B., University of Dayton, 1929; M.A., University of Dayton, 1940.

LOUIS ANTHONY SALETEL, S.M. (1936)
Head of Department, 1941, and Professor of Geology, 1942; Associate Dean, Head of the Division of Science, 1946.
B.S., University of Dayton, 1924; Ph.D., University of Fribourg (Fribourg, Switzerland), 1936.

JUDSON SANDERSON (1953)
Part-time Instructor in Mathematics, 1953.
B.S., University of Illinois, 1947; M.S., University of Illinois, 1948; Ph.D., University of Illinois, 1950.

MICHAEL J. SAVITSKI (1950)
Assistant Professor of Mechanical Engineering, 1950.
B.E.E., Rensselaer Polytechnic Institute, 1933; M.Met.E., Brooklyn Polytechnic Institute, 1950.

BERNHARD M. SCHMIDT (1948)
Assistant Professor of Electrical Engineering, 1951.
B.E.E., University of Dayton, 1942.

KENNETH CHARLES SCHRAUT (1940).
Professor of Mathematics, 1948.
A.B., University of Illinois, 1936; M.A., University of Cincinnati, 1938; Ph.D., University of Cincinnati, 1940.

REEVES RICHARD SCHWARTZ (1946)
Head of Department, 1948, and Associate Professor of Physical and Health Education, 1951.
B.Ed., St. Cloud State Teachers College, 1934; M.Ed., University of Minnesota, 1940.

BLAZ Y. SCOTT (1946)
Part-time Instructor in Mechanical Engineering, 1946.
B.M.E., University of Dayton, 1942.

HOPE PEARSON SELF (1949)
Assistant Professor of Home Economics, 1952.
B.S., East Tennessee State College, 1944; M.S., University of Tennessee, 1948.
ROBERT SHAIN (1950)
A.B., The Ohio State University, 1940.

BARTH J. SNYDER (1935)
Associate Professor of Economics and Business Organization, 1946.
A.B., University of Dayton, 1931; J.D., University of Dayton, 1934; M.A.,
The Ohio State University, 1942.

ATHANASE JOHN SOPIANOPOULOS (1949)
Professor of Chemical Engineering, 1949.
Ph.D., National University of Athens (Greece), 1909.

JOHN A. SPEZZAFERRO (1952)
Instructor in Physical and Health Education and Assistant Football Coach,
1952.
A.B., Heidelberg College (Tiffin, Ohio), 1947; M.A., Western Reserve Uni­
versity, 1950.

DEE B. SPRINGER (1946)
Associate Professor of Accounting, 1951.
A.B., Miami University (Oxford, Ohio), 1921; M.A., Columbia Uni­
versity, 1922; C.P.A.

GEORGE HENRY SPRINGER (1946)
Associate Professor of Geology, 1950.
A.B., Brown University, 1938; M.S. in Geology, Brown University, 1940.

MILTON L. SPROWL (1952)
Part-time Instructor in General Engineering, 1952.
L.L.B., University of Cincinnati, 1950.

REV. THOMAS A. STANLEY, S.M. (1952)
Instructor in Religion, 1952.
A.B., University of Dayton, 1943; S.T.B., University of Fribourg (Fribourg,
Switzerland), 1949; S.T.L., University of Fribourg, 1951; S.T.D., Univer­
sity of Fribourg, 1952.

WILFRED J. STEINER (1946)
Acting Head of Department, 1949, and Associate Professor of History,
1951.
A.B., Loras College, 1936; M.A., Harvard University, 1938.

LINCOLN STEWART (1952)
Associate Professor of Geology, 1952.
B.S., Stanford University, 1915; M.S., University of California, 1917; Ph.D.,
Columbia University, 1935.

LEO STRAUS (1952)
Part-time Instructor in Civil Engineering, 1952.
B.S. in C.E., Purdue University, 1949.
KATHERINE E. STRUCK (1951)
Part-time Instructor in Education, 1951.
B.S., University of Dayton, 1939; M.A., University of Dayton, 1943.

PAUL F. SWIFT, JR. (1951)
Part-time Instructor in Mathematics, 1951.
B.Ch.E., University of Dayton, 1948; M.S. in Ch.E., University of Cincinnati, 1949.

BETTY JEAN THOMAS (1942)
Assistant Professor of Music, 1952.
B.Mus., University of Dayton, 1944; M.Mus., Eastman School of Music (University of Rochester), 1950.

ROBERT A. THOMSON, S.M. (1952)
Instructor in Civil Engineering, 1952.
B.S., University of Dayton, 1950.

JOSEPH E. TOLLE (1948)
Part-time Instructor in Accounting, 1951.
B.S., University of Dayton, 1948.

HEWITT TONY (1950)
Part-time Instructor in Mathematics, 1950.
B.S., The Ohio State University, 1937; M.A., The Ohio State University, 1938.

LOUIS E. TRACY (1952)
Ph.B., University of Notre Dame, 1949; LL.B., University of Notre Dame, 1951.

JOSEPH FRANCIS UPDYKE (1947)
Assistant Professor of Accounting, 1951.
B.S., University of Dayton, 1947.

B. BERNARR VANCE (1940)
Assistant Professor of Biology, 1945.
B.S., Miami University (Oxford, Ohio), 1930; M.A., Miami University, 1936.

JOHN F. VERDER, S.M. (1946)
Assistant Librarian, 1948.
A.B., University of Dayton, 1929; B.S. in L.S., Western Reserve University, 1946.

KENNETH E. WEBBER, JR., FIRST LT. (1952)
Assistant Professor of Military Science and Tactics, 1952.
B.S., United States Military Academy, 1948.
ANDREW RAYMOND WEBER, S.M. (1927)

Professor of Mechanical Engineering, 1942.
B.S., University of Dayton, 1919; B.M.E., University of Dayton, 1927; M.M.E., The Catholic University of America, 1936; Prof. Eng.

ROY WILLIAM WEHMANEN (1946)

Assistant Professor of General Engineering, 1949.

J. ALBERT WEHRLE, S.M. (1920)

Professor of Electrical Engineering, 1943; Dean of the College of Engineering, 1948.
B.S., University of Dayton, 1912; M.E.E., University of Pittsburgh, 1927; Ph.D., University of Pittsburgh, 1930; Prof. Eng.

WILLIAM OTTO WEHRLE, S.M. (1933)

Professor of English, 1933, and Head of Department, 1936.
A.B., University of Dayton, 1918; M.A., The Catholic University of America, 1931; Ph.D., The Catholic University of America, 1933.

JOHN WEIBEL (1952)

Part-time Instructor in Mechanical Engineering, 1952.
B.M.E., Louisiana State University, 1948; M.M.E., Purdue University, 1951.

WEAVER WEISENBARGER (1952)

Part-time Instructor in Speech, 1952.

GEORGE H. WELDON (1952)

Part-time Instructor in English and Philosophy, 1952.
A.B., Mount St. Mary's College (Emmitsburg, Md.), 1942; M. Letters, Register College of Journalism (Denver, Colo.), 1948; M.A., University of Denver, 1949.

ADRIAN JOSEPH WESTBROCK (1946)

Associate Professor of Mechanical Engineering, 1952.

JEROME WESTENDORF (1951)

Part-time Instructor in Accounting, 1951.
B.S., University of Dayton, 1943; C.P.A.

CHARLES W. WHALEN, JR. (1951)

Assistant Professor of Business Organization, 1952.
B.S., University of Dayton, 1942; M.B.A., Harvard University, 1946.

REGINA KATHLEEN WHETRO (1947)

Assistant Professor of English and Dean of Women, 1951.
A.B., University of Dayton, 1943; M.A., University of Michigan, 1950.
DALE H. WHITFORD (1952)
  Part-time Instructor in Mathematics, 1952.
  B.A.E., University of Cincinnati, 1951.

PHILIP M. WHITNEY, JR., FIRST LT. (1952)
  Assistant Professor of Military Science and Tactics, 1952.
  B.S., United States Military Academy, 1948.

ROBERT CHARLES WIECHMAN (1946)
  Assistant Professor of Biology, 1949.
  B.S., Indiana University, 1943; M.T., St. Joseph’s Hospital (Phoenix, Ariz.),
  1944; M.S., Miami University (Oxford, Ohio), 1951.

H. H. WILLIAMS (1940)
  Lecturer in Biology, 1940.
  M.D., The Ohio State University, 1917.

EDITH WOESTE (1948)
  Instructor in Nursing Education, 1948.
  B.S., University of Dayton, 1948; R.N.

WILLIAM JOSEPH WOHLLEBEN, S.M. (1909)
  Head of Department and Professor of Chemical Engineering, 1909.
  B.S., University of Dayton, 1904; M.S., University of Fribourg (Fribourg, Switzerland),
  1906; Ph.D., University of Fribourg, 1908.

VINCENT JOHN WOTTLE, S.M. (1938)
  Associate Professor, 1944, and Acting Head of Department of Chemistry,
  1950.
  B.S., University of Dayton, 1936; M.S., The Catholic University of America,
  1939; Ph.D., The Ohio State University, 1951.

HAROLD E. WRIGHT (1949)
  Part-time Instructor in Mechanical Engineering, 1951.

VERYL L. ZECH (1940)
  Assistant Professor of Music, 1951.
  B.Mus., University of Dayton, 1948; M.Mus., Cincinnati Conservatory of Music,
  1951.

MARIANNA ZIMMERMAN (1945)
  Assistant Professor of Nursing Education, 1949.
  B.S., Indiana University, 1930; R.N.
DIVISION OF ARTS AT CARTHAGENA

VERY REV. LIONEL E. PIRE, C.PP.S., Rector
   Pastoral Theology

REV. HERBERT L. LINENBERGER, C.PP.S., Vice-Rector
   Canon Law, Sacramental Moral

REV. EDMUND L. BINSFELD, C.PP.S., Librarian
   M.A. in L.S., Rosary College, 1951.

REV. ALOYS H. DIRKSEN, C.PP.S.
   Ancient History, Sacred Scripture, Sacramental Dogma

REV. MARK L. DORENKEMPER, C.PP.S.
   Fundamental Dogma, Sacramental Theology
   S.T.L., University of Fribourg (Fribourg, Switzerland), 1949; S.T.D., University of Fribourg, 1951.

REV. LEO J. GAULRAPP, C.PP.S.
   Speech, Homiletics, Music
   M.A., University of Michigan, 1950.

REV. AMBROSE J. HEIMAN, C.PP.S.
   Philosophy, Dogmatic Theology
   M.A., University of Toronto, 1942; L.M.S., Pontifical Institute of Medieval Studies, 1947; Ph.D., University of Toronto, 1949; S.T.L., The Catholic University of America, 1953.

REV. FREDERICK J. HUNNEFELD, C.PP.S. Absent on leave.
   S.T.L., Gregorian University (Rome), 1953.

REV. PAUL J. KNAPKE, C.PP.S.
   Church History

REV. GEORGE J. LUBELEY, C.PP.S.
   Moral Theology, Liturgy
   S.T.L., University of Fribourg (Fribourg, Switzerland), 1947.

REV. HENRY A. LUCKS, C.PP.S.
   History of Philosophy, Education
   M.A., The Catholic University of America, 1934; Ph.D., The Catholic University of America, 1936.
REV. OTHMAR F. MISSLER, C.PP.S., Spiritual Director
Ascetical Theology
A.B., St. Joseph's College, 1940.

REV. EDMUND J. RYAN, C.PP.S., Dean of Studies
Psychology, Philosophy
M.A., The Catholic University of America, 1945; Ph.D., University of St. Louis, 1951.

REV. ROBERT T. SIEBENECK, C.PP.S.
Sacred Scripture, Fundamental Moral
S.T.L., University of Fribourg (Fribourg, Switzerland), 1949; SS.L., Pontifical Biblical Institute, 1951.

DAYTON ART INSTITUTE
ESTHER I. SEAVER, Director
EDWARD R. BURROUGHS, Dean
HELEN PINKNEY, Librarian
ANN DEETER, Registrar

Edward R. Burroughs  Robert Koepnick
Richard W. Clark       Alvin Raffel
Irene Hoffman        Paul Samuelson
Margaret Howland    Esther I. Seaver
John M. King                 Florence Wagner

GOOD SAMARITAN HOSPITAL
Diagnostic Laboratories
HENRY CAES, B.S., M.D., F.A.S.C.P., Head
SISTER CECILE, B.S., M.T.      H. R. WALTER, B.S., M.T.
IRENE GEORGE, B.S., M.T.       MYRA HOOVER WRIGHT, B.S., M.T.

MIAMI VALLEY HOSPITAL
Diagnostic Laboratories
MELVIN OOSTING, A.B., M.D., F.A.S.C.P., Head
SEREPTA ANDERSON, B.S.      SUZANNE HAENZI, B.S., M.T.
LEONA BINKLEY, M.T.          HELEN R. JOHNSON, B.S., M.T.
LIDA MAY CAMPBELL, A.B., M.T. JOHN JOHNSON, B.S.
PHYLLIS DINKEL, M.T.          JAMES P. MURPHY, B.S.
EUNICE FRAZIER, M.A., M.T.   MARIAN PELKING, M.T.
Department of Radiology
GEORGE A. NICOLL, M.D., Head
PAULINE COTRELL, R.T.  JOHN COTTER, R.T.

ST. ELIZABETH HOSPITAL
Diagnostic Laboratories
WILLIAM ABRAMSON, A.B., M.D., F.A.S.C.P., Head
ANN BURT, M.T.  JAMES MARION, B.S., M.T.
PATRICIA HUSSEY, B.S., M.T.  MARY MARION, M.T.
JOAN LOGEL, B.S., M.T.  LIESEL MEHRFORT, B.S., M.T.
Sr. M. ELIZABETH, S.P.S.F., R.N., B.S., M.T.  MARY STRAHLER, M.T.

Department of Radiology
RICHARD LAND, M.D., Head
Sr. LAMBERTINA, S.P.S.F., R.T.  RETHA MINNICK, R.T.
ROBERT LYKINS, R.T.  DOLORES ORDING, R.T.
Sr. PHILOBERTA, S.P.S.F., R.T.

VETERANS ADMINISTRATION HOSPITAL
Diagnostic Laboratories
ALDEN S. THOMPSON, B.S., M.D., F.A.S.C.P., Head
ERNEST CLARK, B.S., M.T.  ELSPEOTH F. MCCALLUM, A.B.
CAROLYN A. FRUEH, A.B., M.T.  HAROLD MCDANIEL, B.S.
CLARA B. GARD, M.T.  OMA J. MOORE, B.S., M.T.
ELIZABETH S. GRIFFITS, B.S.  WILLIE L. ROWE, M.T.
ROSEANN HARRIS, B.S., M.T.  JEAN M. SCHEIBER, M.T.
RUBY S. HIROSE, PH.D.  SUE CASSELL STEVENS, PH.D.
MARJORIE M. HOUSER, B.S.  EDWIN M. STONE, B.S.
ESTHER D. JACKSON, A.B., M.M.T.  WALDON B. WACKER, M.S.
HISTORICAL NOTE

In 1849 there came from their native France a group of educators belonging to the religious organization founded by Reverend William Joseph Chaminade and known as the Society of Mary. At Dayton, Ohio, this pioneer band found the present suitable site for establishment of an institution of learning. At that time they purchased from Mr. John Stuart the section known as the Dewberry Farm, comprising one hundred and twenty acres, and at once opened a school in the farm house located on the property. From these humble beginnings the school grew rapidly under the guidance of Brother Maximin Zehler. Urgent needs made necessary the sale of part of this extensive property, leaving a campus of fifty-six acres.

In 1878 this institution was incorporated, and in 1882, by an act of the general assembly of the State of Ohio, it was empowered to confer degrees under the title of St. Mary Institute. After 1912 it was called St. Mary College and continued to be so designated till 1920, when it was raised to the rank of University. Realizing the demands for higher education, the University established night classes in 1920 and summer sessions in 1923. These two projects were opened to men and women and from the beginning were well received. In 1935 the day school, formerly restricted to men, offered to women also the facilities of full-time students.

The University offers courses in Arts, Science, Engineering, Business Administration, Education, Pre-Medicine, and Pre-Law. Journalistic, forensic, musical, and athletic programs are also sponsored by the University under the supervision of the faculty.

EDUCATIONAL AIMS

The University of Dayton proposes as general objective the complete and harmonious development of all the capacities of man's nature—religious, moral, intellectual, aesthetic, social, and physical. Participation in the widely-varied college activities induces the student to exercise all these powers of soul and body. Moral instruction and adequate campus discipline emphasize the importance of personality development and character formation, while a comprehensive academic program furnishes ample fields of study. Thus college becomes not only a preparation for life, but an integral part of life itself.

The particular objectives are threefold: to give the student a liberal education by training in the natural and social sciences, language, and literature; to prepare for prospective careers in business, art, music—for the professions of teaching and engineering and for professional schools of law, medicine, and dentistry; to establish, in all divisions, a strong sense of social responsibility—to foster leadership both by the theory and the practice of sound principles of religion, philosophy, sociology, economics, and political science.
ACCREDITATION

THE UNIVERSITY OF DAYTON is officially recognized by the following accrediting agencies:

1. The North Central Association of Colleges.
3. The Ohio Association of Colleges.
4. The Pre-Medical course is accredited by the American Medical Association.
5. The Departments of Civil, Electrical, and Mechanical Engineering are accredited by the Engineers' Council for Professional Development.

CAMPUS AND BUILDINGS

THE UNIVERSITY OF DAYTON is situated within the corporate limits of the city of Dayton. It is located in the southern section of the city, approximately three miles from the center of town.

The quiet of the surroundings is conducive to serious study, while at the same time the location affords easy access to the social, business, and industrial interests of the city.

The University campus has for its center the beautiful Chapel of the Immaculate Conception.

The buildings devoted to academic work are: St. Mary Hall, including Administration, Business and Science; Chaminade Hall, including Arts, Education, and Science; St. Joseph Hall, including Civil, Electrical, and Mechanical Engineering; Chemistry Buildings, including Chemical Engineering; Business Administration Building; Field House; Mechanical Engineering Building; Music Building; ROTC Building.

The Albert Emanuel Library, the general library of the campus, was erected in 1928 through the generosity of Victor C. Emanuel, an alumnus of the University, who dedicated this building as a monument to the honor of his father. This library of 55,000 volumes of books and 21,000 volumes of periodicals is equipped with all modern facilities to supplement the regular class work of the student. Special collections are housed in seven departmental libraries to facilitate service to faculty and students.

Adequately equipped laboratories are available for experimental work in the different departments: Biology, Botany, Zoology, Physics, Mineralogy and Geology laboratories in St. Mary Hall; Electrical Engineering laboratories in St. Joseph Hall; Civil and Mechanical Engineering laboratories in the Mechanical Engineering laboratory building; the Chemical and Chemical Engineering laboratories in the Chemistry buildings; Psychological and Home Economics laboratories in Chaminade Hall.

EDUCATION OF VETERANS

ALL DEPARTMENTS OF THE UNIVERSITY have been approved by the Veterans Administration for training under the following G.I. Bills: Public Law 346,
Public Law 16, Korean Public Law 550, and Korean Public Law 894. Credits earned during military service are accepted after an evaluation in terms of the University's standards and the course of study for which the veteran applies. An adequate counseling service is available under the direction of the Veterans' Adviser, whose office is located in Room 113, St. Mary Hall.

HONORS AND AWARDS

AWARDS AND HONORS for scholarship are announced on Honors Day, or at the annual Commencement.

Degrees will be conferred "With Honors" if the student has been awarded the Alpha Sigma Tau Honor Key.

The Alpha Sigma Tau Honor Key is awarded to seniors who have a point average for seven semesters, at the University, of 3.5 based on 4.0. The Alpha Sigma Tau is the Honor Society of the University. These seniors are eligible for membership in the Lambda Chapter of the Delta Epsilon Sigma National Honor Society.

A cumulative point hour ratio of at least 3.0 is required for any award or honor.

The following Awards are given annually through the generosity of donors:

The Victor Emanuel, '15, in memory of Mrs. Albert Emanuel, Awards of Excellence in the Senior and Junior Chemical Engineering Classes.

The Harry F. Finke, '02, Award of Excellence in the Senior Civil Engineering Class.

The Mrs. J. Edward Sweetman, in memory of Mr. J. Edward Sweetman, Award of Excellence in the Junior Civil Engineering Class.

The Anthony Horvath and Elmer Steger Award of Excellence in the Senior Electrical Engineering Class.

The Mrs. Louise A. and Mrs. Lucille Hollenkamp, in memory of Bernard F. Hollenkamp, Award of Excellence in the Senior Mechanical Engineering Class.

The Martin C. Kuntz, '12, Award of Excellence in the Junior Mechanical Engineering Class.

The Charles Huston Brown, in memory of Brother William Haebe, Award of Excellence in the Senior Class of Business Organization.

The President's Award of Excellence in Debating.

The Mathematics Club Alumni Awards of Excellence in the Junior and in the Senior Classes.

The Rev. Charles Policheck Awards—first and second—of Excellence in Philosophy. Only Seniors are eligible.

The Miami Valley Alumnae (Sorosis) Award of General Excellence in both academic and extracurricular activities. Only Senior women are eligible.

The Phi Alpha Theta Scholarship Key, awarded on the basis of excellence in the study of History. Eligibility is restricted to Senior members of Delta Eta Chapter.
GRADUATE RECORD EXAMINATION

A large number of Graduate Schools in the United States and Canada recommend, and some require, that the results of the examinations prepared as a project of the Carnegie Foundation for the Advancement of Teaching be submitted as one of the credentials for admission. The University of Dayton is a center for the administration of these tests.

Information and applications can be procured at the University of Dayton Guidance Center or The Graduate Record Examination, Educational Testing Service, P. O. Box 592, Princeton, New Jersey.

EXTRACURRICULAR ACTIVITIES

Administrative: Student Council; Student Senate; Central Women's Organization.

Religious: National Federation of Catholic College Students; Sodality of the Immaculate Conception; Catholic Students Mission Crusade; Chapel Choir.

Academic: Alpha Sigma Tau Honor Society; Business Organization and Economics Club; Society for Advancement of Management; Alpha Psi Omega; University Players; Education Club; Mechanical Engineering Society; Electrical Engineering Society; Student Chapter of the American Society of Civil Engineers; History Club; Exponent; Daytonian; University of Dayton News; The National Mathematics Honor Society of Secondary Schools; Mathematics Club; Mixed Chorus; Men's Glee Club; Junior Philharmonic Orchestra; Band; Philosophy Club; Psychology Club; Sigma Delta Pi; Geology Club; Chemistry Club; Home Economics Club; Nu Epsilon Delta Society; Sociology Club; Upsilon Delta Sigma Debaters.

Military: Pershing Rifle Club; Scabbard and Blade; Rifle Team.

Athletic: The Monogram Club; Women's Athletic Association.

Social: Flyers Hangar; Spirit Committee; Blue Grass Club; Clevelanders' Club; Toledo Club; Hui o Hawaii.

General: Red Cross College Unit; Mother's Club.

Each of the organizations listed has been approved and placed under the direction of a faculty moderator.

CHILDREN'S THEATRE

A year-round children's theatre of training classes and productions is sponsored by the University Players. Children from age five through eighteen are enrolled. Classes and rehearsals are held in the Student Union Building and are conducted by Mrs. Annette S. Anduze, Assistant Director of the University Players.
ATHLETICS

ATHLETIC PARTICIPATION is an integral part of the educational development that the University of Dayton strives to achieve for all its students. This statement applies to intercollegiate athletics and the intramural athletic and recreational programs. All students are encouraged to engage in some form of athletic competition according to the level of their ability. This is to be particularly emphasized in the case of students majoring in Physical Education for whom the various athletic activities have special importance in view of the career for which they are preparing. It is felt that athletics, intercollegiate and others, cultivate a sense of unity which is one of the important factors in student morale.

Intercollegiate athletic policies are the responsibility of the President. He is assisted by an Advisory Committee, consisting of Faculty and Alumni. Budgetary control for all athletic and recreational programs is exercised by the Budget Committee of the University.
ADDITION

ADMISSION OF STUDENTS

ANYONE DESIRING admission is required to file a written application. For admission to a freshman class the applicant must present a satisfactory high school record. This application for admission and high school record must be on forms supplied by the Director of Admissions. For advanced standing an applicant must see that the last institution attended sends an official transcript of credits together with a statement of honorable dismissal. A student is allowed to register only after all credentials have been received and evaluated and a registration permit has been issued.

The specific high school units required for admission to a freshman class are defined in the requirements of the various divisions of the College of Arts and Sciences and the College of Engineering. Freshman students in all divisions and transfer students in Business Administration, Education and Engineering are obliged to take a battery of psychological tests.

The University does not have dormitory accommodations for women. Women under twenty-one years of age are not accepted as students in the day classes unless they are residing with parents or close relatives in Dayton.

A thorough physical examination is part of the admission procedure of every student. Records are kept by the Registrar's office. When deemed advisable, students and parents or guardians are given copies. A follow-up is made at regular intervals. An infirmary is maintained with a registered nurse in attendance. The services of outstanding physicians as well as the facilities of three hospitals are available to students.

GUIDANCE CENTER

THE GUIDANCE CENTER, located in the basement of the Albert Emanuel Library, is staffed by experienced counselors and psychometrists. The Center offers psychological testing services and vocational counseling to the following groups:

a) Veterans
b) Students of the University enrolled in either Day or Evening Classes
c) High school students seeking guidance, especially in view of preparing for some particular college course
d) Individuals directed to the Center by various industrial organizations
e) High schools and elementary schools that request the administration of a battery of psychological tests

The Center is open from 8:00 a.m. to 4:30 p.m. every day, excepting Saturday and Sunday. Appointments may be made by telephone.
CURRICULUM

THE UNIVERSITY comprises the undergraduate College of Arts and Sciences and the College of Engineering.

COLLEGE OF ARTS AND SCIENCES

THE COLLEGE OF ARTS AND SCIENCES is made up of the Divisions of Arts, Business Administration, Education, and Science.

In the Division of Arts are the Departments of Art, English, History, Languages, Music, Philosophy, Political Science, Psychology, Religion, Sociology, and Speech. This Division includes pre-professional courses in law, social service, foreign service, and journalism. Affiliation of the Dayton Art Institute with the University makes it possible for students to work for the Fine Arts degree. Affiliation of the Dayton Junior Philharmonic Orchestra with the University provides music students with the opportunity for valuable musical practice and experience.

The Division of Arts at Carthage, Ohio, was established in September, 1949. Enrollment in this Division is limited to members of the Congregation of the Most Precious Blood. The names and degrees of faculty members are included in this catalogue.

The Division of Business Administration includes the Departments of Accounting, Business Organization, Economics, Retailing, and Secretarial Studies.

The Division of Education prepares teachers for both elementary and secondary levels. There are two Departments in the Division: Education, and Physical and Health Education.

The Division of Science has pre-professional courses in medicine and dentistry. In cooperation with St. Elizabeth Hospital, Good Samaritan Hospital, Miami Valley Hospital, and The Veterans Administration Hospital, courses are given in Medical Technology; in cooperation with St. Elizabeth Hospital and Miami Valley Hospital, courses are given in Radiological Technique. The Division of Science includes the following Departments: Biology, Chemistry, Geology, Home Economics, Mathematics, Medical Technology, Nursing Education, Physics, and Radiological Technique.

COLLEGE OF ENGINEERING

THE COLLEGE OF ENGINEERING includes Departments in Chemical, Civil, Electrical, Industrial, and Mechanical Engineering.
ACADEMIC REQUIREMENTS

REQUIREMENTS FOR DEGREES

For the degree of Bachelor of Arts or Bachelor of Science, a minimum of one hundred and twenty-eight credit hours is required. These credits must be distributed over eight semesters in point of time.

A credit hour denotes a semester course taken one hour a week as a class period or two or three hours per week as a laboratory period.

One major and two minors are required. Ordinarily, the prerequisites for any major or minor must be satisfied in the first two years. In some cases, however, sophomore courses may be counted towards a major or minor. Any major or minor consists of certain required and elective courses as described under the respective divisions and departments. A comprehensive examination in the major field may also be required.

Requirements for the different degrees are listed under the various Divisions.

For the degree of Bachelor of Chemical, Civil, Electrical, Industrial or Mechanical Engineering, one of the prescribed groups of courses in any of these Departments must be completed as specified under the College of Engineering.

One year of residence or thirty semester hours—ordinarily the senior year—is a requirement for any bachelor degree.

RELIGION

Four credit hours in religion are required of Catholic students for each of the freshman and sophomore years. In the junior and senior years, there are elective courses in religion which are open to all students.

For non-Catholic students there are prescribed courses in Logic and Philosophical Psychology to replace courses in religion.

RESERVE OFFICERS' TRAINING CORPS

The Department of Military Science and Tactics specializes in the Infantry component of the Army of the United States, together with those general subjects applicable in all components of the Department of the Army. Instruction is presented by the military staff under the Professor of Military Science and Tactics.

The ROTC Course is divided into Basic and Advanced. All male non-veterans who are physically qualified and who have not already completed the Basic Course or its equivalent are enrolled in Basic Military during their freshman and sophomore years. Service in the Armed Forces of the United States may be substituted for part or all of the Basic Course. Admission into the Advanced Course is on an optional-selective basis, requiring the approval of the President of the University and the Professor of Military Science and Tactics.
The objective of the course is to qualify students for positions of leadership in time of national emergency, under the National Defense Act, and to produce junior officers who are capable of further progressive development as officers in a component of the Army of the United States. Their education and their position in civil life make it appropriate that they have parallel training to fit them for leadership in the armed services.

Students enrolled in Military Science and Tactics are organized into a Regiment of Infantry. This regiment is commanded and staffed by selected cadet officers and non-commissioned officers.

Completion of the Advanced Course opens the way for commission as second lieutenant, Infantry Regular Army, or Infantry Reserve, in one of the following categories: (1) Distinguished Military Students may apply for Regular Army Commission in any chosen branch; (2) other graduates may elect to serve two years of active duty, of which one year is competitive, with successful competitors receiving a permanent commission in the Regular Army; or (3) graduates may elect to hold a commission in the Infantry Reserve. A Distinguished Military Student is a student designated by the Professor of Military Science and Tactics who:

- a. Possesses outstanding qualities of military leadership, high moral character, and definite aptitude for the military service;

- b. Has distinguished himself either academically or by demonstrated leadership through his accomplishments while participating in recognized campus activities; and

- c. Is scheduled to complete the Advanced Course, senior division, ROTC, within one school year, and whose current standing in military subjects is among the upper third of his ROTC class.

Selected first and second year basic students and all Advanced Course students are deferred from induction as long as they remain in good standing in their academic and military courses, provided they sign an agreement (1) to complete the Basic Course, if enrolled therein; (2) to enroll in and complete the Advanced Course at the proper time, if accepted therefor; (3) upon completion or termination of the course of instruction therein, to accept a commission, if tendered; (4) to serve on active duty for a period of not less than two years after receipt of such commission; and (5) to remain a member of a Regular or Reserve component of the Army until the eighth anniversary of receipt of commission unless sooner terminated.

All ROTC students are issued officer-type uniforms and appropriate insignia. Students accepted for Advanced ROTC receive commutation of Subsistence in cash each month amounting to approximately $27.00. Each Advanced Course student must attend one Summer Camp of about six weeks' duration, during which he receives $75.00 per month and travel expenses.

Completion of the Basic Military course is required of qualified male students as a prerequisite for graduation. Transfer students who enter the University with less than junior status must fulfill the Basic Military course
requirement. Enrollment in the Advanced Course makes completion of the course a prerequisite for graduation.

**GRADES AND SCHOLARSHIP**

At mid·semester and at the end of a semester, a report of every student in each of his classes is given to the Registrar by the instructor in the official marks. Copies of these reports are given to the students and deans and are sent to the parents or guardians. At mid·semester, these marks are merely tentative and represent the progress made by the student. The final academic standing is determined only at the end of the semester.

The official marks with their meanings and quality point values are as follows:

- A—Excellent .......................................................... 4 quality points*
- B—Good ................................................................ 3 quality points*
- C—Fair .................................................................. 2 quality points*
- D—Passing ............................................................ 1 quality point *
- WP—Withdraw, Passing ........................................... 0 quality point
- WF—Withdraw, Failing ............................................ 0 quality point
- F—Failed ............................................................. 0 quality point
- I—Incomplete ........................................................ 0 quality point

*For each credit hour allowed for the course.

A cumulative quality-point-average of 2.00 is required in order to register in succeeding semesters; probationary status is implied when the quality-point-average for any semester is below 2.00.

The quality-point-average is found by dividing the total number of quality points obtained by the number of credit hours carried by the student. In computing the average, a course for which a WP is received is not included; a course for which a WF is received is included in the same manner as one for which an F is received.

During the first three weeks of a semester, a student may withdraw from a class Without Record; beginning with the third week, all withdrawals are recorded as WP or WF.

A grade of F is recorded whenever a student fails to report a withdrawal from a course.

A grade of I may be given at the discretion of the instructor to any student who, for reasons beyond his control, has not completed some portion of the work of the term, provided that the rest of the work has been of satisfactory grade. An I is not to be marked if the student has been delinquent in his work, that is, when work has not been completed through his own fault.

A grade of I is not to be marked at mid·term.

An I must be removed within the following semester (within four weeks from the close of the semester for students in the College of Engineering) or it will be changed to F.
CHANGES AND WITHDRAWALS

WHEN A STUDENT finds it necessary to change from one class to another or to withdraw from a class for any reason whatsoever, it is important that he notify his Dean immediately. Financial adjustments, if allowed, will be made ONLY FROM THE DATE OF NOTIFICATION. Veterans especially should report any such changes or withdrawals promptly, since the amount of time to which they are entitled under Public Laws 346, 16, 550, and 894 is affected by their entrance and withdrawal dates.
EXPENSES

POLICY AND REGULATIONS

THE TRUSTEES of the University of Dayton reserve the right, at any time, to change the regulations of the University, including those concerning fees and the manner of payment, and to make such changes in the curriculum as they deem advisable.

It is a policy of the University that all students who would be classified as campus-students, particularly freshmen, should establish residence on campus in one of the student dormitories, unless these dormitories are fully occupied.

All students having residence on campus shall patronize the dining facilities provided for their service, during the academic week.

The University dining hall and dormitories are closed during the Christmas Holidays. With the permission of the Dean of Students, these facilities may be used. The charge for meals during this time will be based on the charge per day during the regular sessions. Room and Board during summer sessions will be at rates determined and published in summer session bulletins.

Tuition is payable in full at the time of registration. Students who arrange to pay in installments are required to pay a moderate carrying charge.

All drafts should be made payable to the University of Dayton.

The University is not responsible for any money or valuables which are not deposited with the Treasurer.

A student may not register for a new term, a transcript of credits will not be issued, the honors of graduation will not be conferred, unless accounts with the University have been satisfactorily settled.

Those in charge of organizations and activities approved by the University are required to deposit all funds with the Treasurer of the University.

The expenses indicated below are for each term of the 1953-54 scholastic year, unless otherwise stated. During the refund period of four weeks from first day of registration, tuition charges will be made according to the following scale:

During registration week and first week of classes.......................... 20%
During second week of classes.................................................. 40%
During third week of classes.................................................... 60%
During fourth week of classes................................................... 80%
During or after fifth week of classes.......................................... 100%

FULL TIME STUDENTS

A student with an academic schedule of twelve semester hours is considered a full-time student. With this status, he is entitled to the benefits of the various activities.
Matriculation fee, payable once, at entrance........................................... $10.00
Late Registration, beginning with the first day of classes.................... 5.00
Orientation and placement services, payable once, at entrance........... 10.00
Proficiency and other special examinations, average fee...................... 5.00
Tuition, per credit hour........................................................................ 12.00
Deposit on uniform for fall and winter terms, for students taking Basic Military Training, returnable .................................................. 20.00
Laboratory fee, for each laboratory (variations depending upon the course). Average fee ................................................................. 7.50
Laboratory breakage deposit for Chemistry laboratory (variations depending upon the course) .................................................. 5.00-10.00
Books and stationery, at University Book Store, depending upon courses, minimum expense approximately.......................... 25.00
For campus students:
   Room (seven days a week), meals (Mondays through Fridays), and laundry ................................................................. 295.00-320.00
   Special tickets for one or more Saturday and Sunday meals may be purchased
   Room and laundry only ................................................................... 135.00-160.00
Teacher training fee (Student Teachers) per credit hour. (Maximum fee $36.00) ................................................................. 6.00

PART-TIME STUDENTS
Matriculation fee, payable at first registration each year.................... 5.00

SPECIAL STUDENTS
The term "special" or "non-matriculated" is applied to those students who are not following a degree program. Part-time students, including those working toward a degree, are, at the discretion of the respective Deans, assimilated to this category. The status of the student may exempt him from the requirement of attendance at some convocations, but has no bearing on the expenses outlined above.
College of Arts and Sciences

Division of Arts

The Division of Arts has as a function to provide the fundamentals of a liberal education. Among the broad objectives to be served by such a type of education are the following: to enrich the student's cultural background; to stimulate intellectual activity; to educate for satisfactory social adjustment; to develop capacities for leadership. The University regards as a special feature of its educational program the training given to all of its students in the field of philosophy in order to achieve the objectives of life integration, character formation and responsible citizenship. In particular, students registered in the Division of Arts are required to take at least a minor in philosophy in view of the role philosophical principles play in effective thinking, speaking, writing, and living.

In its curriculum, the Division of Arts aims to furnish special preparation for various professions such as education, art, music, law, journalism, social service, personnel administration, foreign service, as well as the more comprehensive forms of business and industrial activity. It also seeks to prepare students for study on the graduate level.

ADMISSION REQUIREMENTS

For admission to the Division of Arts a student must be a graduate of an accredited high school, with a total of not less than 15 units, and, in the judgment of the Committee on Admissions, qualified to pursue the course of his selection.
DEGREE REQUIREMENTS

Catholic students are required to follow the courses in religion as prescribed for the freshman and the sophomore year. Non-Catholic students are required to take the courses in Logic and Philosophical Psychology.

For the A.B. degree, the University of Dayton sets down the following requirements: (Lower Division) Religion or Philosophy 8 credit hours, English 9 credit hours, Speech 3 credit hours, History 12 credit hours, foreign language 12 credit hours, natural science or mathematics 6-8 credit hours, Psychology 3 credit hours, Sociology 3 credit hours; (Upper Division) a major 24 credit hours, two minors 12 credit hours each. When Philosophy is not elected as the major, it must be taken as one of the minors.

The junior and senior years are generally devoted to study in the major and minor fields. Subjects which may count towards the major or minor are listed in the catalogue as 300 and 400 courses and designated as upper division courses. Normally 64 of the 128 credit hours required for graduation must be on the upper level. Departments offering majors are: Art, Economics, English, History, Languages, Mathematical Statistics, Music, Philosophy, Political Science, Psychology, Religion, Sociology, and Speech.

PRE-PROFESSIONAL COURSES

The schedule should be drawn up with a view to preparation for a particular profession which the student may have in mind. Hence it is imperative that the student consult the dean so as to receive the proper educational guidance.

Students contemplating the legal profession can generally satisfy the requirements of Schools of Law by following the curriculum prescribed for the Division of Arts or the Division of Business Administration. Information as to specific requirements should be secured from the particular School of Law which the student desires to enter. Ordinarily ninety credit hours will admit to law school; in particular instances, a bachelor's degree is required.

For foreign service, a curriculum, similar to that of pre-legal students, should be followed with special emphasis on foreign languages and political science.

Two years of college study are required for admission to the first year of Philosophy in diocesan seminaries. During these years stress should be placed upon English, the classical and the modern foreign languages.

In the fields of social service and public administration, there is a great demand for trained personnel. The bachelor's degree is required for admission to a recognized School of Social Work. The undergraduate curriculum should include courses in biology, economics, philosophy, political science, psychology, religion, sociology, and statistics.
**GENERAL REQUIREMENTS FOR THE A. B. DEGREE**

### Freshman Year

**FIRST SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Mil. 101 First Yr. Basic Course</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Phe. 101 Physical Education</td>
<td>1/2</td>
</tr>
<tr>
<td>Phe. 103 Health</td>
<td>1/2</td>
</tr>
<tr>
<td>Spe. 101 Fund. of Eff. Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Hist. 111 Hist. of Mod. Europe</td>
<td>3</td>
</tr>
<tr>
<td>Language</td>
<td>3</td>
</tr>
<tr>
<td>Or. 101 Orientation</td>
<td>0</td>
</tr>
</tbody>
</table>

**SECOND SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Mil. 102 First Yr. Basic Course</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Phe. 102 Physical Education</td>
<td>1/2</td>
</tr>
<tr>
<td>Phe. 104 Health (Women)</td>
<td>1/2</td>
</tr>
<tr>
<td>Eng. 101 English Composition</td>
<td>3</td>
</tr>
<tr>
<td>Hist. 112 Hist. of Mod. Europe</td>
<td>3</td>
</tr>
<tr>
<td>Language</td>
<td>3</td>
</tr>
</tbody>
</table>

**Sophomore Year**

**FIRST SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Mil. 201 Second Yr. Basic Course</td>
<td>3/4</td>
</tr>
<tr>
<td>Phe. 201 Phys. Educ. (Women)</td>
<td>1/2</td>
</tr>
<tr>
<td>Eng. 221 English Literature</td>
<td>3</td>
</tr>
<tr>
<td>Psych. 201 Introd. Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Hist. 251 Amer. Hist. to 1865</td>
<td>3</td>
</tr>
<tr>
<td>Language</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>2-3</td>
</tr>
</tbody>
</table>

**SECOND SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Mil. 202 Second Yr. Basic Course</td>
<td>3/4</td>
</tr>
<tr>
<td>Phe. 202 Phys. Educ. (Women)</td>
<td>1/2</td>
</tr>
<tr>
<td>Eng. 222 American Literature</td>
<td>3</td>
</tr>
<tr>
<td>Soc. 201 General Sociology</td>
<td>3</td>
</tr>
<tr>
<td>Hist. 252 Amer. Hist. since 1865</td>
<td>3</td>
</tr>
<tr>
<td>Language</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>2-3</td>
</tr>
</tbody>
</table>

**Junior Year**

**FIRST SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Field</td>
<td>6</td>
</tr>
<tr>
<td>Philosophy*</td>
<td>3</td>
</tr>
<tr>
<td>Second Minor</td>
<td>3</td>
</tr>
<tr>
<td>Electives†</td>
<td>3-6</td>
</tr>
</tbody>
</table>

**SECOND SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Field</td>
<td>6</td>
</tr>
<tr>
<td>Philosophy*</td>
<td>3</td>
</tr>
<tr>
<td>Second Minor</td>
<td>3</td>
</tr>
<tr>
<td>Electives†</td>
<td>3-6</td>
</tr>
</tbody>
</table>

**Senior Year**

**FIRST SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Field</td>
<td>6</td>
</tr>
<tr>
<td>Philosophy*</td>
<td>3</td>
</tr>
<tr>
<td>Second Minor</td>
<td>3</td>
</tr>
<tr>
<td>Electives†</td>
<td>3-6</td>
</tr>
</tbody>
</table>

**SECOND SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Field</td>
<td>6</td>
</tr>
<tr>
<td>Philosophy*</td>
<td>3</td>
</tr>
<tr>
<td>Second Minor</td>
<td>3</td>
</tr>
<tr>
<td>Electives†</td>
<td>3-6</td>
</tr>
</tbody>
</table>

*If Psychology is chosen as the major field, the freshman science must be Bio. 101-102, followed by Bio. 203-204 in the sophomore year.

*If Philosophy is chosen as the major field, it is replaced by another field as the first minor.

†Electives must be selected from 300-400 courses.
### PROGRAM I

**BACHELOR OF FINE ARTS**

#### Freshman Year

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Cr. Hours</th>
<th>SECOND SEMESTER</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjects</td>
<td></td>
<td>Subjects</td>
<td></td>
</tr>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Eng. 101 English Composition</td>
<td>3</td>
<td>Spe. 101 Fund. of Eff. Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Art</td>
<td>At Art Institute</td>
<td>Art</td>
<td>At Art Institute</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td><strong>Summer Session</strong></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Art</td>
<td>At Art Institute</td>
<td>Art</td>
<td>At Art Institute</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

#### Sophomore Year

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Cr. Hours</th>
<th>SECOND SEMESTER</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjects</td>
<td></td>
<td>Subjects</td>
<td></td>
</tr>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Eng. 221 English Literature, or</td>
<td></td>
<td>Hist. 112 Hist. of Mod. Europe, or</td>
<td></td>
</tr>
<tr>
<td>Eng. 222 American Literature</td>
<td>3</td>
<td>Hist. 252 Amer. Hist. since 1865</td>
<td>3</td>
</tr>
<tr>
<td>Art</td>
<td>At Art Institute</td>
<td>Art</td>
<td>At Art Institute</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td><strong>Summer Session</strong></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Art</td>
<td>At Art Institute</td>
<td>Art</td>
<td>At Art Institute</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

#### Junior Year

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Cr. Hours</th>
<th>SECOND SEMESTER</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjects</td>
<td></td>
<td>Subjects</td>
<td></td>
</tr>
<tr>
<td>Phil. 300-400 Philosophy</td>
<td>3</td>
<td>Phil. 300-400 Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>Psych. 201 Introductory Psych.</td>
<td>3</td>
<td>Soc. 201 General Sociology</td>
<td>3</td>
</tr>
<tr>
<td>Art</td>
<td>At Art Institute</td>
<td>Art</td>
<td>At Art Institute</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td><strong>Summer Session</strong></td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Art</td>
<td>At Art Institute</td>
<td>Art</td>
<td>At Art Institute</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>

#### Senior Year

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Cr. Hours</th>
<th>SECOND SEMESTER</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjects</td>
<td></td>
<td>Subjects</td>
<td></td>
</tr>
<tr>
<td>Art</td>
<td>At Art Institute</td>
<td>Art</td>
<td>At Art Institute</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

1. For the degree of Bachelor of Fine Arts, a minimum of 137 hours is required. Of these, 105 hours must be in Art and related courses. Thirty-two hours must be in academic subjects according to the curriculum suggested.

2. To complete the required course of studies, it will be necessary to distribute the program over four years and three summer sessions or five years with no summer sessions.
# Program II

## Bachelor of Arts with a Major in Art

**Freshman Year**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Mil. 101 First Yr. Basic Course</td>
<td>1½</td>
<td>Mil. 102 First Yr. Basic Course</td>
<td>1½</td>
</tr>
<tr>
<td>Phe. 101 Physical Education</td>
<td>½</td>
<td>Phe. 102 Physical Education</td>
<td>½</td>
</tr>
<tr>
<td>Phe. 103 Health</td>
<td>½</td>
<td>Phe. 104 Health (Women)</td>
<td>½</td>
</tr>
<tr>
<td>Spe. 101 Fund. of Eff. Speaking</td>
<td>3</td>
<td>Eng. 101 English Composition</td>
<td>3</td>
</tr>
<tr>
<td>Hist. 111 Hist. of Mod. Europe</td>
<td>3</td>
<td>Hist. 112 Hist. of Mod. Europe</td>
<td>3</td>
</tr>
<tr>
<td>Art Basic Courses</td>
<td>3</td>
<td>Art Basic Courses</td>
<td>3</td>
</tr>
</tbody>
</table>

**Sophomore Year**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Mil. 201 Second Yr. Basic Course</td>
<td>1½</td>
<td>Mil. 202 Second Yr. Basic Course</td>
<td>1½</td>
</tr>
<tr>
<td>Eng. 221 English Literature</td>
<td>3</td>
<td>Eng. 222 American Literature</td>
<td>3</td>
</tr>
<tr>
<td>Hist. 251 Amer. Hist. to 1865</td>
<td>3</td>
<td>Hist. 252 Amer. Hist. since 1865</td>
<td>3</td>
</tr>
<tr>
<td>Psych. 201 Introd. Psychology</td>
<td>3</td>
<td>Soc. 201 General Sociology</td>
<td>3</td>
</tr>
<tr>
<td>Language</td>
<td>3</td>
<td>Language</td>
<td>3</td>
</tr>
<tr>
<td>Art Basic Courses</td>
<td>3</td>
<td>Art Basic Courses</td>
<td>3</td>
</tr>
</tbody>
</table>

**Junior Year**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Advanced Art</td>
<td>6</td>
<td>Art Advanced Art</td>
<td>6</td>
</tr>
<tr>
<td>Phil. 300-400 Philosophy</td>
<td>3</td>
<td>Phil. 300-400 Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>Second Minor*</td>
<td>3</td>
<td>Second Minor*</td>
<td>3</td>
</tr>
<tr>
<td>Electives†</td>
<td>3-6</td>
<td>Electives†</td>
<td>3-6</td>
</tr>
</tbody>
</table>

**Senior Year**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Advanced Art</td>
<td>6</td>
<td>Art Advanced Art</td>
<td>6</td>
</tr>
<tr>
<td>Phil. 300-400 Philosophy</td>
<td>3</td>
<td>Phil. 300-400 Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>Second Minor*</td>
<td>3</td>
<td>Second Minor*</td>
<td>3</td>
</tr>
<tr>
<td>Electives†</td>
<td>3-6</td>
<td>Electives†</td>
<td>3-6</td>
</tr>
</tbody>
</table>

*The second minor may be chosen from the following fields: Psychology, Sociology, Economics, Political Science, History, English, or one of the languages.

†Electives must be selected from 300-400 courses.

Basic courses in Art to be selected for lower division work are: Design 6 credit hours, Perspective 3 credit hours, Cast Drawing 3 credit hours.

Advanced courses for the field of concentration are: Life Drawing 4½ credit hours, Commercial Art 6 credit hours, Crafts 4½ credit hours, Sculpture 3 credit hours, Painting 3 credit hours, Electives 3 credit hours.
# PROGRAM III
BACHELOR OF ARTS WITH A MAJOR IN MATHEMATICAL STATISTICS

**Freshman Year**

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Cr. Hours</th>
<th>SECOND SEMESTER</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Mil. 101 First Yr. Basic Course</td>
<td>1 1/2</td>
<td>Mil. 102 First Yr. Basic Course</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Phe. 101 Physical Education</td>
<td>1/2</td>
<td>Phe. 102 Physical Education</td>
<td>1/2</td>
</tr>
<tr>
<td>Phe. 103 Health</td>
<td>1/2</td>
<td>Phe. 104 Health (Women)</td>
<td>1/2</td>
</tr>
<tr>
<td>Eng. 101 English Composition</td>
<td>3</td>
<td>Spe. 101 Fund. of Eff. Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Hist. 111 Hist. of Mod. Europe</td>
<td>3</td>
<td>Hist. 112 Hist. of Mod. Europe</td>
<td>3</td>
</tr>
<tr>
<td>Or. 101 Orientation</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sophomore Year**

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Cr. Hours</th>
<th>SECOND SEMESTER</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Mil. 201 Second Yr. Basic Course</td>
<td>1 1/2</td>
<td>Mil. 202 Second Yr. Basic Course</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Eng. 316 Advanced Composition</td>
<td>3</td>
<td>Eng. 222 American Literature</td>
<td>3</td>
</tr>
<tr>
<td>Language</td>
<td>3</td>
<td>Language</td>
<td>3</td>
</tr>
<tr>
<td>Math. 201 Differential and Integral Calculus</td>
<td>4</td>
<td>Math. 202 Differential and Integral Calculus</td>
<td>4</td>
</tr>
<tr>
<td>Eco. 201 Prin. of Economics</td>
<td>3</td>
<td>Eco. 202 Prin. of Economics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Junior Year**

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Cr. Hours</th>
<th>SECOND SEMESTER</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phil. 300-400 Philosophy</td>
<td>3</td>
<td>Phil. 300-400 Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>Math. 301 Differential Equations</td>
<td>3</td>
<td>Math. 302 Theory of Equations</td>
<td>3</td>
</tr>
<tr>
<td>Eco. 404 Business Cycles</td>
<td>3</td>
<td>Eco. 413 Economic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>Psych. 201 Introd. Psychology</td>
<td>3</td>
<td>Soc. 201 General Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Senior Year**

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Cr. Hours</th>
<th>SECOND SEMESTER</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phil. 300-400 Philosophy</td>
<td>3</td>
<td>Phil. 300-400 Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>Math. 421 Advanced Calculus</td>
<td>3</td>
<td>Math. 422 Advanced Calculus</td>
<td>3</td>
</tr>
<tr>
<td>Eco. 408 Contemporary Economics</td>
<td>3</td>
<td>Eco. 300-400 Economics</td>
<td>3</td>
</tr>
<tr>
<td>Hist. 251 Amer. Hist. to 1865</td>
<td>3</td>
<td>Hist. 252 Amer. Hist. since 1865</td>
<td>3</td>
</tr>
</tbody>
</table>
PROGRAMS IV AND V
BACHELOR OF MUSIC
and
BACHELOR OF ARTS WITH A MAJOR IN MUSIC

Requirements for the Degree of Bachelor of Music:

ACADEMIC

English ................................................................. 9 Credit Hours
Speech ............................................................... 3 Credit Hours
History, Social Science ........................................ 6 Credit Hours
Psychology ......................................................... 3 Credit Hours
Philosophy (300 or 400 courses) ......................... 6 Credit Hours
Electives (to include required basic Religion or Philosophy and Military Science courses) .................. 14 Credit Hours

41 Credit Hours

MUSICAL

Major (Piano, Organ, Violin, Voice, Theory, Composition) ......................................................... 20-24 Credit Hours
Minor (Voice, Instrument, Theory) ...................... 12 Credit Hours
Theory .............................................................. 20 Credit Hours
History, Literature, Appreciation ......................... 10 Credit Hours
Conducting, Instrumentation, Orchestration .......... 5 Credit Hours
Ensemble (Chorus, Glee Club, Orchestra, Band) ........ 2 Credit Hours

69-73 Credit Hours

ELECTIVES (Academic or Musical) ......................... 14-18 Credit Hours

1. Voice Majors will be required to take modern languages as a part of the academic electives.

2. Students majoring in Voice, Violin, Theory, or Composition will be required to use Piano as a Minor, or demonstrate ability to play the piano at a level satisfactory to the Department.

3. For ELECTIVES (Academic or Musical), additional courses in Theory and Applied Music are strongly recommended.

Candidates for the degree of Bachelor of Arts may elect Music as their major study. A maximum of forty semester hours will be accepted for credit. Of these sixteen may be in Applied Music. A maximum of twenty-four credits in other musical subjects will be allowed independently of Applied Music.
PROGRAM VI
DIVISION OF ARTS AT CARTAGENA

The freshman and sophomore curriculum corresponds to the Liberal Arts program followed at St. Joseph’s College, Collegeville, Indiana.

**Junior Year**

**FIRST SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phil. 307</td>
<td>Philosophy of Nature ...5</td>
</tr>
<tr>
<td>Phil. 416</td>
<td>History of Ancient Philosophy ...2</td>
</tr>
<tr>
<td>Hist. 311</td>
<td>History of the Ancient Near East ...3</td>
</tr>
<tr>
<td>Psych. 201</td>
<td>Introductory Psych ...3</td>
</tr>
<tr>
<td>Educ. 202</td>
<td>Educational Psych ...3</td>
</tr>
</tbody>
</table>

**SECOND SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phil. 304</td>
<td>Philosophy of Man ...4</td>
</tr>
<tr>
<td>Phil. 417</td>
<td>History of Medieval Philosophy ...4</td>
</tr>
<tr>
<td>Hist. 313</td>
<td>History of Christian Antiquity ...3</td>
</tr>
<tr>
<td>Psych. 305</td>
<td>Mental Hygiene ...3</td>
</tr>
<tr>
<td>Spe. 401</td>
<td>Adv. Public Speaking ...2</td>
</tr>
<tr>
<td>Educ. 307</td>
<td>Principles of Teaching ...2</td>
</tr>
</tbody>
</table>

**Senior Year**

**FIRST SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phil. 421</td>
<td>Metaphysics I ...3</td>
</tr>
<tr>
<td>Phil. 422</td>
<td>Metaphysics II ...3</td>
</tr>
<tr>
<td>Phil. 324</td>
<td>Ethics ...3</td>
</tr>
<tr>
<td>Phil. 418</td>
<td>History of Modern Philosophy ...4</td>
</tr>
<tr>
<td>Hist. 301</td>
<td>Medieval Europe ...3</td>
</tr>
<tr>
<td>Spe. 303</td>
<td>Adv. Inter. Reading ...2</td>
</tr>
</tbody>
</table>

**SECOND SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phil. 423</td>
<td>Metaphysics of Knowledge ...3</td>
</tr>
<tr>
<td>Phil. 424</td>
<td>Prob. of Metaphysics ...3</td>
</tr>
<tr>
<td>Phil. 419</td>
<td>History of Contemporary Philosophy ...2</td>
</tr>
<tr>
<td>Hist. 302</td>
<td>Renaissance and Reform ...3</td>
</tr>
<tr>
<td>Soc. 404</td>
<td>Social Institutions ...3</td>
</tr>
<tr>
<td>Rel. 409</td>
<td>Old Testament Prophets 4</td>
</tr>
</tbody>
</table>
Division of Business Administration

The Division of Business Administration prepares students for activity in business, community leadership, and service. Because intelligent business and community leadership requires a well-rounded character and mind development, this Division feels that its students must not only be well-versed in commerce and its related fields, but also in those of philosophy and the social sciences. It is believed that broad training in the various fields within the Division will equip the student with a more diversified training than if too narrow specialization is followed. Also, by wise guidance in his choice of elective courses outside this Division, the student's general knowledge is widened and in this same manner his interests are fostered and developed.

Admission Requirements

For admission to the Division of Business Administration the applicant must have sixteen units of acceptable credit. These units should include: three in English; one in Mathematics; one-half unit in American History; and one-half unit in Civics.

Degree Requirements

The Division of Business Administration confers the degree of Bachelor of Science in Business Administration upon the satisfactory completion of the prescribed requirements. These requirements consist of one hundred and thirty semester hours as a minimum, and twice that number of quality points, which generally cover a program of eight semesters.

Each candidate for the degree must satisfy the prescribed requirements of the Freshman-Sophomore Business Administration program, which has been planned to give the student a broad and liberal training in preparation for business and economics. It is desirable in the freshman and sophomore years that the sequence of courses be followed as nearly as possible, but it may be varied to suit the needs of individual students. There is a more specialized curriculum for students in Secretarial Studies.

Lower Division

Freshman Year

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Mil. 101 First Yr. Basic Course</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Phe. 101 Physical Education</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Phe. 103 Health (Women)</td>
<td>1/2</td>
</tr>
<tr>
<td>Eng. 101 English Composition</td>
<td>3</td>
</tr>
<tr>
<td>Acct. 101 Elementary Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 101 Intro. to Business</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 103 Math. of Finance I</td>
<td>3</td>
</tr>
<tr>
<td>Or. 101 Orientation</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Mil. 102 First Yr. Basic Course</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Phe. 102 Physical Education</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Phe. 103 Health (Men)</td>
<td>1/2</td>
</tr>
<tr>
<td>Phe. 104 Health (Women)</td>
<td>1/2</td>
</tr>
<tr>
<td>Spe. 101 Fund. of Elf. Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Acct. 102 Elementary Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 102 Industrial Resources</td>
<td>3</td>
</tr>
<tr>
<td>Eco. 104 Economic Geography</td>
<td>3</td>
</tr>
</tbody>
</table>
Sophomore Year

FIRST SEMESTER   

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Mil. 201 Second Yr. Basic Course</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Phe. 201 Phys. Educ. (Women)</td>
<td>1/2</td>
</tr>
<tr>
<td>*Acct. 201 Intermediate Acctg.</td>
<td>3</td>
</tr>
<tr>
<td>Eco. 201 Principles of Economics</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 201 Business Machines</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 203 Math. of Finance II</td>
<td>3</td>
</tr>
<tr>
<td>Eng. 222 American Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Mil. 202 Second Yr. Basic Course</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Phe. 202 Phys. Educ. (Women)</td>
<td>1/2</td>
</tr>
<tr>
<td>*Acct. 202 Intermediate Acctg.</td>
<td>3</td>
</tr>
<tr>
<td>Eco. 202 Principles of Economics</td>
<td>3</td>
</tr>
<tr>
<td>Eco. 205 American Eco. History</td>
<td>3</td>
</tr>
<tr>
<td>Psych. 201 Introductory Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

*Students majoring in Business Organization and Economics and who do not wish to elect Acct. 201-2 should consult their adviser for substitution. Usually, English Literature, Sociology, or Political Science are satisfactory substitutes (6 credit hours).

UPPER DIVISION

Specialization in one or more fields in this Division occurs in the Junior and Senior years. A particular curriculum in each field is recommended and it is advisable that students adhere as nearly as possible to this sequence of courses. It is possible to major in any one of the three departments of Accounting, Business Organization or Economics. A student may choose to major in two, or major in one and have minors in the other two. A minimum of forty-five hours must be completed in Junior and Senior courses in the Division of Business Administration. A specific requirement of the University is six credits in Philosophy and one course in Psychology.

REQUIRED COURSES

The following courses must be completed by all students who are candidates for a degree in Business Administration.

<table>
<thead>
<tr>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus. 301 Corporation Finance</td>
</tr>
<tr>
<td>Bus. 303 Business Law</td>
</tr>
<tr>
<td>Bus. 305 Principles of Marketing</td>
</tr>
<tr>
<td>Bus. 313 Business Statistics</td>
</tr>
<tr>
<td>Bus. 316 Industrial Management</td>
</tr>
<tr>
<td>Bus. 317 Labor Management</td>
</tr>
<tr>
<td>Eco. 405 Money, Credit, and Banking</td>
</tr>
<tr>
<td>Eco. 404 Business Cycles and/or</td>
</tr>
<tr>
<td>Eco. 408 Contemporary Economics</td>
</tr>
<tr>
<td>Bus. 425 Seminar</td>
</tr>
</tbody>
</table>
ACCOUNTING

The following courses are prescribed for a minor in Accounting:

<table>
<thead>
<tr>
<th>Course</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acct. 301-302 Advanced Accounting</td>
<td>6</td>
</tr>
<tr>
<td>Acct. 303-304 Cost Accounting</td>
<td>6</td>
</tr>
<tr>
<td>Acct. 401-402 Auditing</td>
<td>6</td>
</tr>
</tbody>
</table>

These constitute the core courses. For a major in Accounting, a further sequence of four or five courses is required. A student who majors in Accounting and who chooses to have a minor in both Business Organization and Economics must earn credits for at least two courses in either Business Organization or Economics in addition to those listed above as required courses.

BUSINESS ORGANIZATION AND ECONOMICS

The work in Business Organization provides training for students planning to engage in commercial, industrial, and financial activities. The program is developed to emphasize basic principles in the broad fields of finance, management, and marketing. Current economic developments as well as economic and social implications of past and present business developments are stressed. For students desiring some degree of specialization, special courses are provided in the fields of banking, finance, management, retailing, salesmanship, statistics, business law and applied economics. Provisions are made for a well-rounded business training to aid students to adjust themselves intelligently and successfully to the commercial and industrial world.

The work in Economics has been planned for two groups of students. The first group includes those students who desire a general background and understanding of Economics, its order, development, and operation. The second group consists of those students who desire technical training in preparation for advanced specialized study in business and for professional service with government or enterprise requiring trained economists. A balanced program of study is available to the student in this field. Candidates for the Bachelor of Arts degree who desire to major in Economics will follow the program of the Division of Arts. Students in the Division of Business Administration will follow the curriculum provided.

The student who chooses to major in Business Organization and Economics is required to follow a program which includes in addition to the required basic courses (a) a sequence of three or four courses as a minimum in a specialized field, namely marketing, management, banking and finance, and economics, (b) one or two advanced courses in each of the following: marketing, management, banking and finance, business law, and economics. The student, with the adviser, will decide which of the above plans best meets his needs and interests and will govern his courses accordingly.
**PROGRAM I**

**BACHELOR OF SCIENCE WITH A MAJOR IN ACCOUNTING BUSINESS ORGANIZATION AND ECONOMICS MINORS**

**Junior Year**

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acct. 301</td>
<td>Advanced Account</td>
<td>3</td>
</tr>
<tr>
<td>Acct. 303</td>
<td>Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 313</td>
<td>Statistical Analysis</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 316</td>
<td>Industrial Management</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 306</td>
<td>Epistemology</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 103</td>
<td>Logic</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND SEMESTER</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acct. 302</td>
<td>Advanced Account</td>
<td>3</td>
</tr>
<tr>
<td>Acct. 304</td>
<td>Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 301</td>
<td>Corporation Finance</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 303</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 317</td>
<td>Labor Management</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 324</td>
<td>Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 306</td>
<td>Epistemology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Senior Year**

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acct. 401</td>
<td>Auditing I</td>
<td>3</td>
</tr>
<tr>
<td>Acct. 403</td>
<td>Federal Income Tax</td>
<td>3</td>
</tr>
<tr>
<td>Acct. 406</td>
<td>Pay Roll Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Eng. 408</td>
<td>Business English</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 405</td>
<td>Money, Credit, Banking</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 300-400</td>
<td>Philosophy, or Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND SEMESTER</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acct. 402</td>
<td>Auditing II</td>
<td>3</td>
</tr>
<tr>
<td>Acct. 404</td>
<td>C. P. A. Problems</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 404</td>
<td>Business Cycles or Contemporary Economics</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 408</td>
<td>Contemporary Economics</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Bus. 425</td>
<td>Business Seminar</td>
<td>2</td>
</tr>
</tbody>
</table>

**PROGRAM II**

**BACHELOR OF SCIENCE WITH A MAJOR IN BUSINESS ORGANIZATION ACCOUNTING AND ECONOMICS MINORS**

**Junior Year**

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acct. 301</td>
<td>Advanced Account</td>
<td>3</td>
</tr>
<tr>
<td>Acct. 303</td>
<td>Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 301</td>
<td>Corporation Finance</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 303</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 316</td>
<td>Industrial Management</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 306</td>
<td>Epistemology</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 103</td>
<td>Logic</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND SEMESTER</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acct. 302</td>
<td>Advanced Account</td>
<td>3</td>
</tr>
<tr>
<td>Acct. 304</td>
<td>Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 301</td>
<td>Corporation Finance</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 303</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 317</td>
<td>Labor Management</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

**Senior Year**

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acct. 401</td>
<td>Auditing I</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 313</td>
<td>Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 404</td>
<td>Business Cycles or Contemporary Economics</td>
<td>3</td>
</tr>
<tr>
<td>Eng. 408</td>
<td>Business English</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Bus. 425</td>
<td>Business Seminar</td>
<td>2</td>
</tr>
</tbody>
</table>
# Program III

**Bachelor of Science with Majors in Business Organization and Economics**

### Junior Year

#### First Semester

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus. 301 Corporation Finance</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 303 Business Law</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 313 Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 317 Labor Management</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 307 Advertising</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 306 Epistemology or Logic</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Second Semester

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus. 304 Business Law</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 305 Prin. of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 310 Salesmanship</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 316 Industrial Management</td>
<td>3</td>
</tr>
<tr>
<td>Business Electives</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 324 Ethics or Phil. 306 Epistemology</td>
<td>3</td>
</tr>
</tbody>
</table>

### Senior Year

#### First Semester

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus. 405 Money, Credit, Banking</td>
<td>3</td>
</tr>
<tr>
<td>Eco. 308 Insurance</td>
<td>3</td>
</tr>
<tr>
<td>Business Electives</td>
<td>6</td>
</tr>
<tr>
<td>Bus. 425 Business Seminar</td>
<td>2</td>
</tr>
<tr>
<td>Phil. 300-400 Philosophy, or Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Second Semester

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus. 404 Business Cycles or Cont. Economics</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 408 Contemporary Economics</td>
<td>3</td>
</tr>
<tr>
<td>Eco. 401 Investments</td>
<td>3</td>
</tr>
<tr>
<td>Economics Electives</td>
<td>6</td>
</tr>
<tr>
<td>Eco. 425 Economics Seminar</td>
<td>2</td>
</tr>
<tr>
<td>Eng. 408 Business English</td>
<td>3</td>
</tr>
</tbody>
</table>

# Program IV

**Bachelor of Science with a Major in Business Organization, Economics and Unrelated Minors**

### Junior Year

#### First Semester

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus. 301 Corporation Finance</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 305 Business Law</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 317 Advertising</td>
<td>3</td>
</tr>
<tr>
<td>Elective (Unrel. minor)</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 306 Epistemology or Logic</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Second Semester

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus. 305 Prin. of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 310 Salesmanship</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 317 Labor Management</td>
<td>3</td>
</tr>
<tr>
<td>Elective (Unrel. minor)</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 324 Ethics or Phil. 306 Epistemology</td>
<td>3</td>
</tr>
</tbody>
</table>

### Senior Year

#### First Semester

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus. 405 Money, Credit, Banking</td>
<td>3</td>
</tr>
<tr>
<td>Business Elective</td>
<td>3</td>
</tr>
<tr>
<td>Economics Elective</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 425 Business Seminar</td>
<td>2</td>
</tr>
<tr>
<td>Elective (Unrel. minor)</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 300-400 Philosophy or Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Second Semester

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus. 404 Business Cycles or Cont. Economics</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 408 Contemporary Economics</td>
<td>3</td>
</tr>
<tr>
<td>Eco. 401 Investments</td>
<td>3</td>
</tr>
<tr>
<td>Elective (Unrel. minor)</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>9</td>
</tr>
</tbody>
</table>
PROGRAM V
BACHELOR OF SCIENCE WITH A MAJOR IN ECONOMICS
BUSINESS ORGANIZATION AND UNRELATED MINORS

**Junior Year**

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Cr. Hours</th>
<th>SECOND SEMESTER</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subjects</strong></td>
<td></td>
<td><strong>Subjects</strong></td>
<td></td>
</tr>
<tr>
<td>Bus. 301</td>
<td>3</td>
<td>Bus. 305</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 303</td>
<td>3</td>
<td>Bus. 313</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 316</td>
<td>3</td>
<td>Bus. 317</td>
<td>3</td>
</tr>
<tr>
<td>Eco. 325</td>
<td>3</td>
<td>Eco. 308</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 306</td>
<td>3</td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 103</td>
<td>3</td>
<td>Phil. 324</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 306</td>
<td>3</td>
<td>Phil. 306</td>
<td>3</td>
</tr>
</tbody>
</table>

**Senior Year**

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Cr. Hours</th>
<th>SECOND SEMESTER</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subjects</strong></td>
<td></td>
<td><strong>Subjects</strong></td>
<td></td>
</tr>
<tr>
<td>Bus. 405</td>
<td>3</td>
<td>Bus. 406</td>
<td>3</td>
</tr>
<tr>
<td>Eco. 401</td>
<td>3</td>
<td>Bus. 404</td>
<td>3</td>
</tr>
<tr>
<td>Eco. 413</td>
<td>3</td>
<td>Bus. 408</td>
<td>3</td>
</tr>
<tr>
<td>Eco. 402</td>
<td>3</td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td>Eco. 425</td>
<td>2</td>
</tr>
</tbody>
</table>

PROGRAM VI
BACHELOR OF SCIENCE WITH A MAJOR IN PERSONNEL ADMINISTRATION

**Junior Year**

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Cr. Hours</th>
<th>SECOND SEMESTER</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subjects</strong></td>
<td></td>
<td><strong>Subjects</strong></td>
<td></td>
</tr>
<tr>
<td>Bus. 303</td>
<td>3</td>
<td>Bus. 301</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 305</td>
<td>3</td>
<td>Bus. 313</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 316</td>
<td>3</td>
<td>Bus. 317</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 306</td>
<td>3</td>
<td>Phil. 306</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 103</td>
<td>3</td>
<td>Phil. 324</td>
<td>3</td>
</tr>
<tr>
<td>Psych. 308</td>
<td>3</td>
<td>Psych. 402</td>
<td>3</td>
</tr>
<tr>
<td>Psych. 408</td>
<td>3</td>
<td>Eng. 408</td>
<td>3</td>
</tr>
</tbody>
</table>

**Senior Year**

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Cr. Hours</th>
<th>SECOND SEMESTER</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subjects</strong></td>
<td></td>
<td><strong>Subjects</strong></td>
<td></td>
</tr>
<tr>
<td>Bus. 327</td>
<td>3</td>
<td>Bus. 405</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 404</td>
<td>3</td>
<td>Bus. 419</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 408</td>
<td>3</td>
<td>Bus. 422</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 319</td>
<td>3</td>
<td>Bus. 421</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 300-400</td>
<td>3</td>
<td>Business Electives</td>
<td>6</td>
</tr>
</tbody>
</table>
## PROGRAM VII
**Bachelor of Science with a Major in Industrial Management**

### Junior Year

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>SUBJECTS</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Law</td>
<td>303</td>
<td>3</td>
</tr>
<tr>
<td>Business Law</td>
<td>305</td>
<td>3</td>
</tr>
<tr>
<td>Industrial Management</td>
<td>316</td>
<td>3</td>
</tr>
<tr>
<td>Labor Economics</td>
<td>325</td>
<td>3</td>
</tr>
<tr>
<td>Logic</td>
<td>103</td>
<td>3</td>
</tr>
<tr>
<td>Cost Analysis</td>
<td>310</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND SEMESTER</th>
<th>SUBJECTS</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporation Finance</td>
<td>301</td>
<td>3</td>
</tr>
<tr>
<td>Statistics</td>
<td>313</td>
<td>3</td>
</tr>
<tr>
<td>Elements of Supervision</td>
<td>327</td>
<td>3</td>
</tr>
<tr>
<td>Labor Management</td>
<td>317</td>
<td>3</td>
</tr>
<tr>
<td>Business English</td>
<td>408</td>
<td>3</td>
</tr>
<tr>
<td>Ethics or</td>
<td>324</td>
<td>3</td>
</tr>
<tr>
<td>Epistemology</td>
<td>306</td>
<td>3</td>
</tr>
</tbody>
</table>

### Senior Year

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>SUBJECTS</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time and Motion Study</td>
<td>320</td>
<td>3</td>
</tr>
<tr>
<td>Job Evaluation and Wage Determination</td>
<td>319</td>
<td>3</td>
</tr>
<tr>
<td>Business Cycles or</td>
<td>404</td>
<td>3</td>
</tr>
<tr>
<td>Contemporary Economics</td>
<td>408</td>
<td>3</td>
</tr>
<tr>
<td>Labor Legislation</td>
<td>316</td>
<td>3</td>
</tr>
<tr>
<td>Philosophy, or Elective</td>
<td>300-400</td>
<td>3</td>
</tr>
<tr>
<td>Industrial Psychology</td>
<td>420</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND SEMESTER</th>
<th>SUBJECTS</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time and Motion Study</td>
<td>321</td>
<td>3</td>
</tr>
<tr>
<td>Money, Credit, Banking</td>
<td>405</td>
<td>3</td>
</tr>
<tr>
<td>Production Methods and Control</td>
<td>415</td>
<td>3</td>
</tr>
<tr>
<td>Collective Bargaining, Mediation, Arbitration</td>
<td>419</td>
<td>3</td>
</tr>
<tr>
<td>Theory of Organization</td>
<td>421</td>
<td>3</td>
</tr>
</tbody>
</table>

## PROGRAM VIII
**Bachelor of Science with a Major in Retailing**

### Junior Year

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>SUBJECTS</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporation Finance</td>
<td>301</td>
<td>3</td>
</tr>
<tr>
<td>Business Law</td>
<td>303</td>
<td>3</td>
</tr>
<tr>
<td>Intro. to Retailing</td>
<td>305</td>
<td>3</td>
</tr>
<tr>
<td>Retail Salesmanship</td>
<td>310</td>
<td>3</td>
</tr>
<tr>
<td>Textiles</td>
<td>316</td>
<td>3</td>
</tr>
<tr>
<td>Epistemology, or</td>
<td>306</td>
<td>3</td>
</tr>
<tr>
<td>Logic</td>
<td>103</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND SEMESTER</th>
<th>SUBJECTS</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistics</td>
<td>313</td>
<td>3</td>
</tr>
<tr>
<td>Business English</td>
<td>408</td>
<td>3</td>
</tr>
<tr>
<td>Retail Personnel Relations</td>
<td>318</td>
<td>3</td>
</tr>
<tr>
<td>Retail Organization and Operation</td>
<td>409</td>
<td>3</td>
</tr>
<tr>
<td>Buying for Retail Stores</td>
<td>414</td>
<td>3</td>
</tr>
<tr>
<td>Ethics or</td>
<td>324</td>
<td>3</td>
</tr>
<tr>
<td>Epistemology</td>
<td>306</td>
<td>3</td>
</tr>
</tbody>
</table>

### Senior Year

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>SUBJECTS</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money, Credit, Banking</td>
<td>405</td>
<td>3</td>
</tr>
<tr>
<td>Advertising</td>
<td>307</td>
<td>3</td>
</tr>
<tr>
<td>Color Design &amp; Interior Decorating</td>
<td>319</td>
<td>3</td>
</tr>
<tr>
<td>Retail Merchandising Mathematics</td>
<td>405</td>
<td>3</td>
</tr>
<tr>
<td>Store Laboratory</td>
<td>420</td>
<td>3</td>
</tr>
<tr>
<td>Philosophy, or Elective</td>
<td>300-400</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND SEMESTER</th>
<th>SUBJECTS</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credits and Collections</td>
<td>402</td>
<td>3</td>
</tr>
<tr>
<td>Business Cycles or</td>
<td>404</td>
<td>3</td>
</tr>
<tr>
<td>Contemporary Economics</td>
<td>408</td>
<td>3</td>
</tr>
<tr>
<td>Retail Sales Promotion</td>
<td>311</td>
<td>3</td>
</tr>
<tr>
<td>Fashions or Elective</td>
<td>320</td>
<td>3</td>
</tr>
<tr>
<td>Store Laboratory</td>
<td>421</td>
<td>2</td>
</tr>
<tr>
<td>Retail Seminar</td>
<td>425</td>
<td>2</td>
</tr>
</tbody>
</table>
PROGRAM IX
CERTIFICATE PROGRAM IN SECRETARIAL STUDIES

THE TWO-YEAR Secretarial Studies Certificate Program has been designed especially for those who plan to attend college only two years. It is a complete certificate program in itself, and may also be used as the first two years for a four-year degree program in Business Administration or in Education.

University-trained private secretaries are urgently needed in hospitals, clinics, and other medical service organizations. They are needed in research organizations, personnel, and foreign trade offices, in social service and governmental agencies, in commercial and industrial offices.

In order to qualify for the higher-bracket secretarial positions, expert skill should be achieved in stenography and office procedure. A knowledge of accountancy, finance, and business machines is important. But as important as these studies are, the future worker needs the reinforcement of broad educational training in Economics, History, and other Social Studies. He needs to enrich his personality with higher training in English or other cultural studies.

Freshman Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjects</td>
<td>Cr. Hours</td>
</tr>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Phe. 101 Physical Education</td>
<td>$\frac{1}{2}$</td>
</tr>
<tr>
<td>Phe. 103 Health</td>
<td>$\frac{1}{2}$</td>
</tr>
<tr>
<td>Eng. 101 English Composition</td>
<td>3</td>
</tr>
<tr>
<td>Sec. 101 Elementary Shorthand</td>
<td>3</td>
</tr>
<tr>
<td>Sec. 103 Elementary Typing</td>
<td>3</td>
</tr>
<tr>
<td>Sec. 110 Secretarial Math.</td>
<td>3</td>
</tr>
</tbody>
</table>

Sophomore Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjects</td>
<td>Cr. Hours</td>
</tr>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Phe. 201 Physical Education</td>
<td>$\frac{1}{2}$</td>
</tr>
<tr>
<td>Eco. 204 Survey of Economics</td>
<td>3</td>
</tr>
<tr>
<td>Sec. 201 Advanced Shorthand</td>
<td>3</td>
</tr>
<tr>
<td>Sec. 203 Advanced Typing</td>
<td>3</td>
</tr>
<tr>
<td>Sec. 105 Secretarial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Sec. 205 Secretarial Theory</td>
<td>3</td>
</tr>
</tbody>
</table>
**Division of Education**

The Division of Education is primarily concerned with the professional preparation of future teachers. It is recognized that teaching is an art, that it is an inter-personal affair between teacher and student. As such, the Division of Education incorporates within its professional objectives those overall University objectives aimed at the development of moral, religious, intellectual, social, aesthetic, and physical qualities in teacher-candidates. In this respect, the Division seeks quality rather than quantity in its students.

The four-year program of teacher-education is designed to provide the future teacher with opportunities for: (1) personal, social, and ethical development; (2) a broad general education; (3) comprehensive subject matter specialization; and (4) professional competence.

In this wise, the largest part of the curriculum is directed toward gaining the elements of a broad and sound education. In addition, the teacher should have a feeling of power in his field, which requires that his specialization be comprehensive. Finally, provisions for professional competence are made (1) through adequate study of the various phases in the growth and development of the human individual, (2) through thorough study of the professional foundations which are common to all teaching, and (3) through specialized study of the principles underlying a particular type and level of teaching.

**ADMISSION REQUIREMENTS**

Certificates of grades and credits are accepted from all high schools accredited by the North Central Association of Colleges and Secondary Schools, or by any other regional association, and from all high schools on the accredited lists of state universities.

All students are required to take the placement tests at the University Guidance Center before being admitted.

**DEGREE REQUIREMENTS**

Specific four-year course requirements for kindergarten-primary, elementary, secondary, and special (music, art, physical education, home economics, business, speech) certification are outlined in the following pages.

The Division of Education will not recommend students for graduation unless these students can also qualify and be recommended for teacher certification.

To satisfy University requirements for graduation and State requirements for certification, the student shall fulfill the following requirements:

1. Show evidence of such general scholarship, personal and moral qualities, as give promise of professional success.
2. Earn 128 semester hours credit in approved courses.
3. Meet the following letter-grade requirements:
   A. Earn a grade-point average of 2.00 or better. This minimum point average is necessary in order to be in good standing each semester.
   B. Show work of no less than "C" caliber in one's specialized teaching field or fields. (No grade of "D" is acceptable in the student's teaching field.)

4. Complete a minimum of 24 semester hours in professional courses distributed over the following areas:

<table>
<thead>
<tr>
<th>Cr. Hours</th>
<th>A. Introduction To Education</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B. Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Educational Psychology I, Child Psychology, Adolescent Psychology.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C. The Learning and Teaching Processes</td>
<td>3-6</td>
</tr>
<tr>
<td></td>
<td>Educational Psychology II, Group Leadership, Classroom Management, Provisions for Individual Differences, Diagnosis and Remedial Instruction.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#D. The Purposes and Practices of Education</td>
<td>5-6</td>
</tr>
<tr>
<td></td>
<td>E. The Integrated Personality</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Mental Hygiene, Principles of Guidance, Interviewing and Counseling Procedures.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*F. Special Methods (in area of main teaching field)</td>
<td>2-3</td>
</tr>
<tr>
<td></td>
<td>G. Student Teaching</td>
<td>6-12</td>
</tr>
<tr>
<td></td>
<td>#Not applicable to students following courses leading to a Bachelor of Science Degree in Music Education, Art Education, or Business Education.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Students in Elementary Education follow special courses in methods covering (a) Reading, (b) Skills, (c) Content. Students in Kindergarten-Primary Education follow special courses in theory, methods, and materials on kindergarten-primary level.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The responsibility for meeting the University and State requirements rests with the student and not the University officials. The student is cautioned to study the course requirements, especially specific prerequisite course requirements, as noted in the catalogue.</td>
<td></td>
</tr>
</tbody>
</table>

TEACHING CERTIFICATES

The Division of Education is on the approved list of the Ohio State Department of Education for the education and preparation of teachers. In addition to preparing regular kindergarten-primary, elementary, and high school teachers, the Division also enables students to qualify for special certificates in Art, Physical Education, Home Economics, Business Education, Music, and Speech. Provisional certificates will be issued only to those who complete the above mentioned requirements.
PROGRAM I
FOR STUDENTS MAJORING IN ELEMENTARY EDUCATION

Degree: Bachelor of Science in Education

Freshman Year

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Art 101 Drawing, or</td>
<td></td>
</tr>
<tr>
<td>Sec. 107 Personal Typing</td>
<td>2</td>
</tr>
<tr>
<td>Educ. 101 Intro. to Education</td>
<td>3</td>
</tr>
<tr>
<td>Educ. 102 Science for the Elem. School Teacher I</td>
<td>4</td>
</tr>
<tr>
<td>Eng. 101 English Composition</td>
<td>3</td>
</tr>
<tr>
<td>Hist. 111 Hist. of Modern Europe</td>
<td>3</td>
</tr>
<tr>
<td>Mil. 101 First Yr. Basic Course</td>
<td>1.5</td>
</tr>
<tr>
<td>Or. 101 Orientation</td>
<td>0</td>
</tr>
<tr>
<td>Phe. 101 Physical Education</td>
<td>1/2</td>
</tr>
<tr>
<td>Phe. 103 Health</td>
<td>1/2</td>
</tr>
</tbody>
</table>

SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Art 201 Principles of Design</td>
<td></td>
</tr>
<tr>
<td>Educ. 103 Science for the Elem. School Teacher II</td>
<td>4</td>
</tr>
<tr>
<td>Hist. 112 Hist. of Modern Europe</td>
<td>3</td>
</tr>
<tr>
<td>Mil. 102 First Yr. Basic Course</td>
<td>1.5</td>
</tr>
<tr>
<td>Phe. 102 Physical Education</td>
<td>1/2</td>
</tr>
<tr>
<td>Phe. 104 Health (Women)</td>
<td>1/2</td>
</tr>
<tr>
<td>Psych. 201 Introductory Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Spe. 101 Fund. of Eff. Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>

Sophomore Year

FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Educ. 200 Purposes and Practices of the Elem. School</td>
<td>3</td>
</tr>
<tr>
<td>Educ. 202 Educ. Psychology I, or</td>
<td></td>
</tr>
<tr>
<td>Educ. 306 Child Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Eng. 221 English Literature</td>
<td>3</td>
</tr>
<tr>
<td>Hist. 251 Amer. Hist. to 1865</td>
<td>3</td>
</tr>
<tr>
<td>Mil. 201 Second Yr. Basic Course</td>
<td>1.5</td>
</tr>
<tr>
<td>Mus. 141 Intro. to Music</td>
<td>2</td>
</tr>
<tr>
<td>Phe. 201 Physical Education</td>
<td>1/2</td>
</tr>
</tbody>
</table>

SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Art 221 or 222 Practical Arts</td>
<td></td>
</tr>
<tr>
<td>Educ. 203 Educ. Psychology II</td>
<td>3</td>
</tr>
<tr>
<td>Eng. 222 American Literature</td>
<td>3</td>
</tr>
<tr>
<td>Hist. 232 Amer. Hist. since 1865</td>
<td>3</td>
</tr>
<tr>
<td>Mil. 202 Second Yr. Basic Course</td>
<td>1.5</td>
</tr>
<tr>
<td>Mus. 102 Music Lit. and Apprec</td>
<td>2</td>
</tr>
<tr>
<td>Phe. 202 Physical Education</td>
<td>1/2</td>
</tr>
</tbody>
</table>

Junior Year

FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educ. 301 Classroom Mgmt., or</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
</tr>
<tr>
<td>Educ. 322 Lit. in Elem. School</td>
<td>3</td>
</tr>
<tr>
<td>Educ. 324 Lang. in Elem. School</td>
<td>3</td>
</tr>
<tr>
<td>Geo. 103 Prin. of Geography</td>
<td>3</td>
</tr>
<tr>
<td>Mus. 231 or 232 Teaching Music</td>
<td>2</td>
</tr>
<tr>
<td>Phil. 103 Logic or</td>
<td></td>
</tr>
<tr>
<td>Phil. 306 Epistemology</td>
<td>3</td>
</tr>
</tbody>
</table>

SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educ. 303 Reading in Elem. Sch</td>
<td>3</td>
</tr>
<tr>
<td>Educ. 318 Mental Hygiene</td>
<td>3</td>
</tr>
<tr>
<td>Educ. 241 Arithmetic and Methods</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 324 Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Phe. 130 Fundamental Rhythms, or</td>
<td></td>
</tr>
<tr>
<td>Phe. 131 Games of Low. Organ, or</td>
<td>2</td>
</tr>
<tr>
<td>Electives in the Social Studies</td>
<td></td>
</tr>
</tbody>
</table>

Senior Year

FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educ. 325 Soc. Stud. in Elem. Sch</td>
<td>3</td>
</tr>
<tr>
<td>Educ. 419 Phil. of Education</td>
<td>3</td>
</tr>
<tr>
<td>Educ. Elective</td>
<td>3</td>
</tr>
<tr>
<td>Phe. 132 Hygiene and Sanitation</td>
<td>2</td>
</tr>
<tr>
<td>Elective in the Social Studies</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educ. 407 Art in the Elem. Sch.</td>
<td>2</td>
</tr>
<tr>
<td>Educ. 414 Student Teaching</td>
<td>6-12</td>
</tr>
<tr>
<td>Educ. Elective</td>
<td>3</td>
</tr>
</tbody>
</table>
# PROGRAM II
## FOR STUDENTS MAJORING IN SECONDARY EDUCATION

*Degree: Bachelor of Science in Education*

### Freshman Year

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Cr. Hours</th>
<th>SECOND SEMESTER</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Bio. 101 General Biology</td>
<td>4</td>
<td>Bio. 102 General Biology</td>
<td>4</td>
</tr>
<tr>
<td>Educ. 101 Intro. to Education</td>
<td>3</td>
<td>Mil. 102 First Yr. Basic Course</td>
<td>1(\frac{1}{2})</td>
</tr>
<tr>
<td>Eng. 101 English Composition</td>
<td>3</td>
<td>Phe. 102 Physical Education</td>
<td>1(\frac{1}{2})</td>
</tr>
<tr>
<td>Mil. 101 First Yr. Basic Course</td>
<td>1(\frac{1}{2})</td>
<td>Phe. 104 Health (Women)</td>
<td>1(\frac{1}{2})</td>
</tr>
<tr>
<td>Or. 101 Orientation</td>
<td>0</td>
<td>Psych. 201 Introductory Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Phe. 101 Physical Education</td>
<td>1(\frac{1}{2})</td>
<td>Spe. 101 Fund. of Eff. Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Elective in field of concentration</td>
<td>3</td>
<td>Elective in field of concentration</td>
<td>3</td>
</tr>
</tbody>
</table>

### Sophomore Year

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Cr. Hours</th>
<th>SECOND SEMESTER</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Educ. 304 Adolescent Psychology</td>
<td>3</td>
<td>Eng. 222 American Literature</td>
<td>3</td>
</tr>
<tr>
<td>Eng. 221 English Literature</td>
<td>3</td>
<td>Mil. 202 Second Yr. Basic Course</td>
<td>1(\frac{1}{2})</td>
</tr>
<tr>
<td>Mil. 201 Second Yr. Basic Course</td>
<td>1(\frac{1}{2})</td>
<td>Phe. 202 Physical Education (Women)</td>
<td>1(\frac{1}{2})</td>
</tr>
<tr>
<td>Phe. 201 Physical Education</td>
<td>1(\frac{1}{2})</td>
<td>An approved course in Social Studies</td>
<td>3</td>
</tr>
<tr>
<td>An approved course in Social Studies</td>
<td>3</td>
<td>Elective in field of concentration</td>
<td>3</td>
</tr>
<tr>
<td>Electives in fields of concentration</td>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Junior Year

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Cr. Hours</th>
<th>SECOND SEMESTER</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educ. 302 Prin. of Sec. Educ., or</td>
<td>2-3</td>
<td>Educ. 318 Mental Hygiene, or</td>
<td></td>
</tr>
<tr>
<td>Phil. 103 Logic, or</td>
<td>3</td>
<td>Phil. 324 Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 306 Epistemology</td>
<td>3</td>
<td>Spec. meth. in main teaching field</td>
<td>3</td>
</tr>
<tr>
<td>Electives in fields of concentration</td>
<td>9</td>
<td>Electives in fields of concentration</td>
<td>3</td>
</tr>
</tbody>
</table>

### Senior Year

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Cr. Hours</th>
<th>SECOND SEMESTER</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educ. 301 Classroom Mgmt., or</td>
<td>3</td>
<td>Educ. 414 Student Teaching</td>
<td>6-12</td>
</tr>
<tr>
<td>Educ. Elective</td>
<td>3</td>
<td>Electives in fields of concentration</td>
<td>6</td>
</tr>
<tr>
<td>Educ. 419 Phil. of Educ., or</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# PROGRAM III
## FOR STUDENTS MAJORING IN PHYSICAL EDUCATION

### Degree: Bachelor of Science in Education

#### Freshman Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subjects</strong></td>
<td><strong>Cr. Hours</strong></td>
</tr>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Bio. 101 General Biology</td>
<td>4</td>
</tr>
<tr>
<td>Educ. 101 Intro. to Education</td>
<td>3</td>
</tr>
<tr>
<td>Eng. 101 English Composition</td>
<td>3</td>
</tr>
<tr>
<td>Mil. 101 First Yr. Basic Course</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Or. 101 Orientation</td>
<td>0</td>
</tr>
<tr>
<td>Phe. 116 Methods in Minor Sports</td>
<td>2</td>
</tr>
<tr>
<td>Phe. 117 Teams Sports (Women)</td>
<td>2</td>
</tr>
<tr>
<td>Phe. 119 Officiating (Men)</td>
<td>1/2</td>
</tr>
<tr>
<td>Phe. 132 Hygiene and Sanitation</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Sophomore Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subjects</strong></td>
<td><strong>Cr. Hours</strong></td>
</tr>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Educ. 202 Educ. Psychology I, or</td>
<td>3</td>
</tr>
<tr>
<td>Educ. 304 Adolescent Psychology, or</td>
<td>3</td>
</tr>
<tr>
<td>Educ. 306 Child Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Eng. 221 English Literature</td>
<td>3</td>
</tr>
<tr>
<td>Hist. 111 Hist. of Modern Europe</td>
<td>3</td>
</tr>
<tr>
<td>Mil. 201 Second Yr. Basic Course</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Phe. 201 Physical Educ. (Women)</td>
<td>1/2</td>
</tr>
<tr>
<td>Phe. 203 Human Anatomy</td>
<td>2</td>
</tr>
<tr>
<td>Phe. 210 Coach, Foot. and Basket</td>
<td>2</td>
</tr>
<tr>
<td>Phe. 235 Camp. and Playgrounds</td>
<td>3</td>
</tr>
<tr>
<td>Phe. 245 Modern Dance (Women)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Junior Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subjects</strong></td>
<td><strong>Cr. Hours</strong></td>
</tr>
<tr>
<td>Educ. 302 Prin. of Sec. Educ., or</td>
<td>3</td>
</tr>
<tr>
<td>Educ. 340 Principles of Education 2-3</td>
<td>3</td>
</tr>
<tr>
<td>Educ. 318 Mental Hygiene</td>
<td>3</td>
</tr>
<tr>
<td>Hist. 251 American Hist. to 1865</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 105 Logic</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 306 Epistemology</td>
<td>3</td>
</tr>
<tr>
<td>Phe. 303 Human Physiology</td>
<td>3</td>
</tr>
<tr>
<td>Phe. 323 Program Building</td>
<td>2</td>
</tr>
<tr>
<td>Phe. 328 Recreational Activities</td>
<td>1</td>
</tr>
<tr>
<td>Phe. 346 Problems in Phe. for Women</td>
<td>2</td>
</tr>
</tbody>
</table>
Senior Year

**FIRST SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educ. 419 Phil. of Educ., or</td>
<td></td>
</tr>
<tr>
<td>Educ. 420 Mod. Theories of Educ.</td>
<td>3</td>
</tr>
<tr>
<td>Phe. 401 Prin. of Physical Educ.</td>
<td>2</td>
</tr>
<tr>
<td>Phe. 402 Org. &amp; Adm. of Phys.</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>2</td>
</tr>
<tr>
<td>Phe. 403 Prin. &amp; Adm. of Health Education</td>
<td>2</td>
</tr>
<tr>
<td>Phe. 405 Tests and Measurements</td>
<td>2</td>
</tr>
<tr>
<td>Phe. 407 Modern Problems in Public Health</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

**SECOND SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educ. 414 Student Teaching</td>
<td>6-12</td>
</tr>
<tr>
<td>Phe. 409 Corrective Phys. Educ.</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

---

**PROGRAM IV**

FOR STUDENTS MAJORING IN MUSIC EDUCATION

*Degree: Bachelor of Science in Music Education*

**Freshman Year**

**FIRST SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Educ. 101 Intro. to Education</td>
<td>3</td>
</tr>
<tr>
<td>Hist. 111 Hist. of Mod. Europe, or</td>
<td></td>
</tr>
<tr>
<td>Hist. 251 American Hist. to 1865</td>
<td>3</td>
</tr>
<tr>
<td>Mil. 101 First Yr. Basic Course</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Mus. 102 Music Lit. and Apprec.</td>
<td>2</td>
</tr>
<tr>
<td>Mus. 151 First Year Theory</td>
<td>5</td>
</tr>
<tr>
<td>Mus. Applied Music</td>
<td>2</td>
</tr>
<tr>
<td>Or. 101 Orientation</td>
<td>0</td>
</tr>
<tr>
<td>Phe. 101 Physical Education</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Phe. 103 Health</td>
<td>1 1/2</td>
</tr>
</tbody>
</table>

**SECOND SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Eng. 101 English Composition</td>
<td>3</td>
</tr>
<tr>
<td>Hist. 112 Hist. of Mod. Europe, or</td>
<td></td>
</tr>
<tr>
<td>Hist. 252 American Hist. since 1865</td>
<td></td>
</tr>
<tr>
<td>Mil. 102 First Yr. Basic Course</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Mus. 152 First Year Theory</td>
<td>5</td>
</tr>
<tr>
<td>Mus. Applied Music</td>
<td>2</td>
</tr>
<tr>
<td>Phe. 102 Physical Education</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Phe. 104 Health (Women)</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Psych. 201 Introductory Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Sophomore Year**

**FIRST SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Educ. 202 Educational Psych. I, or</td>
<td></td>
</tr>
<tr>
<td>Educ. 304 Adolescent Psych., or</td>
<td>3</td>
</tr>
<tr>
<td>Eng. 221 English Literature</td>
<td>3</td>
</tr>
<tr>
<td>Mil. 201 Second Yr. Basic Course</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Mus. 251 Second Year Theory</td>
<td>5</td>
</tr>
<tr>
<td>Mus. Applied Music</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>2</td>
</tr>
</tbody>
</table>

**SECOND SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Educ. 203 Educational Psych. II</td>
<td>3</td>
</tr>
<tr>
<td>Eng. 222 American Literature</td>
<td>3</td>
</tr>
<tr>
<td>Mil. 202 Second Yr. Basic Course</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Mus. 252 Second Year Theory</td>
<td>5</td>
</tr>
<tr>
<td>Mus. Applied Music</td>
<td>2</td>
</tr>
<tr>
<td>Spe. 101 Fundamentals of Effective Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>
Junior Year

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educ. 301</td>
<td>Classroom Management</td>
<td>3</td>
</tr>
<tr>
<td>Mus. 231 or 232 Teaching Music</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Mus. 301</td>
<td>History of Music I</td>
<td>3</td>
</tr>
<tr>
<td>Mus. 311</td>
<td>18th Cen. Counterpoint</td>
<td>2</td>
</tr>
<tr>
<td>Mus. 321</td>
<td>Instrumental Conducting</td>
<td>2</td>
</tr>
<tr>
<td>Mus. 235 Voice Class, or</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Mus. 325 Inst. Class Methods</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Phil. 103 Logic, or</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Phil. 306 Epistemology</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND SEMESTER</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educ. 318 Mental Hygiene</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mus. 312 18th Cen. Counterpoint</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Mus. 322 Instrumentation and Orchestra</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mus. 351 Choral Conducting</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Mus. 331 Vocal Music in H.S. or School Band and Orch</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Phil. 324 Ethics</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Senior Year

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educ. 419 Phil. of Education</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mus. 236 Voice Class, or</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Mus. 326 Instrumental Class</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Mus. 413 Form and Analysis</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Mus. 415 Mod. Harmonic Styles, or</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Mus. 417 16th Cen. Counterpoint</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Mus. 425 Prob. in Inst. Mus., or</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Mus. 431 Prob. in Vocal Music</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND SEMESTER</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educ. 414 Student Teaching</td>
<td>6-12</td>
<td></td>
</tr>
<tr>
<td>Mus. 414 Form and Analysis</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Mus. 416 Modern Harmonic Styles, or</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Mus. 418 16th. Cent. Counterpoint</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

NOTES:
1. Students must take Applied Music instruction in Piano to a level satisfactory to the Faculty of the Music Department, or demonstrate proficiency at such a level.
2. Needs of the individual student and fulfillment of State requirements should be given first consideration in the choice of electives. Additional Applied Music courses are strongly recommended.
3. Mus. 231 is not required of students qualifying for Secondary School Music Education, but it is strongly recommended for all.

PROGRAM V

FOR STUDENTS MAJORING IN ART EDUCATION

Degree: Bachelor of Science in Art Education

Freshman Year

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Art Design</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Art Perspective</td>
<td>1½</td>
<td></td>
</tr>
<tr>
<td>Art Cast Drawing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Educ. 101 Intro. to Education</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Eng. 101 English Composition</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mil. 101 First Yr. Basic Course</td>
<td>1½</td>
<td></td>
</tr>
<tr>
<td>Or. 101 Orientation</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Phe. 101 Physical Education</td>
<td>½</td>
<td></td>
</tr>
<tr>
<td>Phe. 103 Health</td>
<td>½</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND SEMESTER</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Art Design</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Art Perspective</td>
<td>1½</td>
<td></td>
</tr>
<tr>
<td>Art Cast Drawing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mil. 102 First Yr. Basic Course</td>
<td>1½</td>
<td></td>
</tr>
<tr>
<td>Phe. 102 Physical Education</td>
<td>½</td>
<td></td>
</tr>
<tr>
<td>Phe. 104 Health (Women)</td>
<td>½</td>
<td></td>
</tr>
<tr>
<td>Psych. 201 Introductory Psychology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Spe. 101 Fundamentals of Effective Speaking</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
### Sophomore Year

#### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Art An Apprec. of the Arts</td>
<td>1½</td>
</tr>
<tr>
<td>Art Lettering</td>
<td>1½</td>
</tr>
<tr>
<td>Art Painting</td>
<td>3</td>
</tr>
<tr>
<td>Art Life Drawing</td>
<td>4½</td>
</tr>
<tr>
<td>Educ. 202 Educ. Psychology I, or</td>
<td></td>
</tr>
<tr>
<td>Educ. 304 Adolescent Psych., or</td>
<td></td>
</tr>
<tr>
<td>Educ. 306 Child Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Mil. 201 Second Yr. Basic Course</td>
<td>1½</td>
</tr>
</tbody>
</table>

#### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Art An Apprec. of the Arts</td>
<td>1½</td>
</tr>
<tr>
<td>Art Lettering</td>
<td>1½</td>
</tr>
<tr>
<td>Art Painting</td>
<td>3</td>
</tr>
<tr>
<td>Art Life Drawing</td>
<td>4½</td>
</tr>
<tr>
<td>Educ. 203 Educ. Psychology II</td>
<td>3</td>
</tr>
<tr>
<td>Mil. 202 Second Yr. Basic Course</td>
<td>1½</td>
</tr>
</tbody>
</table>

### Junior Year

#### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Introd. Art History</td>
<td>2</td>
</tr>
<tr>
<td>Art Life Drawing</td>
<td>1½</td>
</tr>
<tr>
<td>Art Advertising Design</td>
<td>3</td>
</tr>
<tr>
<td>Educ. 301 Classroom Management</td>
<td>3</td>
</tr>
<tr>
<td>Educ. 419 Philosophy of Education</td>
<td></td>
</tr>
<tr>
<td>Eng. 221 English Literature</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 103 Logic, or</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 306 Epistemology</td>
<td>3</td>
</tr>
</tbody>
</table>

#### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Introd. Art History</td>
<td>2</td>
</tr>
<tr>
<td>Art Methods and Materials</td>
<td>2</td>
</tr>
<tr>
<td>Educ. 318 Mental Hygiene</td>
<td>3</td>
</tr>
<tr>
<td>Eng. 222 American Literature</td>
<td>3</td>
</tr>
<tr>
<td>Phil 324 Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

### Senior Year

#### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Commercial Illustration</td>
<td>4½</td>
</tr>
<tr>
<td>Art Crafts</td>
<td>4½</td>
</tr>
<tr>
<td>Educ. 414 Student Teaching</td>
<td>3-6</td>
</tr>
</tbody>
</table>

#### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Commercial Illustration</td>
<td>4½</td>
</tr>
<tr>
<td>Art Crafts</td>
<td>4½</td>
</tr>
<tr>
<td>Educ. 414 Student Teaching</td>
<td>3-6</td>
</tr>
</tbody>
</table>

### PROGRAM VI

FOR STUDENTS MAJORING IN BUSINESS EDUCATION

Degree: Bachelor of Science in Education

### Freshman Year

#### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Mil. 101 First Yr. Basic Course</td>
<td>1½</td>
</tr>
<tr>
<td>Phe. 101 Physical Education</td>
<td>½</td>
</tr>
<tr>
<td>Phe. 103 Health</td>
<td>½</td>
</tr>
<tr>
<td>Eng. 101 English Composition</td>
<td>3</td>
</tr>
<tr>
<td>Spe. 101 Fund. of Eff. Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Eco. 104 Economic Geography</td>
<td>3</td>
</tr>
<tr>
<td>Educ. 101 Intro, to Education</td>
<td>3</td>
</tr>
<tr>
<td>Psych. 201 Introductory Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Or. 101 Orientation</td>
<td>0</td>
</tr>
</tbody>
</table>

#### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Mil. 102 First Yr. Basic Course</td>
<td>1½</td>
</tr>
<tr>
<td>Phe. 102 Physical Education</td>
<td>½</td>
</tr>
<tr>
<td>Phe. 104 Health (Women)</td>
<td>½</td>
</tr>
<tr>
<td>Eng. 221 English Literature</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 101 Intro. to Business</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 201 Business Machines</td>
<td>3</td>
</tr>
<tr>
<td>Hist. 252 Amer. Hist. since 1865</td>
<td>3</td>
</tr>
<tr>
<td>Sec. 110 Secretarial Mathematics</td>
<td>3</td>
</tr>
</tbody>
</table>
### Sophomore Year

#### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Mil. 201 Second Yr. Basic Course</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Phe. 201 Phys. Educ. (Women)</td>
<td>1/2</td>
</tr>
<tr>
<td>Acct. 101要素 Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Eco. 201 Principles of Economics</td>
<td>3</td>
</tr>
<tr>
<td>Educ. 202 Educ. Psychology I</td>
<td>3</td>
</tr>
<tr>
<td>Sec. 101 Elementary Shorthand</td>
<td>3</td>
</tr>
<tr>
<td>Sec. 103 Elementary Typewriting</td>
<td>3</td>
</tr>
</tbody>
</table>

#### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Mil. 202 Second Yr. Basic Course</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Phe. 202 Phys. Educ. (Women)</td>
<td>1/2</td>
</tr>
<tr>
<td>Acct. 102 Elementary Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Eco. 202 Principles of Economics</td>
<td>3</td>
</tr>
<tr>
<td>Educ. 203 Educ. Psychology II</td>
<td>3</td>
</tr>
<tr>
<td>Sec. 102 Elementary Shorthand</td>
<td>3</td>
</tr>
<tr>
<td>Sec. 104 Elementary Typewriting</td>
<td>3</td>
</tr>
</tbody>
</table>

### Junior Year

#### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acct. 406 Pay Roll Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 301 Corporation Finance</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 103 Logic, or</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 306 Epistemology</td>
<td>3</td>
</tr>
<tr>
<td>Sec. 201 Advanced Shorthand</td>
<td>3</td>
</tr>
<tr>
<td>Sec. 203 Advanced Typewriting</td>
<td>3</td>
</tr>
<tr>
<td>Sec. 205 Secretarial Theory</td>
<td>3</td>
</tr>
</tbody>
</table>

#### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus. 305 Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Eco. 205 American Eco. History</td>
<td>3</td>
</tr>
<tr>
<td>Educ. 318 Mental Hygiene</td>
<td>3</td>
</tr>
<tr>
<td>Eng. 222 American Literature</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 324 Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Sec. 206 Secretarial Theory</td>
<td>3</td>
</tr>
</tbody>
</table>

### Senior Year

#### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus. 303 Business Law</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 307 Advertising</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 309 Retail Merchandising</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 310 Salesmanship</td>
<td>3</td>
</tr>
<tr>
<td>Educ. Special Methods</td>
<td>3-4</td>
</tr>
</tbody>
</table>

#### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eng. 408 Business English</td>
<td>3</td>
</tr>
<tr>
<td>Educ. 414 Student Teaching</td>
<td>6-12</td>
</tr>
<tr>
<td>Hist. 357 Latin-America, or</td>
<td>3</td>
</tr>
<tr>
<td>Hist. Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

### PROGRAM VII

FOR STUDENTS MAJORING IN HOME ECONOMICS

Degree: Bachelor of Science in Education

### Freshman Year

#### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Phe. 101 Physical Education</td>
<td>1/2</td>
</tr>
<tr>
<td>Chem. 100 Inorganic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>Educ. 101 Intro. to Education</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 100 Intro. to Home Econ</td>
<td>1</td>
</tr>
<tr>
<td>Hec. 102 Foods I</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 103 Intro. to Related Art</td>
<td>3</td>
</tr>
<tr>
<td>Eng. 101 English Composition</td>
<td>3</td>
</tr>
<tr>
<td>Or. 101 Orientation</td>
<td>3</td>
</tr>
</tbody>
</table>

#### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Phe. 102 Physical Education</td>
<td>1/2</td>
</tr>
<tr>
<td>Chem. 200 Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>Hec. 101 Beginning Clothing</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 214 Textiles I</td>
<td>3</td>
</tr>
<tr>
<td>Spe. 101 Fund. of Eff. Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>
### Sophomore Year

**FIRST SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Phe. 201 Physical Education</td>
<td>1½</td>
</tr>
<tr>
<td>Bio. 101 General Biology</td>
<td>4</td>
</tr>
<tr>
<td>Educ. 202 Educ. Psychology I</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 203 Health and Home Nurs.</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 318 Family Relationships</td>
<td>3</td>
</tr>
</tbody>
</table>

**SECOND SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Phe. 202 Physical Education</td>
<td>1½</td>
</tr>
<tr>
<td>Bio. 102 General Biology</td>
<td>4</td>
</tr>
<tr>
<td>Educ. 203 Educ. Psychology II</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 201 Foods II</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 221 Home Management I</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 307 Household Physics</td>
<td>3</td>
</tr>
</tbody>
</table>

### Junior Year

**FIRST SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio. 413 General Bacteriology</td>
<td>4</td>
</tr>
<tr>
<td>Educ. 340 Prin. of Education, or</td>
<td></td>
</tr>
<tr>
<td>Educ. 302 Prin. of Sec. Educ.</td>
<td>2-3</td>
</tr>
<tr>
<td>Hec. 302 Meal Planning</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 303 Nutrition and Health</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 309 Household Equipment</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 324 Ethics</td>
<td></td>
</tr>
</tbody>
</table>

**SECOND SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio. 303 Physiology</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 304 Quantity Cookery</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 315 Consumer Buying</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 323 Demonstration Methods</td>
<td>1</td>
</tr>
<tr>
<td>Hec. 406 Home Management II</td>
<td>3</td>
</tr>
<tr>
<td>Soc. 202 Social Problems</td>
<td>3</td>
</tr>
</tbody>
</table>

### Senior Year

**FIRST SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educ. 318 Mental Hygiene, or</td>
<td></td>
</tr>
<tr>
<td>Educ. 415 Principles of Guidance</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 311 Advanced Clothing, or</td>
<td></td>
</tr>
<tr>
<td>Hec. 415 Tailoring</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 405 Teaching Home Econ.</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 409 Advanced Foods</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 425 Child Development I</td>
<td>3</td>
</tr>
</tbody>
</table>

**SECOND SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educ. 414 Student Teaching</td>
<td>6</td>
</tr>
<tr>
<td>Hec. 423 Home Furnishings I</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 426 Child Development II</td>
<td>3</td>
</tr>
</tbody>
</table>

### PROGRAM VIII

**FOR STUDENTS WHO DESIRE TO QUALIFY FOR A PROVISIONAL CADET ELEMENTARY CERTIFICATE**

**Cr. Hrs.**

A. PROFESSIONAL REQUIREMENTS .............................................. 21

The student shall complete a minimum of 18 semester hours in professional courses distributed among the following areas:

**Cr. Hrs.**

1. **Growth and Development** ........................................ 3
   - Child Psychology, Educational Psychology I.

2. **The Learning and Teaching Processes** .......................... 6-9
   - Educational Psychology II, Classroom Management,
     Special Methods, Provisions for Individual Differences,
     Diagnosis and Remedial Instruction, etc.
Purposes and Practices of the Elementary School.

4. Personality Adjustment .......................................................... 3
Mental Hygiene for Teachers

5. Student Teaching ................................................................. 6-9
Actual classroom teaching under supervision, preferably in large blocks of time per day.

B. GENERAL REQUIREMENTS ......................................................... 42
The student shall complete not less than 38 semester hours of credit distributed among the following areas:

1. Language Arts ................................................................. 9-12
   Literature in the Elementary School, English Composition, English Literature, Speech.

2. Social Studies ................................................................. 9-15
   American History since 1865, Principles of Geography, American Government, European History, Sociology. (A basic course in American History or American Government must be included.)

3. Science ................................................................. 6-8
   Science for the Elementary Teacher.

4. Health and Physical Education .................................................. 3-6
   Hygiene and Sanitation, Fundamental Rhythms, Games of Low Organization, Theory of Play and Recreation.

5. Art and Crafts ................................................................. 2-4
   Drawing, Principles of Design, Practical Arts, Art in the Elementary School. (Practical Arts must be included.)

6. Music ................................................................. 2-4

7. Arithmetic ................................................................. 3
   Arithmetic for the Elementary School Teacher.

8. Philosophy or Religion .......................................................... 4

C. A Provisional Cadet Elementary Certificate issued to one who entered upon preparation for such certificate after May 9, 1952, may be renewed only upon evidence of the completion of 24 semester hours (equivalent to at least 6 semester hours per year) of additional training applicable to the degree in elementary education. A second renewal may be granted under the same requirements.
PROGRAM IX
FOR STUDENTS WHO DESIRE DUAL CERTIFICATION
(QUALIFYING FOR BOTH THE PROVISIONAL ELEMENTARY CERTIFICATE AND THE HIGH SCHOOL OR SPECIAL CERTIFICATE)

Degree: Bachelor of Science in Education

<table>
<thead>
<tr>
<th>Cr. Hrs.</th>
<th>A. PROFESSIONAL REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>37</td>
<td>The student shall complete a minimum of 34 semester hours in professional courses distributed among the following areas:</td>
</tr>
</tbody>
</table>

1. Introduction To Education ........................................ 3
2. Growth and Development ............................................. 3
3. Personality Adjustment ................................................ 3
4. The Learning and Teaching Processes ............................ 3-6
5. Purposes and Practices of Education .............................. 5-6
6. Methods .......................................................................... 12
7. Student Teaching ....................................................... 8-12

B. GENERAL REQUIREMENTS ............................................. 64

The student shall complete not less than 64 semester hours of credit distributed over the following areas:

1. Philosophy or Religion ................................................. 14
2. Language Arts ............................................................ 15-18

English Composition, Literature in the Elementary School, English Literature, American Literature, Speech.
3. **Social Studies** ................................................................. 18-24
   American History, European History, American

4. **Science** ........................................................................ 8-12
   Science for the Elementary School Teacher (or any
   other combination of biological and physical sciences.)

5. **Health and Physical Education** .................................... 3-6
   Hygiene and Sanitation, Fundamental Rhythms, Games
   of Low Organization, Theory of Play and Recreation.

6. **Music, Art, and Crafts** .................................................. 6-9
   Music Literature and Appreciation, Introduction to
   Music, Drawing, Principles of Design, Practical
   Arts, Cultural History of Europe.

7. **Arithmetic** ..................................................................... 3
   Arithmetic for the Elementary School Teacher.

C. **ELECTIVES** ..................................................................... 30
   Elective credits should include service courses in physical
   education, Military, and fields of teaching at the secondary level.

---

**PROGRAM X**

**FOR STUDENTS WHO HAVE COMPLETED REQUIREMENTS**

**FOR THE PROVISIONAL HIGH SCHOOL CERTIFICATE OR**

**FOR THE PROVISIONAL SPECIAL CERTIFICATE AND**

**WHO DESIRE CERTIFICATION VALID**

**FOR ELEMENTARY TEACHING**

A. The holder of a Provisional High School or Special Certificate may obtain
   a certificate valid for elementary teaching by completing the following 12
   semester hours of credit:

<table>
<thead>
<tr>
<th>Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Purposes and Practices of the Elementary School</td>
</tr>
<tr>
<td>2. Reading in the Elementary School</td>
</tr>
<tr>
<td>3. Arithmetic in the Elementary School</td>
</tr>
<tr>
<td>4. Child Psychology</td>
</tr>
</tbody>
</table>

B. Such a certificate shall be designated as a “RETRAINING” certificate.
   It may be renewed upon evidence of the completion of 12 semester hours
   of additional credit in elementary education. Subsequent renewals may be
   gained without additional training.
Division of Science

Candidates for the degree of Bachelor of Science may major in biology, chemistry, geology, mathematics, home economics, medical technology, medical radiological technique, nursing education, and physics.

Besides satisfying the requirements already mentioned in the foreword under the heading Requirements for Degrees, an applicant for a degree must have acquired from 18 to 24 credit hours for the major, 12 credit hours for the related minor. Basic courses do not count toward the major or minor.

Admission Requirements

For admission to the Division of Science, students shall have completed a four-year course of at least sixteen units in an accredited high school or other institution of standard secondary school grade. They must be in the upper two-thirds of their classes.

Required Studies

- English ............................................................................................ 3 units
- Language—Latin, Greek, or Modern Foreign .................................. 2 units
- Algebra—to Quadratics .................................................................. 1 unit
- Chemistry or Physics ...................................................................... 1 unit
- Geometry—Plane* ......................................................................... 1 unit
- History .............................................................................................. 1 unit
- Electives ............................................................................................ 7 units

*Students wishing to major in Chemistry, Mathematics, or Physics should present 1½ units in Plane and Solid Geometry.

Degree Requirements

Pre-Medical Course

The program offered the students of this course meets the requirements for admission to approved medical schools as determined by the Council of Medical Education of the American Medical Association.

For those pre-medical students for whom it is possible, the four-year course leading to the degree of Bachelor of Science with a major in biology is recommended.

A reading knowledge of one language, either German or French, is generally required by the medical schools. One year of college work, in addition to the high school units in the same language, may be sufficient.

Recommendation of a student by his pre-medical school is usually an important item for admission to medical or dental school. Recommendation is based on more than academic standing; character and personality qualities
are also weighed. The board on pre-medical recommendations is made up of the following:

Sylvester Eveslage
Peter J. Faso
Michael B. Grandy, S.M.

Vincent J. Wottle, S.M.

PROGRAM I

BACHELOR OF SCIENCE WITH A MAJOR IN BIOLOGY

This course, consisting of a major in Biology and a related minor in Chemistry, is especially adapted to the needs of pre-medical and pre-dental students.

**Freshman Year**

**FIRST SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Chem. 105 Inorganic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>Bio. 105 Zoology</td>
<td>4</td>
</tr>
<tr>
<td>Math. 101 College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>Eng. 101 English Composition</td>
<td>3</td>
</tr>
<tr>
<td>Phe. 101 Physical Education</td>
<td>1½</td>
</tr>
<tr>
<td>Mil. 101 First Basic Military</td>
<td>1½</td>
</tr>
<tr>
<td>Or. 101 Orientation</td>
<td>0</td>
</tr>
</tbody>
</table>

**SECOND SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Chem. 106 Inorganic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>Bio. 106 Zoology</td>
<td>4</td>
</tr>
<tr>
<td>Math. 102 Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>Eng. 221 English Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

**Sophomore Year**

**FIRST SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Chem. 201 Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>Bio. 201 Comparative Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>Phys. 201 General Physics</td>
<td>4</td>
</tr>
<tr>
<td>Bio. 315 Botany</td>
<td>4</td>
</tr>
<tr>
<td>Mil. 201 Second Basic Military</td>
<td>1½</td>
</tr>
</tbody>
</table>

**SECOND SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Chem. 202 Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>Bio. 202 Comparative Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>Phys. 202 General Physics</td>
<td>4</td>
</tr>
<tr>
<td>Mil. 202 Second Basic Military</td>
<td>1½</td>
</tr>
<tr>
<td>*Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Junior Year**

**FIRST SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chem. 207 Qualitative Analysis</td>
<td>4</td>
</tr>
<tr>
<td>Bio.</td>
<td></td>
</tr>
<tr>
<td>Eng. Advanced English</td>
<td>3</td>
</tr>
<tr>
<td>*Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**SECOND SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chem. 301 Quantitative Analysis</td>
<td>4</td>
</tr>
<tr>
<td>Bio.</td>
<td></td>
</tr>
<tr>
<td>Eng. Advanced English</td>
<td>3</td>
</tr>
<tr>
<td>*Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Senior Year**

**FIRST SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chem. 302 Physical Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>Bio. Advanced Courses</td>
<td>3-6</td>
</tr>
<tr>
<td>Phil. 324 Ethics</td>
<td>3</td>
</tr>
<tr>
<td>*Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**SECOND SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio. Advanced Courses</td>
<td>3-6</td>
</tr>
<tr>
<td>Phil. 482 Medical Ethics</td>
<td>3</td>
</tr>
<tr>
<td>*Electives</td>
<td>3-6</td>
</tr>
</tbody>
</table>

*Systematic Botany, Modern Language, Government, and Psychology are courses helpful to students who plan Medicine or Dentistry as a career.*
PROGRAM II
BACHELOR OF SCIENCE WITH A MAJOR IN CHEMISTRY

The following curriculum consists of a major in Chemistry and a related minor in Mathematics. Physics, Geology, or Biology may replace Mathematics as a minor. The course is suggestive; variations can be made to satisfy individual needs.

Freshman Year

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Mil. 101 First Basic Military</td>
<td>1½</td>
<td></td>
</tr>
<tr>
<td>Eng. 101 English Composition</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Math. 115 Math. Analysis</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Chem. 107 Inorganic Chemistry</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Phe. 101 Physical Education</td>
<td>½</td>
<td></td>
</tr>
<tr>
<td>Phe. 103 Health</td>
<td>½</td>
<td></td>
</tr>
<tr>
<td>Or. 101 Orientation</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND SEMESTER</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Mil. 102 First Basic Military</td>
<td>1½</td>
<td></td>
</tr>
<tr>
<td>Eng. 221 English Literature</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Math. 116 Math. Analysis</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Chem. 108 Inorganic Chemistry</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Phys. 206 Mechanics &amp; Sound</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Phe. 102 Physical Education</td>
<td>½</td>
<td></td>
</tr>
</tbody>
</table>

Sophomore Year

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Mil. 201 Second Basic Military</td>
<td>1½</td>
<td></td>
</tr>
<tr>
<td>Chem. 205 Analytic Chemistry</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Math. 201 Calculus</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Phys. 207 Electricity &amp; Magnetism</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Ger. 101 Elementary German</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND SEMESTER</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Mil. 202 Second Basic Military</td>
<td>1½</td>
<td></td>
</tr>
<tr>
<td>Chem. 206 Analytic Chemistry</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Math. 202 Calculus</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Phys. 208 Heat &amp; Light</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Ger. 102 Elementary German</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Junior Year

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chem. 303 Physical Chemistry</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Chem. 305 Organic Chemistry</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Math. Advanced Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Geo. 201 Mineralogy</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Ger. 307 Chemical German</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND SEMESTER</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chem. 304 Physical Chemistry</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Chem. 306 Organic Chemistry</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Math. Advanced Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>3-6</td>
<td></td>
</tr>
</tbody>
</table>

Senior Year

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ch.E. 401 Industrial Chemistry</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Chem. 403 Technical Analysis</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Chem. 415 Adv. Inorganic Chem.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Eng. Advanced Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Chem. 410 Seminar</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Phil. 324 Ethics or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phil. 103 Logic or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND SEMESTER</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ch.E. 402 Industrial Chemistry</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Chem. 412 Advanced Organic Chem.</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Chem. 416 Adv. Inorganic Chem.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Eng. Advanced Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Chem. 410 Seminar</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Rel. 420 Religion and Science</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
PROGRAM III
BACHELOR OF SCIENCE WITH A MAJOR IN GEOLOGY

The following curriculum consists of a major in Geology and a joint minor in Biology and Chemistry. The curriculum is only suggestive; variations in the minor may be made to satisfy individual needs.

Freshman Year

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Cr. Hours</th>
<th>SECOND SEMESTER</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Mil. 101 First Basic Military</td>
<td>1 1/2</td>
<td>Mil. 102 First Basic Military</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Eng. 101 English Composition</td>
<td>3</td>
<td>Eng. 221 English Literature</td>
<td>3</td>
</tr>
<tr>
<td>Math. 101 College Algebra</td>
<td>3</td>
<td>Math. 102 Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>Chem. 105 Inorganic Chemistry</td>
<td>4</td>
<td>Chem. 106 Inorganic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>Geo. 101 Physical Geology</td>
<td>4</td>
<td>Geo. 102 Historical Geology</td>
<td>4</td>
</tr>
<tr>
<td>Phe. 101 Physical Education</td>
<td>1/2</td>
<td>Phe. 102 Physical Education</td>
<td>1/2</td>
</tr>
<tr>
<td>Phe. 103 Health</td>
<td>1/2</td>
<td>Or. 101 Orientation</td>
<td>0</td>
</tr>
</tbody>
</table>

Sophomore Year

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Cr. Hours</th>
<th>SECOND SEMESTER</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Mil. 201 Second Basic Military</td>
<td>1 1/2</td>
<td>Mil. 202 Second Basic Military</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Geo. 201 Mineralogy</td>
<td>4</td>
<td>Geo. 202 Optical Mineralogy and Petrography</td>
<td>4</td>
</tr>
<tr>
<td>Bio. 101 General Biology</td>
<td>4</td>
<td>Bio. 102 General Biology</td>
<td>4</td>
</tr>
<tr>
<td>Phys. 201 General Physics</td>
<td>4</td>
<td>Phys. 202 General Physics</td>
<td>4</td>
</tr>
<tr>
<td>Modern Language</td>
<td>3</td>
<td>Modern Language</td>
<td>3</td>
</tr>
</tbody>
</table>

Junior Year

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Cr. Hours</th>
<th>SECOND SEMESTER</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geo. Advanced Courses</td>
<td>8</td>
<td>Geo. Advanced Courses</td>
<td>8</td>
</tr>
<tr>
<td>Chem. 207 Qualitative Analysis</td>
<td>4</td>
<td>Chem. 301 Quantitative Analysis</td>
<td>4</td>
</tr>
<tr>
<td>Bio. 201 Comparative Anatomy</td>
<td>4</td>
<td>Bio. 202 Comparative Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>Modern Language</td>
<td>3</td>
<td>Modern Language</td>
<td>3</td>
</tr>
<tr>
<td>*Geo. 303 Field Course</td>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Senior Year

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Cr. Hours</th>
<th>SECOND SEMESTER</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geo. Advanced Courses</td>
<td>6</td>
<td>Geo. Advanced Courses</td>
<td>8</td>
</tr>
<tr>
<td>Bio. 413 Bacteriology</td>
<td>4</td>
<td>Bio. Advanced Course</td>
<td>4</td>
</tr>
<tr>
<td>Phil. 324 Ethics, or Logic</td>
<td>3</td>
<td>Rel. 420 Religion and Science</td>
<td>3</td>
</tr>
</tbody>
</table>

*Field Course is taken during summer following the Sophomore or Junior Year.
## PROGRAM IV

### BACHELOR OF SCIENCE WITH A MAJOR IN MATHEMATICS OR MATHEMATICAL STATISTICS

The following curriculum consists of a major in Mathematics and a related minor in Physics. Biology, Chemistry, or Geology may replace Physics as a minor. The curriculum is only suggestive; variations may be made to satisfy individual needs.

### Freshman Year

#### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Mil. 101</td>
<td>1½</td>
</tr>
<tr>
<td>Phe. 101</td>
<td>1½</td>
</tr>
<tr>
<td>Phe. 103</td>
<td>1½</td>
</tr>
<tr>
<td>Math. 115</td>
<td>5</td>
</tr>
<tr>
<td>Chem. 107</td>
<td>4</td>
</tr>
<tr>
<td>Eng. 101</td>
<td>3</td>
</tr>
<tr>
<td>Or. 101</td>
<td>0</td>
</tr>
</tbody>
</table>

#### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Mil. 102</td>
<td>1½</td>
</tr>
<tr>
<td>Phe. 102</td>
<td>½</td>
</tr>
<tr>
<td>Math. 116</td>
<td>5</td>
</tr>
<tr>
<td>Chem. 108</td>
<td>4</td>
</tr>
<tr>
<td>Phys. 206</td>
<td>4</td>
</tr>
</tbody>
</table>

### Sophomore Year

#### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Mil. 201</td>
<td>1½</td>
</tr>
<tr>
<td>Math. 201</td>
<td>4</td>
</tr>
<tr>
<td>Phys. 207</td>
<td>4</td>
</tr>
<tr>
<td>Modern Language</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

#### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Math. 202</td>
<td>4</td>
</tr>
<tr>
<td>Phys. 208</td>
<td>4</td>
</tr>
<tr>
<td>Eng. 221</td>
<td>3</td>
</tr>
</tbody>
</table>

### Junior Year

#### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math. Advanced Courses</td>
<td>6</td>
</tr>
<tr>
<td>Phys. Advanced Course</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 324</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 105</td>
<td>3</td>
</tr>
<tr>
<td>Ger. 305</td>
<td>3</td>
</tr>
</tbody>
</table>

#### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math. Advanced Courses</td>
<td>6</td>
</tr>
<tr>
<td>Phys. Advanced Course</td>
<td>3</td>
</tr>
<tr>
<td>Rel. 420</td>
<td>3</td>
</tr>
<tr>
<td>Ger. 306</td>
<td>3</td>
</tr>
</tbody>
</table>

### Senior Year

#### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math. Advanced Courses</td>
<td>3-6</td>
</tr>
<tr>
<td>Phys. Advanced Course</td>
<td>3</td>
</tr>
<tr>
<td>Eng. Advanced Course</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

#### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math. Advanced Courses</td>
<td>3-6</td>
</tr>
<tr>
<td>Phys. Advanced Course</td>
<td>3</td>
</tr>
<tr>
<td>Eng. Advanced Course</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**NOTE:** Students desiring to major in Mathematical Statistics should elect two semesters of Mathematical Statistics in their Junior year, and Probability and the Calculus of Finite Differences in their Senior year.
PROGRAM V

BACHELOR OF SCIENCE WITH A MAJOR IN PHYSICS

The following curriculum consists of a major in Physics and a related minor in Mathematics. Chemistry or Biology may replace Mathematics as a minor. The course is suggestive; variations may be made to satisfy individual needs.

Freshman Year

FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Mil. 101 First Basic Military</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Phe. 101 Physical Education</td>
<td>1/2</td>
</tr>
<tr>
<td>Phe. 103 Health</td>
<td>1/2</td>
</tr>
<tr>
<td>Eng. 101 English Composition</td>
<td>3</td>
</tr>
<tr>
<td>Math. 115 Math. Analysis</td>
<td>5</td>
</tr>
<tr>
<td>Chem. 107 Inorganic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>Or. 101 Orientation</td>
<td>0</td>
</tr>
</tbody>
</table>

SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Mil. 102 First Basic Military</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Phe. 102 Physical Education</td>
<td>1/2</td>
</tr>
<tr>
<td>Math. 116 Math. Analysis</td>
<td>5</td>
</tr>
<tr>
<td>Chem. 108 Inorganic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>Phys. 206 Mechanics and Sound</td>
<td>4</td>
</tr>
</tbody>
</table>

Sophomore Year

FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Mil. 201 Second Basic Military</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Math. 201 Calculus</td>
<td>4</td>
</tr>
<tr>
<td>Phys.  207 Electricity &amp; Magnetism</td>
<td>4</td>
</tr>
<tr>
<td>Modern Language</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Mil. 202 Second Basic Military</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Math. 202 Calculus</td>
<td>4</td>
</tr>
<tr>
<td>Phys. 208 Heat and Light</td>
<td>4</td>
</tr>
<tr>
<td>Eng. 221 English Literature</td>
<td>3</td>
</tr>
<tr>
<td>Modern Language</td>
<td>3</td>
</tr>
</tbody>
</table>

Junior Year

FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phys. Advanced Courses</td>
<td>3-6</td>
</tr>
<tr>
<td>Math. Advanced Course</td>
<td>3</td>
</tr>
<tr>
<td>Ger. 305 Scientific German</td>
<td>3</td>
</tr>
<tr>
<td>Eng. Advanced Course</td>
<td>3</td>
</tr>
</tbody>
</table>

SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phys. Advanced Courses</td>
<td>3-6</td>
</tr>
<tr>
<td>Math. Advanced Course</td>
<td>3</td>
</tr>
<tr>
<td>Ger. 306 Scientific German</td>
<td>3</td>
</tr>
<tr>
<td>Eng. Advanced Course</td>
<td>3</td>
</tr>
</tbody>
</table>

Senior Year

FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phys. Advanced Courses</td>
<td>3-6</td>
</tr>
<tr>
<td>Phil. 103 Logic, or</td>
<td></td>
</tr>
<tr>
<td>Phil. 324 Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phys. Advanced Courses</td>
<td>3-6</td>
</tr>
<tr>
<td>Rel. 420 Religion and Science</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
</tbody>
</table>
PROGRAM VI

BACHELOR OF SCIENCE IN HOME ECONOMICS

The Department provides six special curricula:

(a) Dietetics and Institutional Management.
(b) Home Economics Education.
(c) Clothing and Textiles.
(d) Home Economics in Business: Foods.
(e) Interior Decoration.
(f) General Home Economics.

Students following these curricula may be employed in home-making, teaching, interior decorating, the designing of clothes and costumes, the management of cafeterias, dormitories, and tearooms, demonstrating for commercial manufacturing concerns, dietetics in hospitals and other institutions, graduate work, and research projects.

The Department of Home Economics has been accredited by the Ohio State Department of Education to train teachers in Home Economics for Secondary Schools. Graduates qualify for the Provisional Special Teaching Certificate in Home Economics.

The Department also offers a Teaching Field in Home Economics for students in the Division of Education.

The Curriculum for Dietetics and Institutional Management meets the requirements of the American Dietetics Association.

FRESHMAN YEAR FOR ALL HOME ECONOMICS MAJORS

FIRST SEMESTER                         SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Hec. 100 Intro. to Home Ec</td>
<td>1</td>
<td>Hec. 101 Beginning Clothing</td>
<td>3</td>
</tr>
<tr>
<td>*Hec. 102 Foods I</td>
<td>3</td>
<td>Hec. 214 Textiles I</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 105 Intro. to Related Art</td>
<td>3</td>
<td>*Chem. 200 Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>*Chem. 100 Inorganic Chemistry</td>
<td>5</td>
<td>Spe. 101 Fundamentals of</td>
<td>3</td>
</tr>
<tr>
<td>Eng. 101 English Composition</td>
<td>3</td>
<td>Effective Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Phe. 101 Physical Education</td>
<td>½</td>
<td>Phe. 102 Physical Education</td>
<td>½</td>
</tr>
<tr>
<td>Or. 101 Orientation</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Required of Student Dietitians by the Executive Board of the American Dietetics Association.

1. MAJOR: CLOTHING AND TEXTILES

Sophomore Year

FIRST SEMESTER                         SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Bio. 101 General Biology</td>
<td>4</td>
<td>Bio. 102 General Biology</td>
<td>4</td>
</tr>
<tr>
<td>Hec. 203 Health and Home Nurs</td>
<td>3</td>
<td>Hec. 316 Textiles II</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 318 Family Relationships</td>
<td>3</td>
<td>Hec. 221 Home Management I</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 311 Advanced Clothing</td>
<td>3</td>
<td>Hec. 314 Costume, Art &amp; Design</td>
<td>3</td>
</tr>
<tr>
<td>Psych. 201 Introd. Psychology</td>
<td>3</td>
<td>Soc. 202 Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>Phe. 201 Physical Education</td>
<td>½</td>
<td>Phe. 202 Physical Education</td>
<td>½</td>
</tr>
</tbody>
</table>
### Junior Year

#### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hec. 303 Nutrition and Health</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 302 Menu Planning</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 415 Tailoring</td>
<td>3</td>
</tr>
<tr>
<td>Eco. 204 Survey of Economics</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 310 Salesmanship</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 324 Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

#### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hec. 312 Children's Clothing</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 315 Consumer Buying</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 412 Historic Costume</td>
<td>3</td>
</tr>
<tr>
<td>Bio. 305 Physiology</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 309 Retail Merchandising</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 423 Home Furnishings I</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Senior Year

#### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hec. 425 Child Development I</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 427 Textile Economics</td>
<td>3</td>
</tr>
</tbody>
</table>

#### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hec. 406 Home Management II</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 431 Field Work</td>
<td>3-6</td>
</tr>
</tbody>
</table>

#### Electives

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

### MAJOR: DIETETICS AND INSTITUTIONAL MANAGEMENT

#### Sophomore Year

#### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>*Bio. 101 General Biology</td>
<td>4</td>
</tr>
<tr>
<td>Hec. 205 Health &amp; Home Nursing</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 205 Elem. Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 318 Family Relationships</td>
<td>3</td>
</tr>
<tr>
<td>*Psych. 201 Intro. Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Phe. 201 Physical Education</td>
<td>½</td>
</tr>
</tbody>
</table>

#### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>*Bio. 102 General Biology</td>
<td>4</td>
</tr>
<tr>
<td>*Hec. 201 Foods II</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 221 Home Management I</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 305 Institutional Accounting</td>
<td>3</td>
</tr>
<tr>
<td>*Soc. 202 Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>Phe. 202 Physical Education</td>
<td>½</td>
</tr>
</tbody>
</table>

#### Junior Year

#### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Hec. 303 Nutrition and Health</td>
<td>3</td>
</tr>
<tr>
<td>*Hec. 302 Menu Planning</td>
<td>3</td>
</tr>
<tr>
<td>*Chem. 400 Biochemistry</td>
<td>5</td>
</tr>
<tr>
<td>*Eco. 204 Survey of Economics</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 324 Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

#### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Hec. 304 Quantity Cookery</td>
<td>3</td>
</tr>
<tr>
<td>*Hec. 308 Institutional Buying</td>
<td>3</td>
</tr>
<tr>
<td>*Hec. 401 Advanced Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 307 Household Physics</td>
<td>3</td>
</tr>
<tr>
<td>*Bio. 303 Physiology</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 323 Demonstration Methods</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Senior Year

#### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hec. 309 Household Equipment</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 409 Advanced Foods</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 425 Child Development I</td>
<td>3</td>
</tr>
<tr>
<td>*Educ. 202 Educational Psychology I</td>
<td>3</td>
</tr>
<tr>
<td>*Bio. 413 Bacteriology</td>
<td>4</td>
</tr>
</tbody>
</table>

#### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Hec. 407 Institutional Org.</td>
<td>3</td>
</tr>
<tr>
<td>*Hec. 402 Diet in Disease</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 406 Home Management II</td>
<td>3</td>
</tr>
<tr>
<td>*Educ. 203 Educational Psych. II</td>
<td>3</td>
</tr>
<tr>
<td>*Hec. 405 Teaching of Home Eco,</td>
<td>3</td>
</tr>
</tbody>
</table>

*Required of Student Dietitians by the Executive Board of the American Dietetic Association.
3. MAJOR: HOME ECONOMICS EDUCATION

**Sophomore Year**

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>SUBJECTS</th>
<th>CR. HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Bio. 101 General Biology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Hec. 203 Health &amp; Home Nursing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hec. 318 Family Relationships</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Psych. 201 Introd. Psychology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Phe. 201 Physical Education</td>
<td>1/2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND SEMESTER</th>
<th>SUBJECTS</th>
<th>CR. HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Bio. 102 General Biology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Hec. 201 Foods II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hec. 221 Home Management I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hec. 307 Household Physics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Phe. 202 Physical Education</td>
<td>1/2</td>
<td></td>
</tr>
</tbody>
</table>

**Junior Year**

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>SUBJECTS</th>
<th>CR. HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hec. 303 Nutrition and Health</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hec. 302 Menu Planning</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hec. 309 Household Equipment</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Bio. 413 Bacteriology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Educ. 202 Educational Psych.</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Phil. 324 Ethics</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND SEMESTER</th>
<th>SUBJECTS</th>
<th>CR. HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hec. 304 Quantity Cookery</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hec. 315 Consumer Buying</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hec. 323 Demonstration Methods</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Educ. 203 Educational Psych. II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Soc. 202 Social Problems</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Educ. 301 Classroom Management</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Senior Year**

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>SUBJECTS</th>
<th>CR. HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hec. 409 Advanced Foods</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hec. 425 Child Development I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hec. 415 Tailoring, or</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hec. 311 Advanced Clothing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hec. 405 Teaching of Home Eco</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Educ. 307 Principles of Teaching</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND SEMESTER</th>
<th>SUBJECTS</th>
<th>CR. HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hec. 406 Home Management II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hec. 426 Child Development II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hec. 423 Home Furnishings I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Educ. 415 Principles of Guidance</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Educ. 414 Student Teaching</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

4. MAJOR: BUSINESS: FOODS

**Sophomore Year**

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>SUBJECTS</th>
<th>CR. HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Bio. 101 General Biology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Hec. 203 Health &amp; Home Nursing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hec. 318 Family Relationships</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hec. 303 Nutrition and Health</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Psych. 201 Introd. Psychology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Phe. 201 Physical Education</td>
<td>1/2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND SEMESTER</th>
<th>SUBJECTS</th>
<th>CR. HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Bio. 102 General Biology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Hec. 201 Foods II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hec. 221 Home Management I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hec. 307 Household Physics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Soc. 202 Social Problems</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Phe. 202 Physical Education</td>
<td>1/2</td>
<td></td>
</tr>
</tbody>
</table>

**Junior Year**

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>SUBJECTS</th>
<th>CR. HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hec. 302 Menu Planning</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hec. 309 Household Equipment</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Bio. 413 Bacteriology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Eco. 204 Survey of Economics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Bus. 310 Salesmanship</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Phil. 324 Ethics</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND SEMESTER</th>
<th>SUBJECTS</th>
<th>CR. HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hec. 304 Quantity Cookery</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hec. 401 Advanced Nutrition</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Bio. 303 Physiology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Bus. 309 Retail Merchandising</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hec. 423 Home Furnishings</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hec. 323 Demonstration Methods</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
### Senior Year

#### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hec. 409 Advanced Foods</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 425 Child Development I</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 424 Home Planning</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

#### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hec. 406 Home Management II</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 426 Child Development II</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 402 Diet in Disease</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 431 Field Work</td>
<td>3</td>
</tr>
</tbody>
</table>

### 5. MAJOR: INTERIOR DECORATION

#### Sophomore Year

#### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Art 107 Cultural Hist. of Europe to 1830</td>
<td>3</td>
</tr>
<tr>
<td>Art 103 Intro. Painting I</td>
<td>2</td>
</tr>
<tr>
<td>Eco. 204 Survey of Economics</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 203 Health and Home Nurs...</td>
<td>3</td>
</tr>
<tr>
<td>Phe. 201 Physical Education</td>
<td>½</td>
</tr>
<tr>
<td>Psych. 201 Introductory Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

#### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Art 108 Cultural Hist. of Europe since 1830</td>
<td>3</td>
</tr>
<tr>
<td>Art 201 Prin. of Design I</td>
<td>2</td>
</tr>
<tr>
<td>Hec. 221 Home Management I</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 222 Historic Textiles</td>
<td>3</td>
</tr>
<tr>
<td>Phe. 202 Physical Education</td>
<td>½</td>
</tr>
<tr>
<td>Soc. 202 Social Problems</td>
<td>3</td>
</tr>
</tbody>
</table>

### Junior Year

#### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 104 Introd. Painting II</td>
<td>2</td>
</tr>
<tr>
<td>Bus. 310 Salesmanship</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 302 Meal Planning and Table Service</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 318 Family Relationships</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 431 Field Work</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 324 Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

#### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 202 Prin. of Design II</td>
<td>2</td>
</tr>
<tr>
<td>Hec. 314 Costume, Art and Design</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 315 Consumer Buying</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 323 Demonstration Methods</td>
<td>1</td>
</tr>
<tr>
<td>Hec. 324 Bishop Clothing</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 423 Home Furnishings I</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 509 Retail Merchandising</td>
<td>3</td>
</tr>
</tbody>
</table>

### Senior Year

#### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hec. 427 Textile Economics</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 430 Home Furnishings II</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 431 Field Work</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

#### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hec. 406 Home Management II</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 424 Home Architecture</td>
<td>3</td>
</tr>
<tr>
<td>Hec. 431 Field Work</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
</tbody>
</table>

### 6. MAJOR: GENERAL HOME ECONOMICS

The general major is planned to give a broad cultural course and training for homemaking. Opportunity exists for many electives.

The curriculum is essentially that listed for Home Economics Education. However, the courses in Education may be replaced by electives.
PROGRAM VII
BACHELOR OF SCIENCE WITH A MAJOR IN
MEDICAL TECHNOLOGY

A TWELVE or thirteen month course in Medical Technology is offered by the Diagnostic Laboratories of St. Elizabeth Hospital, Good Samaritan Hospital, Miami Valley Hospital, and Veterans Administration Hospital. Affiliation with the University of Dayton permits a student to obtain the degree of Bachelor of Science in Medical Technology if the University's requirements are fulfilled. These schools are accredited by the Registry of Medical Technologists of the American Society of Clinical Pathologists through the Council on Medical Education and Hospitals of the American Medical Association, and qualify a student to take the examination given by the Registry of Medical Technologists.

The student receives practical and theoretical experience in the various branches of the clinical laboratory, after which he is qualified for positions in physicians' offices, clinics, and hospitals.

METHODS OF INSTRUCTION

After a preliminary concentrated introduction to medical technology, the student participates in the activities of the Diagnostic Laboratories, spending a specific time in each department. Instruction is largely by supervised practice and demonstration, given by members of the laboratory staff. Regular assignments in recognized textbooks and laboratory periodicals are given. Conferences and examinations are held throughout the year. Following a review period at the end of the prescribed course, a final examination is given patterned after that of the Registry of Medical Technologists.

ADMISSION REQUIREMENTS

Application may be made in person or by letter. A personal interview is highly desirable. For students who are not interested in receiving a degree but desire to earn a certificate only, a two-year program will be arranged by the Head of the Division which will satisfy the minimum requirements for admission to the hospital training period. In general this program will be similar to the first two years of the pre-medical program.

Applicants must present the following qualifications:

A. FOR CERTIFICATE ONLY.

1. Two years (60 credit hours) of college work in a college or university accredited by a recognized standardizing association.

2. The minimum credits as required by the Registry of Medical Technologists, Muncie, Indiana, with minor additions listed below. The student must submit an official transcript of college credits approved by the Registry. The following credits are required:
Biology: 12 semester hours which may include general biology, parasitology, physiology, anatomy, histology, embryology, zoology. Biology and physiology are preferred.

Chemistry: One year of General Inorganic Chemistry to include both lectures and laboratory.
3 semester hours of Quantitative Chemistry, Organic Chemistry, or Biochemistry including lectures and laboratory. Quantitative Chemistry is preferred.

Bacteriology: 3 semester hours of introductory Bacteriology are required.

English: 6 semester hours in English Rhetoric and Composition.

Electives: It is recommended that subjects such as Zoology, Anatomy, Physics, Organic Chemistry, advanced Bacteriology, while not required, be taken to fulfill the requirements for the total credit hours.

B. FOR B. S. IN MEDICAL TECHNOLOGY.

1. Three years of college work of which a minimum of 30 semester hours must be taken at the University of Dayton. The subjects listed above should be included.

2. 52-56 weeks’ work at the Hospital Laboratory for which the student receives 33 semester hours of credit. Some students may be required to follow subjects given on the University campus, concurrently with training at the Hospital Laboratory.

3. A total of 128 semester hours, including the Major in Medical Technology, a related minor either in Chemistry or Biology (12 semester hours above basic courses), an unrelated minor (12 semester hours). Students are accepted for classes beginning in July. Completion of hospital training in August should not, in most cases, interfere with graduation in June.

EXPENSES

1. Tuition—None for students working for certificate only. Students working for the B.S. degree from the University of Dayton are required to pay the regular University tuition for the practical year, and register with the University.

2. Maintenance—Complete maintenance will be provided if desired. It is somewhat difficult for us to supply rooms for male students at the present time.

3. Uniforms—The student shall provide herself with at least six approved white uniforms, which will be laundered by the hospital, and a pair of comfortable white shoes.

4. One good textbook on clinical laboratory procedures approved by the Director of the School.

LENGTH OF COURSE

The course of instruction covers a period of 52-56 consecutive weeks. Vacation periods or leaves of absence are not provided because not desirable, but can be arranged upon necessity. The hours of duty are from 8:00 a.m. to 5:00 p.m., five and one-half days a week. Special assignments for Sunday and holiday work are given with time off during the week. There is no night call for students.

Textbook assignments and extracurricular reading and study shall be done
outside the regular hours. Written and oral examinations are held at regular intervals throughout the course.

GRADUATION AND REGISTRATION

AFTER DEMONSTRATING a theoretical and practical proficiency in clinical laboratory procedures, the student is given a certificate by the Hospital, and becomes eligible for the national examination for certification by the Registry of Medical Technology.

Students who are registered at the University of Dayton are eligible for the degree of Bachelor of Science in Medical Technology.

Examinations for Registration and the Certificate of M.T. (Medical Technologist) are given in April and October by the Registry of Medical Technologists in various cities. These are comprehensive written examinations.

CURRICULUM

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>FIRST SEMESTER</th>
<th>Cr. Hours</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Religion or Philosophy</td>
<td>2</td>
<td></td>
<td>Religion or Philosophy</td>
</tr>
<tr>
<td></td>
<td>Chem. 105 Inorganic Chemistry</td>
<td>4</td>
<td></td>
<td>Chem. 106 Inorganic Chemistry</td>
</tr>
<tr>
<td></td>
<td>Bio. 105 Zoology</td>
<td>4</td>
<td></td>
<td>Bio. 106 Zoology</td>
</tr>
<tr>
<td></td>
<td>Math. 101 College Algebra</td>
<td>3</td>
<td></td>
<td>Eng. 221 English Literature</td>
</tr>
<tr>
<td></td>
<td>Eng. 101 English Composition</td>
<td>3</td>
<td></td>
<td>Phe. 102 Physical Education</td>
</tr>
<tr>
<td></td>
<td>Phe. 101 Physical Education</td>
<td>1/2</td>
<td></td>
<td>Or. 101 Orientation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>SECOND SEMESTER</th>
<th>Cr. Hours</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Religion or Philosophy</td>
<td>2</td>
<td></td>
<td>Religion or Philosophy</td>
</tr>
<tr>
<td></td>
<td>Bio. 203 Human Anatomy</td>
<td>2</td>
<td></td>
<td>Bio. 204 Human Anatomy</td>
</tr>
<tr>
<td></td>
<td>Eng. 221 English Literature</td>
<td>3</td>
<td></td>
<td>Eng. Advanced Course</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
<td></td>
<td>Elective</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sophomore Year</th>
<th>FIRST SEMESTER</th>
<th>Cr. Hours</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Religion or Philosophy</td>
<td>2</td>
<td></td>
<td>Religion or Philosophy</td>
</tr>
<tr>
<td></td>
<td>Bio. 203 Human Anatomy</td>
<td>2</td>
<td></td>
<td>Bio. 204 Human Anatomy</td>
</tr>
<tr>
<td></td>
<td>Eng. Advanced Course</td>
<td>3</td>
<td></td>
<td>Eng. Advanced Course</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
<td></td>
<td>Elective</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Junior Year</th>
<th>FIRST SEMESTER</th>
<th>Cr. Hours</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Chem. 207 Qualitative Analysis</td>
<td>4</td>
<td></td>
<td>Chem. 301 Quantitative Analysis</td>
</tr>
<tr>
<td></td>
<td>Bio. 305 Microtechnique</td>
<td>4</td>
<td></td>
<td>Bio. 306 Microtechnique</td>
</tr>
<tr>
<td></td>
<td>Bio. 413 Bacteriology</td>
<td>4</td>
<td></td>
<td>Phil. 482 Medical Ethics</td>
</tr>
<tr>
<td></td>
<td>Bio. 305 Physiology</td>
<td>3</td>
<td></td>
<td>Elective</td>
</tr>
<tr>
<td></td>
<td>Phil. 324 Ethics</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Senior Year</th>
<th>FIRST SEMESTER</th>
<th>Cr. Hours</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Met. 450 Intro. to Med. Technology</td>
<td>6</td>
<td></td>
<td>Met. 454 Chemistry and Gastric Analysis</td>
</tr>
<tr>
<td></td>
<td>Met. 451 Urinalysis and Renal Functions</td>
<td>3</td>
<td></td>
<td>Met. 455 Histology and Cytology</td>
</tr>
<tr>
<td></td>
<td>Met. 452 Hematology</td>
<td>4</td>
<td></td>
<td>Met. 456 Serology &amp; Spinal Fluids</td>
</tr>
<tr>
<td></td>
<td>Met. 453 Bacteriology, Sputum, Parasitology, Feces, and Special Fluids</td>
<td>4</td>
<td></td>
<td>Met. 457 Electrocardiography, B.M.R.</td>
</tr>
</tbody>
</table>
PROGRAM VIII
BACHELOR OF SCIENCE WITH A MAJOR IN
RADIOLOGICAL TECHNIQUE

A TWELVE-MONTHS' course in Radiological Technique is offered by the Radiology Departments of Miami Valley and St. Elizabeth Hospitals. Affiliation with the University of Dayton permits a student to obtain a degree of Bachelor of Science in Radiological Technique, if the University's requirements are met. The school is approved by the Council on Medical Education and Hospitals of the American Medical Association and qualifies a student to take the examination given by the American Registry of X-ray Technicians.

The student receives practical and theoretical experience in diagnostic and therapeutic technique which qualifies the graduate for positions in hospitals, clinics, physicians’ offices, and industrial medical departments. There are excellent opportunities for both men and women in this field.

METHODS OF INSTRUCTION

INSTRUCTION CONSISTS of a series of lectures in the theoretical principles of X-ray technique and in their practical applications. Assignments are given in appropriate textbooks and periodicals. Extensive supervised, practical applications of the principles are made. Regular monthly examinations are given, with a final examination upon completion of the course.

ADMISSION REQUIREMENTS

APPLICATIONS MAY BE made in person or by letter. A personal interview is advisable. Applicants should present the following qualifications for admission to the courses given at the Hospitals:

A. FOR A CERTIFICATE:

Two years of college work are required, followed by one year at Miami Valley or St. Elizabeth Hospital. The college work, preferably, includes the following courses:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics:</td>
<td></td>
</tr>
<tr>
<td>College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>Plane Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry:</td>
<td></td>
</tr>
<tr>
<td>General Inorganic</td>
<td>6</td>
</tr>
<tr>
<td>Physics:</td>
<td></td>
</tr>
<tr>
<td>General Physics</td>
<td>10</td>
</tr>
<tr>
<td>English:</td>
<td></td>
</tr>
<tr>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>Theme Writing</td>
<td>3</td>
</tr>
<tr>
<td>Biology:</td>
<td></td>
</tr>
<tr>
<td>General Biology</td>
<td>8</td>
</tr>
<tr>
<td>Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>Human Physiology</td>
<td>3</td>
</tr>
</tbody>
</table>
B. FOR A BACHELOR OF SCIENCE DEGREE IN RADIOLOGICAL TECHNIQUE:
Three years of college work are required, followed by one year at Miami Valley or St. Elizabeth Hospital.

Preference will be given to those students who are interested in the degree program. Classes begin in January and July. The year of practical training at the Hospital covers a period of twelve consecutive months. Vacations and leaves of absence are not scheduled but may be arranged. The hours of duty are from 8 a.m. to 5 p.m., five and one-half days per week. There is no Sunday duty. One meal is provided by the Hospitals daily. Complete maintenance is available in a hospital residence at the cost of $50.00 per month.

CURRICULUM

Freshman Year

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Eng. 101 English Composition</td>
<td>3</td>
<td>Eng. 221 English Literature</td>
<td>3</td>
</tr>
<tr>
<td>Bio. 101 General Biology</td>
<td>3</td>
<td>Bio. 102 General Biology</td>
<td>4</td>
</tr>
<tr>
<td>Mil. 101 First Basic Military</td>
<td>1 1/2</td>
<td>Mil. 102 First Basic Military</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Phe. 101 Physical Education</td>
<td>1 1/2</td>
<td>Phe. 102 Physical Education</td>
<td>1/2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phys. 206 Mechanics and Sound</td>
<td>4</td>
</tr>
</tbody>
</table>

Sophomore Year

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Philosophy</td>
<td>2</td>
<td>Religion or Philosophy</td>
<td>2</td>
</tr>
<tr>
<td>Bio. 203 Human Anatomy</td>
<td>2</td>
<td>Bio. 204 Human Anatomy</td>
<td>2</td>
</tr>
<tr>
<td>Bio. 201 Comp. Anatomy Lab</td>
<td>1</td>
<td>Bio. 202 Comp. Anatomy Lab</td>
<td>1</td>
</tr>
<tr>
<td>Math. 201 Calculus</td>
<td>4</td>
<td>Math. 202 Calculus</td>
<td>4</td>
</tr>
<tr>
<td>Phys. 207 Electricity &amp; Magnetism</td>
<td>4</td>
<td>Phys. 208 Heat and Light</td>
<td>4</td>
</tr>
<tr>
<td>Mil. 201 Second Basic Military</td>
<td>1 1/2</td>
<td>Mil. 202 Second Basic Military</td>
<td>1 1/2</td>
</tr>
<tr>
<td>E.E. 201 Elem. of Elect. Engr.</td>
<td>4</td>
<td>Eng. Advanced Course</td>
<td>3</td>
</tr>
</tbody>
</table>

Junior Year

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>E.E. 305 Altern. Current Circuits</td>
<td>.4</td>
<td>E.E. 312 Engineering Electronics</td>
<td>.4</td>
</tr>
<tr>
<td>Bio. Advanced Course</td>
<td>5</td>
<td>Bio. Advanced Course</td>
<td>3</td>
</tr>
<tr>
<td>Phil. 324 Ethics</td>
<td>3</td>
<td>Phil. 482 Medical Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
<td>Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

Senior Year

At Miami Valley or St. Elizabeth Hospital

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Weeks</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rad. 451 Radiological Physics</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Rad. 452 The X-ray Machine</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Rad. 453 Processing Technique</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Rad. 454 Routine Standard Positioning</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>Rad. 455 Special Examinations (Opaque Material)</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Rad. 456 Fluoroscopic Procedure</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Rad. 457 Radiation Therapy</td>
<td>12</td>
<td>8</td>
</tr>
</tbody>
</table>
PROGRAM IX
NURSING AND NURSING EDUCATION

THE UNIVERSITY OF DAYTON offers two plans to nurses and prospective nurses who wish to secure a degree.

Plan I. Five Year Combined Program

This program leads to one of the following degrees: Bachelor of Science, Bachelor of Science in Nursing, or Bachelor of Science in Nursing Education. The program is offered: a) to nurses who complete two years at the University of Dayton after the three year professional course in Nursing at a properly accredited institution; and b) to students who complete the three year professional course in nursing at St. Elizabeth Hospital School of Nursing after two years' successful work at the University of Dayton. Sixty credit hours are allowed toward the degree for the basic professional course in nursing.

A minimum of 128 credit hours is required for the degree. They must include:

1. Basic professional course in nursing ........................................ 60 credit hours
2. A minimum of 42 academic or non-professional credits in the following subjects:
   - English ................................................................. 12 credit hours
   - Philosophy ........................................................... 6 credit hours
   - Psychology ............................................................ 6 credit hours
   - History and Social Sciences ................................... 12 credit hours
   - Natural Science .................................................. 6-8 credit hours
   - Electives ............................................................. 24-26 credit hours

The electives, including Education and Nursing Education, should be chosen according to the special requirements of the degree desired:

a. For the degree of Bachelor of Science, 10-12 additional hours in Biology or Chemistry are required.

b. For the degree of Bachelor of Science in Nursing, 9 additional hours in Nursing Education are required. Survey courses and those giving a broad knowledge of nursing and its various fields are recommended.

c. For the degree of Bachelor of Science in Nursing Education, 9 hours in Education and 18 hours in Nursing Education are required. Courses in supervision, administration, and the major fields of interest are recommended. Supervision and teaching in these latter fields are desirable.

Students who meet the requirements for the degree of Bachelor of Science in Nursing Education may become eligible for a Provisional Teacher’s Certificate which will entitle them to teach in the fields for which they qualify. This will permit them to teach in State-accredited schools. Those who are interested in obtaining the Provisional Teacher’s Certificate should make the fact known at registration so that they may be properly directed in drawing up their schedule of courses.
Plan II. Four Year Academic-Basic Professional Curriculum

This curriculum leads to the degree of Bachelor of Science in Nursing and the diploma in Nursing. It is designed to give the student a cultural background in higher education and the basic course in the theory and practice of nursing. Through the combination of academic and professional courses, the University provides the opportunity for students to further their cultural development and to attain professional competence. Clinical experience is provided at St. Elizabeth Hospital and affiliating institutions. This curriculum prepares the graduates for first level positions in the various health and hospital fields and for advanced work in the area of specialization.

**CURRICULUM**

**Freshman Year**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Cr. Hours</th>
<th>Subject</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Phil.</td>
<td>2</td>
<td>Religion or Phil.</td>
<td>2</td>
</tr>
<tr>
<td>Eng. 101</td>
<td>3</td>
<td>Eng. 221</td>
<td>3</td>
</tr>
<tr>
<td>Chem. 100</td>
<td>5</td>
<td>Chem. 200</td>
<td>3</td>
</tr>
<tr>
<td>Bio. 103</td>
<td>4</td>
<td>Bio. 121</td>
<td>3</td>
</tr>
<tr>
<td>Phe. 101</td>
<td>1 1/2</td>
<td>Phe. 102</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Ned. 120</td>
<td>1</td>
<td>Ned. 141</td>
<td>1</td>
</tr>
<tr>
<td>Ned. 141</td>
<td>1</td>
<td>Ned. 142</td>
<td>1</td>
</tr>
</tbody>
</table>

**Summer Session**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Cr. Hours</th>
<th>Subject</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soc. 201</td>
<td>3</td>
<td>Soc. 201</td>
<td>3</td>
</tr>
<tr>
<td>Ned. 143</td>
<td>2</td>
<td>Ned. 142</td>
<td>2</td>
</tr>
<tr>
<td>Ned. 121</td>
<td>2</td>
<td>Ned. 121</td>
<td>2</td>
</tr>
</tbody>
</table>

**Sophomore Year**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Cr. Hours</th>
<th>Subject</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion or Phil.</td>
<td>2</td>
<td>Religion or Phil.</td>
<td>2</td>
</tr>
<tr>
<td>Spe. 101 Fund.</td>
<td>3</td>
<td>Psych. 201</td>
<td>3</td>
</tr>
<tr>
<td>Phe. 201</td>
<td>1 1/2</td>
<td>Phe. 202</td>
<td>1 1/2</td>
</tr>
<tr>
<td>Bio. 122</td>
<td>3</td>
<td>Ned. 127</td>
<td>2</td>
</tr>
<tr>
<td>Ned. 124</td>
<td>3</td>
<td>Ned. 129</td>
<td>4</td>
</tr>
<tr>
<td>Ned. 128</td>
<td>1</td>
<td>Ned. 220</td>
<td>3</td>
</tr>
<tr>
<td>Ned. 144</td>
<td>3</td>
<td>Ned. 145</td>
<td>3</td>
</tr>
</tbody>
</table>

**Summer Session**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soc. 211</td>
<td>2</td>
</tr>
<tr>
<td>Ned. 125</td>
<td>2</td>
</tr>
<tr>
<td>Ned. 221</td>
<td>2</td>
</tr>
</tbody>
</table>
### Junior Year

**FIRST SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hist. 251 Amer. Hist. to 1865</td>
<td>3</td>
</tr>
<tr>
<td>Psych. 306 Child Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Bio. 350 Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>Ned. 222 General Medical and Surgical Nursing</td>
<td>3</td>
</tr>
<tr>
<td>Ned. 327 First Aid</td>
<td>2</td>
</tr>
<tr>
<td>Ned. 223 Medical and Surgical Specialties</td>
<td>4</td>
</tr>
<tr>
<td>Ned. 123 Geriatrics</td>
<td>1</td>
</tr>
</tbody>
</table>

**SECOND SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phil. 482 Medical Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Soc. 312 Social Case Work</td>
<td>3</td>
</tr>
<tr>
<td>Ned. 224 Medical and Surgical Specialties</td>
<td>4</td>
</tr>
<tr>
<td>Ned. 320 Obstetrics</td>
<td>4</td>
</tr>
</tbody>
</table>

**Summer Session**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ned. 322 Pediatric Nursing</td>
<td>4</td>
</tr>
</tbody>
</table>

### Senior Year

**FIRST SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eng. Elective in English</td>
<td>3</td>
</tr>
<tr>
<td>Psych. 202 Educational Psych. I</td>
<td>3</td>
</tr>
</tbody>
</table>

**SECOND SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ned. 323 Psychiatric Nursing</td>
<td>4</td>
</tr>
<tr>
<td>Ned. 325 Nursing and Health Service in the Family</td>
<td>2</td>
</tr>
</tbody>
</table>

**Summer Session**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ned. 326 Professional Adjust. II</td>
<td>2</td>
</tr>
<tr>
<td>Ned. 328 Advanced Nursing and Experience</td>
<td>1</td>
</tr>
</tbody>
</table>

**NOTE:** For students who enter with advanced standing, the curriculum is planned in accord with amount of work completed before entrance.
Courses of Instruction

ACCOUNTING (Acct.)

MR. D. B. SPRINGER, ACTING HEAD
MR. UPDYKE

ACCT. 101-102. ELEMENTARY ACCOUNTING SIX CREDIT HOURS
The purpose of the course is to acquaint the student with the primary function of accounting and to introduce him to the entire cycle of bookkeeping procedure. Under supervision the student is required to demonstrate his ability to work out several practice sets. This is a prerequisite to all other courses in Accounting. Two class periods and two laboratory periods a week.

Both 101 and 102 Each Semester, Each Year

ACCT. 201-202. INTERMEDIATE ACCOUNTING SIX CREDIT HOURS
The accounting work of the sophomore year is a logical continuation and development of the theory and practice introduced in the freshman year. The course includes in part: accounting for corporations; voucher systems; general principles of valuation; depreciation; surplus reserves; and liquidation of corporations. Two class periods and two laboratory periods a week.

Full Year Course, Each Year

ACCT. 203. SURVEY OF ACCOUNTING THREE CREDIT HOURS
A consideration of the basic principles of accounting, including debits and credits, the balance sheet, the statement of profit and loss, the statement of surplus and elements of cost accounting from an interpretative viewpoint. Three class periods a week.

Each Semester, Each Year

ACCT. 301-302. ADVANCED ACCOUNTING SIX CREDIT HOURS
Additional training in the preparation, analysis, and interpretation of statements; accounting procedure in connection with special types of business and with corporate reorganizations and dissolutions including the accounts and reports of receivers and trustees. Three class periods a week.

Full Year Course, Each Year

ACCT. 303-304. COST ACCOUNTING SIX CREDIT HOURS
Theory and practice of industrial cost accounting as a means of control of business enterprises applicable to job order, process, and standard cost systems. Three class periods a week.

Full Year Course, Each Year

ACCT. 310. COST ACCOUNTING ANALYSIS THREE CREDIT HOURS
Elements of cost accounting; methods of analyzing and interpreting cost data for management's use. Cost accounting and cost data are emphasized as an aid to management and not a mechanical substitute for management. Three class periods a week.

First Semester, Each Year

ACCT. 401-402. AUDITING SIX CREDIT HOURS
A review of accounting with particular attention given to the theory and prac-
tice of auditing as applied to cash, receivables, inventories, etc. Practice in the auditing of special business types, and the preparation of auditor's reports. Three class periods a week.

**ACCT. 403. FEDERAL INCOME TAX ACCOUNTING**
Three credit hours
An interpretation of the current Revenue Act, including income, estates and trust, gift and excise taxes. The preparation of the individual, partnership and corporation income tax returns. Three class periods a week.

**First Semester, Each Year**

**ACCT. 404. C. P. A. PROBLEMS**
The application of the principles of accounting to specific problems as set forth in the examination of the Ohio State Board of Accountancy. Three class periods a week.

**Second Semester, Each Year**

**ACCT. 406. PAY ROLL ACCOUNTING**
Three credit hours

**Each Semester, Each Year**

---

**ART (Art)**

**MR. BURROUGHS, FR. PREISINGER**

**ART 101. DRAWING**
Two credit hours
A study of the elements of drawing, including perspective, drawing from still life, light and shade and sketching. Two class periods a week.

**First Semester, Each Year**

**ART 103. INTRODUCTORY PAINTING I**
Two credit hours
Painting in oil and water color from still life, landscape and floral subjects. Emphasis is placed on composition and application of art theories.

**First Semester, Each Year**

**ART 104. INTRODUCTORY PAINTING II**
Two credit hours
A further study of painting problems with reference to technique and methods of procedure in building a painting. Prerequisite: Art. 103 or its equivalent.

**First Semester, Each Year**

**ART. 107. CULTURAL HISTORY OF EUROPE TO 1830**
Three credit hours
A brief review of pre-historic and Oriental art to prepare the ground for a study of modern art. Then a more intensive survey of the basic arts of architecture, painting, sculpture and music through the various movements in Europe and America: the Greek and Roman; the Byzantine and Saracenic; the Romanesque and Gothic; the Renaissance; the Baroque, the Rococo and the
Neo-Classic. Accredited in History.

First Semester, Each Year

ART 108. CULTURAL HISTORY OF EUROPE SINCE 1830 THREE CREDIT HOURS
After a brief survey of the basic principles underlying all the arts, and their application to daily life, an intensive study of the Romantic, Realistic and Impressionistic movements, together with a study of the various Modern movements since 1900. Accredited in History.

Second Semester, Each Year

ART 201. PRINCIPLES OF DESIGN I TWO CREDIT HOURS
A study of the underlying elements and principles of design as they are applied to surface pattern. Color theories and their use in creative design are a part of this course.

Second Semester, Each Year

ART 202. PRINCIPLES OF DESIGN II TWO CREDIT HOURS
Advanced studies in creative design and their application to modern materials and to industry. Prerequisite: Art 201 or its equivalent.

Second Semester, Each Year

ART 203. GENERAL CRAFTS TWO CREDIT HOURS
The application of original designs to such materials as paper, textiles, ceramics and plastics through weaving, silk screen printing and modeling. A study of handwork as an integral part of an activity in the schools.

To be announced

ART 221. PRACTICAL ARTS IN THE KINDERGARTEN AND PRIMARY GRADES TWO CREDIT HOURS
Creative expression in the use of such materials as papers, textiles, ceramics, and plastics. A study of handwork as an integral part of activities in the schools. Accredited in Education.

Second Semester, Each Year

ART 222. PRACTICAL ARTS IN THE INTERMEDIATE GRADES TWO CREDIT HOURS
Same as Art 221, adjusted to the maturity of children in the intermediate grades. Accredited in Education.

Second Semester, Each Year

ART 406. THE GREAT MASTERS TWO CREDIT HOURS
This study, by contrast, tries to combine the historical and the aesthetic approaches through comparison of the various ways in which certain similar themes have been approached by the masters of different epochs. The intent is to present the common visual experience of various periods and areas in art, tracing the shifts in visual patterns from generation to generation of the most important of the artists, stating what is constant in Western art and what is changing.

To be announced

ART 407. ART IN THE ELEMENTARY SCHOOL TWO CREDIT HOURS
Present methods of teaching art in the elementary school; experience in art expression and the use of art elements and principles as the basis for creative approach; organization of units of work, including drawing, painting, design, color, modeling, block printing, lettering, and the mural, as they relate to the integrated school program. Accredited in Education.

Second Semester, Each Year
BIOLOGY (Bio.)

BRO. JOLY, HEAD
BRO. BECK, MRS. ENGLAND, MR. FASO, MISS HECKMAN, DR. WILLIAMS
MR. WIECHMAN

Bio. 101-102. General Biology EIGHT CREDIT HOURS
A study of the more important plant and animal forms, designed to fit the facts and theories of biology into the broader picture of human life and human affairs. Three class periods and one laboratory period a week.

Full Year Course, Each Year

Bio. 103. General Zoology FOUR CREDIT HOURS
Lectures on structure, physiology, and life histories of invertebrates and vertebrates. Three class periods and one laboratory period a week.

First Semester, Each Year

Bio. 105-106. General Zoology EIGHT CREDIT HOURS
A course insisting on general principles. Lectures are given on the classification, structure, physiology, development, and life histories of the invertebrates and vertebrates. Two class periods and two laboratory periods a week.

Full Year Course, Each Year

Bio. 201-202. Comparative Anatomy EIGHT CREDIT HOURS
A study of the similarities and the differences in the anatomy of the different organ systems of the various vertebrate groups. Embryology, histology, and morphology play an important role in this comparative study. Physiology is introduced where it is deemed advisable. Three class periods and one laboratory period a week.

Full Year Course, Each Year

Bio. 203-204. Human Anatomy FOUR CREDIT HOURS
Lectures and demonstrations on the bones, muscles, vessels, and nerves of the human body. This course is primarily for students in Physical Education. Two class periods a week.

Full Year Course, Each Year

Bio. 213. Comparative Anatomy FOUR CREDIT HOURS

Bio. 303. Physiology THREE CREDIT HOURS
A course showing that the human body is a living mechanism. Sufficient anatomy and histology are introduced to give at least an elementary knowledge of the structures of the organs and the organ systems. Three class periods a week.

Each Semester, Each Year

Bio. 305-306. Microtechnique EIGHT CREDIT HOURS
This course is essentially for medical technology and biology majors. It includes fixing, washing, dehydrating, clearing, infiltrating, imbedding, sectioning, affixing of normal tissues. It also aims at recognition of the fundamental tissues and
gives the histological picture of all the organs and organ systems of the vertebrate body. Two class periods and two laboratory periods a week.

**Full Year Course, Each Year**

**BIO. 311. GENERAL GENETICS**
Three Credit Hours
A study of the principles of variation and heredity in plants and animals, with stress on the inheritance of human characteristics. Three lecture periods a week.

**Second Semester, Each Year**

**BIO. 314. GENERAL BOTANY**
Four Credit Hours
An introductory course stressing classification, morphology, physiology, reproduction, ecology, and distribution of plants. Typical specimens are studied microscopically and macroscopically. Three class periods and one laboratory period a week.

**First Semester, Each Year**

**Second Semester, Each Year—Evening**

**BIO. 315. SYSTEMATIC BOTANY**
Three Credit Hours
Illustrative plant types are discussed, assigned forms are studied, and assigned readings are required, so that the student will have a grasp of the fundamental principles of phylogenetic taxonomy. The use of herbaria, indexes, and keys will be taught. The families of the spermatophyta are given special attention. Field trips necessary. Three lectures a week.

**Second Semester, Each Year**

**BIO. 350. PREVENTIVE MEDICINE**
Two Credit Hours
The development of the science of public health, and the prevention of disease from the standpoint of the individual and the community.

**First Semester, 1953-1954—Evening**

**BIO. 351. EPIDEMIOLOGY**
Two Credit Hours
The occurrence of the more common communicable diseases, their methods of transmission, and the control of reservoirs between periods of activity.

**Second Semester, 1953-1954—Evening**

**BIO. 403-404. EMBRYOLOGY**
Six Credit Hours
The course gives the student a clear understanding of the early stages of development of the invertebrates and the vertebrates. It pays special attention to the study of the development of the chick and of the pig. Two class periods and one laboratory period a week.

**To be announced**

**BIO. 405-406. BIOPHYSICS**
Four Credit Hours
The course applies physical and chemical principles to the following biological problems: stress and strain in biologic systems, surface tension, osmosis, membranes, colloids, cells, dynamics of cell division and growth, bio-hydraulics, heat production, calorimetry, sound production and reception, electric phenomena in cells and tissues, diatherms, artificial fevers, effects of radiant energy on biological materials, spectrographic methods of investigation, treatment of tumors with X-rays, and the production of vitamins. Two class periods a week.

**Full Year Course, Each Year**
BIO. 407. EMBRYOLOGY
FIVE CREDIT HOURS
The course gives the student a clear understanding of the early stages of development of the invertebrates and the vertebrates. It pays special attention to the study of the development of the chick and of the pig. Three class periods and two two-hour laboratory periods a week. Second Semester, 1953-1954

BIO. 413. GENERAL BACTERIOLOGY
FOUR CREDIT HOURS
A brief course covering the physiology, classification, and cultivation of bacteria. Their relation to medicine and agriculture is stressed. Isolation and microscopic observations of pathogenic germs; theories of immunity and immunization; training in clinical serological methods. Two class periods and two laboratory periods a week. Each Semester, Each Year

BIO. 415. PATHOGENIC BACTERIOLOGY
FOUR CREDIT HOURS
A brief survey of pathogenic organisms, including their classification, cultural characteristics, biochemical and physiological reactions. Isolation and identification of unknowns; demonstration of and limited training in clinical serological methods as related to pathogens included in course. Two class periods and one laboratory period a week. Second Semester, 1953-1954

BIO. 420. SEMINAR
ONE CREDIT HOUR
Practice in development, presentation, and discussion of papers dealing with biological problems. Second Semester, Each Year

BUSINESS ORGANIZATION (Bus.)

MR. O'LEARY, HEAD
MR. COMER, MR. GUENSCHIE, MR. HODGETTS, MR. MURPHY, MR. ORTH,
MR. SNYDER, MR. WHALEN

Concentration Recommendations

MAJOR: Minimum of thirty hours of upper division courses are required of students majoring in business organization. These courses should include 301, 303, 305, 313, 316, 317, 404, 405, 425. A minimum of two additional closely related courses is also required. These courses are to be selected in consultation with the Department Head. A related minor is to be selected in the fields of economics, philosophy, political science, psychology or sociology.

Accounting 101-102 and Economics 201-202 are prerequisite to all advanced courses except by permission of the instructor.

Students preparing for teaching positions in secondary schools should consult their adviser in the selection of required courses.

BUS. 101. INTRODUCTION TO BUSINESS
THREE CREDIT HOURS
A survey of the fields of business and their inter-relationships. The uses and functions of production and distributive systems, capital, labor, finance, ac-
counting, statistics, marketing, etc., are studied. The objectives are to emphasize business concepts and to prepare the students for specialized courses. Three class periods a week.

**BUS. 102. INDUSTRIAL RESOURCES AND PRODUCTS**

Three credit hours

A survey of major industries, their raw materials, processing, distribution, and marketing factors. Three class periods a week.

**BUS. 103. MATHEMATICS OF FINANCE I**

Three credit hours

This course covers the fundamentals of second year of high school algebra and continues into topics of college algebra. Logarithms, ratio and proportion, with application to problems in business and finance, are stressed. Three class periods a week.

**BUS. 201. BUSINESS MACHINES**

Three credit hours

Proposes to give students the opportunity to become acquainted with and to use correctly the machines commonly found in offices today. Such machines include the two principal types of adding machines, two principal types of calculators, and a variety of accounting mechanisms. Recommended prerequisite: Acct. 101. Three class periods a week. Laboratory fee, $5.00.

**BUS. 203. MATHEMATICS OF FINANCE II**

Three credit hours

A study of the essential mathematical problems helpful to business men; interest, logarithms, ordinary annuities, time payment plans, amortization and sinking funds, valuation of bonds, and mathematics of life insurance. Three class periods a week.

**BUS. 301. CORPORATION FINANCE**

Three credit hours

Principles of financial organization and management. A study of business organizations, corporate securities, financial structures; financing of new and established corporations; management of corporate funds; corporate expansion; mergers, failures and reorganizations; security exchanges, financial markets and government regulation of financial institutions and practices. Three class periods a week.

**BUS. 303. BUSINESS LAW CONTRACTS**

Three credit hours

The basic course in business law treating the nature and the classification of law, the courts and court procedure, and considering in some detail the law of contracts, sales, agency, and personal property. Three class periods a week.

**BUS. 304. BUSINESS LAW REAL PROPERTY AND NEGOTIABLE INSTRUMENTS**

Three credit hours

A consideration of the law of real property, real estate mortgages, landlord and tenant, mechanics' lien, deed and conveyances and the law of negotiable instruments. Three class periods a week.

**BUS. 305. PRINCIPLES OF MARKETING**

Three credit hours

The general principles and practices underlying the processes of marketing. An
analysis of the problems of the manufacturer, wholesaler, retailer and other marketing agencies. Principles, trends, methods and policies with relation to marketing efficiency. Three class periods a week.  

**Bus. 306. Advanced Marketing**  
Two-three credit hours  
The marketing policies of manufacturers and wholesalers; the technique of marketing research; and analysis of current problems and literature relating to marketing efficiency. Three class periods a week.  

**Bus. 307. Advertising**  
Three credit hours  
Nature and functions of advertising; the preparation of layouts, the writing of copy; selection and evaluation of media. The coordination of advertising with other marketing efforts. Social implications of advertising are discussed. Three class periods a week.  

**Bus. 308. Advertising Problems**  
Three credit hours  
An intensive study of special problems in advertising. Emphasis is placed on such topics as preparation of copy, methods of printing and engraving, layout of advertisements, effectiveness of position, use of media, current trends of advertising. Three class periods a week.  

**Bus. 309. Retail Merchandising**  
Three credit hours  
Surveys basic merchandising principles and problems of large and small retail stores. Includes organizations, location, buying and selling, cost reductions, current practices and trends.  

**Bus. 310. Salesmanship**  
Three credit hours  
A study of the basic principles underlying all selling and their practical application to specific cases. Topics include: types of selling jobs; fundamentals of selling, sales personality, buying motives, methods and sources of acquiring product knowledge; planning the sale; selling techniques, securing prospects, the approach, arousing interest, overcoming objections, closing the sale.  

**Bus. 311. Sales Management**  
Three credit hours  
The structure of the sales organization, determination of sales policies, the selection, training, and motivation of salesmen, the establishing of sales territories and quotas. Specific problems are used to illustrate and apply principles.  

**Bus. 312. Principles of International Trade**  
Three credit hours  
Principles and procedures in exporting and importing. Export and import organization, market analysis, handling shipments, packing, customs, and current practices. Three class periods a week.  

**Bus. 313. Business Statistics**  
Three credit hours  
A survey of statistical methods including sampling, tabulations, graphics, averages, dispersions, index numbers, time series, trends, and simple correlations. Three class periods a week. Laboratory fee, $3.00
Bus. 316. Industrial Management
Nature and place of management, and factors underlying management decisions; product designs, physical facilities, location and layout; job evaluation and classification; plant operation and output; control of purchases and inventories. Problems of production control and coordinating factory operations. Three class periods a week.

Each Semester, Each Year

Bus. 317. Labor Management
Nature and development of the labor problem; selection, training and supervision of labor; wage practices; methods of wage payment; promotion and transfer policies; layoffs; employee morale; current practices in labor management relations. Three class periods a week.

Each Semester, Each Year

Bus. 319. Job Evaluation and Wage Determination
Job evaluation methods; determining requirements of jobs; establishing grade levels; development of basic rates, salary classifications and performance ratings. Three class periods a week.

First Semester, Each Year

Bus. 320-321. Motion and Time Study
A study of the methods and apparatus used in achieving and perpetuating operation standardization. A study of motion and time of workers with the objective of increasing efficiency and enlarging production. Three class periods a week.

Full Year Course, Each Year

Bus. 324. Labor Legislation
The development, constitutional aspects, and practical effects of Federal and State legislation with respect to child labor, wages, hours, conditions of employment, industrial accidents, social security, civil and criminal liability and labor relations. Prerequisites: Bus. 316, 317, or permission of instructor. Three class periods a week.

Each Semester, Each Year

Bus. 327. Elements of Supervision
A consideration of the responsibilities of the shop or department head within the field of operative management; emphasis on training, motivation, grievances and maintenance of morale in the light of sound management principles. An exposition of accepted solutions to present day problems. Three class periods a week.

Second Semester, Each Year

Bus. 331-332. Office Management and Office Methods and Improvement
The organization and management of an office and the functions of those in supervisory work. Planning, organizing and control of office work and personnel; problems of office standards, business forms and designs; analysis of office methods and procedures in relation to purchase, production and distribution. Three class periods a week.

Full Year Course, Each Year

Bus. 401. Investments
A study of the basic features and principles underlying sound investments. The
discussions include an analysis and evaluation of government, municipal, railroad, public utility, industrial, financial, and real estate securities. Problems and trends are emphasized. This course is a continuation of Bus. 301 but may be elected by qualified students with consent of the instructor. Three class periods a week.

**BUS. 402. CREDITS AND COLLECTIONS**

Nature and functions of credit. Principles and practices in retail and mercantile credit administration. Sources and analysis of credit information. Two or three class periods a week.  
*Second Semester, Each Year*

**BUS. 403. LAW OF BUSINESS ORGANIZATION AND SECURITY RELATIONS**

A treatment of the characteristics of partnerships and corporations and of the law of chattel mortgages, conditional sales, suretyship and insurance. Three class periods a week.  
*Second Semester, Each Year*

**BUS. 404. BUSINESS CYCLES**

Characteristics and economic consequences of business cycles. Analysis of causes and theories of business cycles. Examination of the proposals for eliminating or for controlling the business cycle. Some attention is given to the barometers and measurements of business cycles. Three class periods a week.  
*First Semester, Each Year*

**BUS. 405. MONEY, CREDIT AND BANKING**

A survey of concepts, principles and practices in the field of money, credit and banking. Considerations of monetary systems, foreign exchange, credit instruments and the principal types of modern financial institutions. Special attention to the commercial bank and its relation to the federal reserve system. Emphasis upon the social and management viewpoint. Three class periods a week.  
*Each Semester, Each Year*

**BUS. 406. MONEY, CREDIT AND BANKING**

A study of the problems and policies of commercial banks. The policies and operation of central banks particularly the federal reserve banks, in relation to commercial banks, business, the Treasury and financial markets. Problems of credit control, monetary stabilization, and banking regulations and reform. Current banking practices and trends are emphasized and discussed. This course follows Bus. 405. Three class periods a week.  
*Second Semester, Each Year*

**BUS. 414. INDUSTRIAL PURCHASING**

Principles, policies, and practices of industrial procurement. Organization and functions; purchasing procedure; quality and quantity control; supply sources; price policies; forward buying; legal aspects of purchasing procedure. Three class periods a week.  
*First Semester, Each Year*

**BUS. 415. PRODUCTION METHODS AND CONTROL**

Principles and techniques used in production; current practices in production
planning, routing, scheduling and dispatching; study of production standards, labor efficiency and costs; quantity and quality control. Three class periods a week.  

**Second Semester, Each Year**

**Bus. 416. Work Simplification**  
A study of the methods of eliminating useless effort; developing short cuts; reducing costs; increasing production with less effort; job efficiency. Three class periods a week.  

**Second Semester, Each Year**

**Bus. 419. Collective Bargaining, Mediation and Arbitration**  
Meaning, practices, principles and organization of collective bargaining; techniques of mediation and agencies for effecting mediation; major economic problems involved in the adjustment of labor disputes. Three class periods a week.  

**Second Semester, Each Year**

**Bus. 421. Theory of Organization**  
A review of the development of improved administrative methods in industry and commerce and their contribution to the field of higher wages and lower costs. Works of Taylor, Fayol, Emerson, Davis, Urwick, Mooney and others are examined; stress is placed upon the development of effective organization and operation through the application of the principles of scientific management. Three class periods a week.  

**Second Semester, Each Year**

**Bus. 422. Counseling Techniques**  
Functions of counselors in employee adjustment in personnel and in industrial relations; establishing counseling services, organizing and administering a program; evaluation and remedial action. Two-three class periods a week.  

**First Semester, Each Year**

**Bus. 425. Business Organization Seminar**  
A study of special problems of current importance and of interest to the group. The class meetings consist of individual reports and discussions. Two class hours a week.  

**Each Semester, Each Year**

**RETAILING (Ret.)**

The programs in this field are designed to  
(a) prepare students for merchandising and sales departments of manufacturing and wholesale establishments,  
(b) train students for executive positions in Retailing,  
(c) offer specialized courses in Retailing to those who can benefit from them.

Retailing is becoming a more complicated business each year. If a person is to make the most of the opportunities offered, he must possess adequate knowledge and training in various functions of Retailing, such as, merchandising, operations and sales promotion.
The co-operative program leading to a Major in Retailing is designed to train students properly for an executive career in Retailing. It offers classroom theory and emphasizes its practical applications. In conjunction with the Dayton Retail Merchants Association, the student obtains experience through a supervised work program in downtown stores.

Thus with the aid of those who have both studied and practiced sound principles of Retailing, the student avoids the trial and error method of jobs and learning, and can make rapid progress towards an executive career.

The University of Dayton offers either a Major or a Minor in Retailing.

RET. 305. INTRODUCTION TO RETAILING THREE CREDIT HOURS
Presents the opportunities in retailing, the marketing institutions, functions, and costs, the background and development of retailing, retail institutions of today, retail store policies, the development of the consumer, governmental regulations of marketing. Open to Retailing students in lieu of Bus. 305.
First Semester, Each Year

RET. 310. RETAIL SALESMANSHIP THREE CREDIT HOURS
Responsibilities of the sales-person; retail selling techniques, meeting the customer, developing the sales presentation, obtaining conviction, how to make the merchandise speak for itself, increasing the average sale. Students have the opportunity to analyze practical selling situations and to participate in demonstration sales.
First Semester, Each Year

RET. 311. RETAIL SALES PROMOTION THREE CREDIT HOURS
An analysis of the scope and activities of sales promotion; where, when and what to promote; budgeting and planning of sales promotion, events and activities; emphasis upon the coordination of sales promotion activities. Prerequisite: Ret. 307 or consent of instructor.
Second Semester, Each Year

RET. 316. TEXTILES THREE CREDIT HOURS
Recognition of fabrics with emphasis on appropriate use, care, and serviceability factors. Intended to enable those concerned with buying and selling to identify fabrics and to help them in the selection of ready-to-wear and household textiles. Three class periods a week. Laboratory fee, $3.00.
First Semester, Each Year

RET. 318. RETAIL PERSONNEL RELATIONS THREE CREDIT HOURS
Evaluation of personnel problems and policies; planning manpower needs, job analysis and evaluation, sources of labor supply, selection and placement, training plans and procedures, personnel ratings and reviews, wages and wage stabilization, employee activities, labor relations, current legislation, supervisory techniques.
Second Semester, Each Year

RET. 319. COLOR, DESIGN AND INTERIOR DECORATION THREE CREDIT HOURS
The course is designed to develop judgment in selection and arrangement of well-designed furnishings in the home. Three class periods a week. Laboratory fee, $3.00.
First Semester, Each Year
RET. 320. FASHIONS  
TWO-THREE CREDIT HOURS  
A course dealing with the principles of planning, buying, promoting, and selling fashions. Includes the fashion cycle and trends, designer influence, coordination and promotion. Two or three class periods a week.  
*First Semester, Each Year*

RET. 405. RETAIL MERCHANDISING MATHEMATICS  
THREE CREDIT HOURS  
Study of mathematical principles involved in buying and selling. Includes purchase planning, open to buy, markup, inventories-cost, retail and LIFO methods—stock turnover, and initial markup formula. Drill is provided in solving mathematical problems.  
*First Semester, Each Year*

RET. 409. RETAILING ORGANIZATION AND OPERATION  
THREE CREDIT HOURS  
Devoted to principles of store management and their application by successful stores. Such factors as store location, buildings and equipment, store organization, receiving and marking, store protection, and coordination of retail store activities are studied.  
*Second Semester, Each Year*

RET. 414. BUYING FOR RETAIL STORES  
THREE CREDIT HOURS  
Covers the work of the store buyer. Considers types of buyers, organization for buying in independents and chains, determining what to buy, selection of brands, how much to buy, model stocks, market resources, resident buying, terms and dating, and buyer's order.  
*First Semester, Each Year*

RET. 420-421. RETAILING LABORATORY  
TWO CREDIT HOURS  
One class hour plus a minimum of sixteen hours a week of approved work experience. Student will participate in a variety of both selling and non-selling work as provided in the training program worked out with the cooperating store. Success in the store will be evaluated by the store's supervisory personnel as well as periodic reports and assignments at the weekly class meeting. Pre-requisite: consent of instructor.  
*Each Semester, Each Year*

RET. 425. RETAILING SEMINAR  
TWO CREDIT HOURS  
A thorough analysis of special problems of current importance in retailing. Class meetings consist of individual reports, student panel presentations, open class discussions and original student research projects.  
*Second Semester, Each Year*

CHEMISTRY (Chem.)

BRO. WOTTLE, ACTING HEAD
BRO. CHUDD, MR. EVELSLAGE, BRO. LUCIER, BRO. WOHLLEBEN

CHEM. 12. ELEMENTARY CHEMISTRY  
NO COLLEGE CREDIT  
This is a refresher course equivalent to high school chemistry. Four class periods a week.  
*First Semester, Each Year*
CHEM. 100. INORGANIC CHEMISTRY  FIVE CREDIT HOURS
Fundamental principles of general chemistry, including a brief study of metals, non-metals, and their compounds. The course is designed to meet the needs of students in Home Economics and Nursing. Four class periods and one three-hour laboratory period a week.  
First Semester, Each Year

CHEM. 105-106. INORGANIC CHEMISTRY  EIGHT CREDIT HOURS
A comprehensive treatment of the fundamentals of general chemistry covering non-metals and metals, with an introduction to chemical calculations. This course is designed for students in Arts, Premedical, Predental, and Medical Technology courses. Three class periods and one three-hour laboratory period a week.  
Full Year Course, Each Year

CHEM. 107. INORGANIC CHEMISTRY  FOUR CREDIT HOURS
This course is similar to Chem. 105-106, but designed to meet the needs of Engineering students and Science majors. Emphasis is placed on engineering and industrial applications. Three class periods and one three-hour laboratory period a week.  
Each Semester, Each Year

CHEM. 108. INORGANIC CHEMISTRY  FOUR CREDIT HOURS
A continuation of Chem. 107. Three class periods and one three-hour laboratory period a week.  
Each Semester, Each Year

CHEM. 200. ORGANIC CHEMISTRY  FIVE CREDIT HOURS
A brief course covering the essential aliphatic and aromatic compounds. This course is designed to meet the needs of the Home Economics and Nursing students. Four class periods and one three-hour laboratory period a week.  
Second Semester, Each Year

CHEM. 201-202. ORGANIC CHEMISTRY  TEN CREDIT HOURS
This is a two-semester course designed for Medical Technicians, Premedical, and Predental students. A study of the aliphatic, aromatic, and heterocyclic compounds, including laboratory preparations of typical compounds and the methods of identifying simple organic groups and radicals. Three class periods and one four-hour laboratory period a week.  
Full Year Course, Each Year

CHEM. 205-206. ANALYTIC CHEMISTRY  TWELVE CREDIT HOURS
A theoretical and mathematical study of the laws that apply in qualitative analysis, including the separation and identification of some common anions and cations; theory and technique of modern gravimetric and volumetric methods, with stoichiometrical calculations and the applications of the mass action law and solubility product to quantitative analysis. Three class periods and three three-hour laboratory periods a week.  
Full Year Course, Each Year

CHEM. 207. QUALITATIVE ANALYSIS  FOUR CREDIT HOURS
A theoretical discussion of ionization constant, solubility product, and equilibrium constants as influencing qualitative analysis. The laboratory work includes the semimicro method for the separation and identification of common
anions and cations. Two class periods and one four-hour laboratory period a week.

**CHEM. 211-212. QUANTITATIVE ANALYSIS**

Theory and technique of modern gravimetric and volumetric methods, with stoichiometrical calculations and the applications of the mass action law and solubility product to quantitative analysis. The course will provide an introduction to instrumental methods of analysis. Two class periods and two three-hour laboratory periods a week. Prerequisite: Chem. 107-108.

*First Semester, Each Year*

**CHEM. 301. QUANTITATIVE ANALYSIS**

Short course intended for Premedical, Predental, and Medical Technology students. Two class periods and one four-hour laboratory period a week.

*Second Semester, Each Year*

**CHEM. 302. PHYSICAL CHEMISTRY**

A short course for Premedical and Predental students. Discussion of the properties of laws of matter in its different states and in solution; chemical equilibrium; thermo-chemistry; electro-chemistry; reaction kinetics; phase rule. The laboratory work includes physicochemical methods and their applications. Three class periods and one three-hour laboratory period a week. Prerequisite: Chem. 301.

*First Semester, Each Year*

**CHEM. 303-304. PHYSICAL CHEMISTRY**

Long course for students who wish to follow a scientific or engineering career. More comprehensive than Chem. 302, with emphasis on industrial applications. Three class periods and one three-hour laboratory period a week. Prerequisite: Chem. 205-206, Math. 201-202.

*Full Year Course, Each Year*

**CHEM. 305-306. ORGANIC CHEMISTRY**

A more intensive course than Chem. 201-202 for students who are planning for a scientific or engineering career. Three class periods and three laboratory periods a week.

*Full Year Course, Each Year*

**CHEM. 400. BIOCHEMISTRY**

A one-semester course intended to meet the needs of students in Home Economics. A study of the chemistry of the essential food constituents, their digestion, absorption, and intermediary metabolism. Four class periods and one three-hour laboratory period a week.

*First Semester, 1954-1955*

**CHEM. 401. BIOCHEMISTRY**

A course intended for Premedical, Predental, and Medical Technology students. It treats the chemistry and metabolism of carbohydrates, lipids, and proteins, foods and digestion, intermediary metabolism, enzymes, acid base balance, vitamins, and hormones. Three class periods and one four-hour laboratory period a week. Prerequisite: Chem. 2001-202, & Chem. 301-302.

*Second Semester, Each Year*
CHEM. 403. TECHNICAL ANALYSIS

This course provides training in the analytical methods needed for plant control and treats of examination of solid, liquid, and gaseous fuels, lubricants, ferrous and non-ferrous alloys, saponifiable oils, etc. Three laboratory periods a week.

First Semester, Each Year

CHEM. 412. ADVANCED ORGANIC LABORATORY

In this course, a study is made of the solubilities, functional groups, and derivatives of organic compounds in view of their identification and the separation of mixtures. In addition, a series of experimental problems is carried out involving organic combustions, hydrogenations, and estimations of functional groups. This work affords opportunity for originality and literature research. Three laboratory periods a week. Prerequisite: Senior standing.

Second Semester, Each Year

CHEM. 415-416. ADVANCED INORGANIC CHEMISTRY

This course comprises topics such as electronic distribution in atoms and ions, the Bohr Atom, types of forces resulting in compound stability, nature of the chemical bond, electron affinity and the periodic arrangement, the nucleus and its reactions, coordination compounds, systematization of the inorganic family. Two class periods a week.

Second Year

ECONOMICS (Eco.)

MR. O'LEARY, HEAD

MR. FECHER, MR. MCGOVERN, BRO. NAGEL, MR. SNYDER

Concentration Recommendation

Prerequisite: Economics 201-202.

MAJOR: Minimum of thirty hours of upper division courses are required of students majoring in Economics. These courses should include 301, 313, 402, 404, 405, 406, 408, 413, 425. A minimum of two additional closely related courses is also required. These courses to be selected in consultation with the adviser. A related minor is to be selected in the fields of business organization, philosophy, political science, psychology, or sociology.

Economics 201-202 is prerequisite to all advanced courses except by permission of the instructor.

The following courses in business organization are credited in an economics major or minor toward the B.S. or A.B. degree:

301 Corporation Finance 313 Statistics
305 Marketing 316 Industrial Management

Eco. 104. ECONOMIC GEOGRAPHY

This course shows the influence exerted by topography, climate, geographical position, soil, and other natural resources upon the various types of activity by
mean of which man gains his living. It further shows the influence of geographical factors on the forms of agricultural industry, on the extractive and manufacturing industries and on the problems involved in transportation and commerce. Three class periods a week.

Eco. 201-202. PRINCIPLES OF ECONOMICS SIX CREDIT HOURS
A general survey of the economic institutions, forces, and factors which affect the production, exchange, distribution, and consumption of wealth. Fundamental principles and concepts are emphasized. Designed for students who desire a general knowledge of economics as well as for those planning to concentrate on economics, business organization, and the social sciences. Required of all students selecting economics for a major or minor and for business administration students. Both 201 and 202 Each Semester, Each Year

Eco. 203. SURVEY OF ECONOMICS THREE CREDIT HOURS
A general treatment of the principles, objectives and applications of economics. Specifically a consideration of the relationship of a capitalistic economy to political democracy. Designed especially for Engineers. Each Semester, Each Year

Eco. 204. SURVEY OF ECONOMICS THREE CREDIT HOURS
A general treatment of economics, as indicated in Eco. 203, but designed especially for students in Home Economics and in Secretarial Studies. First Semester, Each Year

Eco. 205. AMERICAN ECONOMIC HISTORY THREE CREDIT HOURS
An intensive study of the development of agriculture, industry, transportation, commerce, and finance against the general background of American political history and social history. Three class periods a week. Accredited in History. Each Semester, Each Year

Eco. 303. LABOR PROBLEMS THREE CREDIT HOURS
The causes, extent, effects and methods of dealing with labor disturbances, past and present. Wages, hours, and conditions of work; standards of living; distribution of incomes; unemployment; old age; industrial accidents and diseases; substandard workers; organized and unorganized labor; state and federal legislation affecting labor and industry. Three class periods a week.

Eco. 305. COMPARATIVE ECONOMIC SYSTEMS THREE CREDIT HOURS
A study of economic systems from early times to the present. The emphasis is upon the theories of socialism, fascism, communism and capitalism. Three class periods a week. Second Semester, Each Year

Eco. 308. PRINCIPLES OF INSURANCE THREE CREDIT HOURS
A general course in underlying principles of property, marine, casualty, and life insurance. The use and functions of insurance in the life of a business and in the life of individuals. The theory and practices of insurance carriers are discussed. Three class periods a week. Each Semester, Each Year
Eco. 309.  **PRINCIPLES OF LIFE INSURANCE**  
**THREE CREDIT HOURS**
An intensive study of the principles and practices of life insurance; types of policies; premiums; reserves; insurance programs and government regulations. Three class periods a week.  
*Second Semester, Each Year*

Eco. 310.  **SOCIAL INSURANCE**  
**THREE CREDIT HOURS**
Application of social insurance to old age, accident, disability and unemployment. Private and cooperative programs for worker security. Current pension and retirement programs are analyzed and discussed.  
*Second Semester, Each Year*

Eco. 312.  **TRANSPORTATION**  
**THREE CREDIT HOURS**
A survey of inland transportation agencies and facilities and a discussion of current transportation problems and regulations. Three class periods a week.  
*Each Semester, Each Year*

Eco. 313.  **PUBLIC UTILITIES**  
**THREE CREDIT HOURS**
*First Semester, Each Year*

Eco. 403.  **HISTORY OF ECONOMIC THOUGHT**  
**TWO-THREE CREDIT HOURS**
The development of economic concepts and theories from the mercantilists to recent economists. Emphasis upon the modern period. Two or three class periods a week.  
*Second Semester, Each Year*

Eco. 404.  **BUSINESS CYCLES**  
**THREE CREDIT HOURS**
Characteristics and economic consequences of business cycles. Analysis of causes and theories of business cycles. Examination of the proposals for eliminating or controlling the business cycle. Some attention is given to the barometers and measurements of business cycles. Three class periods a week.  
*First Semester, Each Year*

Eco. 405.  **MONEY, CREDIT AND BANKING**  
**THREE CREDIT HOURS**
A survey of the concepts, principles and practices in the fields of money, credit, and banking. Consideration of monetary systems, foreign exchange, credit instruments, and the principal types of modern financial institutions. Special attention to the commercial bank and its relation to the Federal Reserve System. Three class periods a week.  
*Each Semester, Each Year*

Eco. 406.  **ADVANCED BANKING AND MONETARY PROBLEMS**  
**THREE CREDIT HOURS**
Policies and operation of central banks, particularly the Federal Reserve System, and the financial markets. Problems of credit control, monetary stabilization and banking regulations and reform. Current banking problems and trends are emphasized. Three class periods a week.  
*Second Semester, Each Year*
ECO. 408. CONTEMPORARY ECONOMICS  THREE CREDIT HOURS
Analysis and discussion of current economic issues. Among the problems considered are labor, prices, government and economic maladjustments. Important current economic problems will be emphasized and discussed as they arise. Three class periods a week.
Second Semester, Each Year

ECO. 413. ECONOMIC ANALYSIS AND POLICY  TWO-THREE CREDIT HOURS
Analysis of basic economic principles with special attention to the theories of value and distribution. Two or three class periods a week.
First Semester, Each Year

ECO. 425. ECONOMICS SEMINAR  TWO CREDIT HOURS
A study and discussion of special economic problems currently important and of interest to the group. Two class periods a week.
Each Semester, Each Year

EDUCATION (Educ.)

BRO. FAERBER, HEAD
FR. BARRETT, MR. BURROUGHS, MR. DALY, SR. GENEVIEVE MARIE,
MISS KOOGLE, MR. KREIDER, MR. LEARY, MR. LUBBERS,
SR. M. PELAGIA, MISS MONNETTE, MR. NADEAU,
MRS. REEL, MR. REICHARD, MR. SCHWARTZ, BRO. SIBBING

EDUC. 101. INTRODUCTION TO EDUCATION  THREE CREDIT HOURS
A consideration of the field of Education, its problems and possibilities, with a view of orienting the beginning student with the profession of teaching and of enabling him to select a field of education for major emphasis during his preservice program. Required of all freshman students in Education.
Each Semester, Each Year

EDUC. 102. SCIENCE FOR THE ELEMENTARY SCHOOL TEACHER I  FOUR CREDIT HOURS
Gives the student a functional and broad understanding of those phases and aspects of man's environment that are of everyday interest and usefulness. The contents include such items as the place of the earth in the universe, changes in the earth's surface, conditions necessary to life, living things. Educ. 102-3 or any other approved science courses to equal eight credit hours required of all freshman students in Elementary Education.
First Semester, Each Year

EDUC. 103. SCIENCE FOR THE ELEMENTARY SCHOOL TEACHER II  FOUR CREDIT HOURS
A continuation of Educ. 102. The content items include energy in the universe, man's attempts to control his environment, a study of the objectives of elementary science and of the selection and grade placement of subject matter. Educ. 102-3 or any other approved science courses to equal eight credit hours required of all freshman students in Elementary Education.
Second Semester, Each Year
EDUC. 200. PURPOSES AND PRACTICES OF THE ELEMENTARY SCHOOL
THREE CREDIT HOURS
The objectives, organization, curricula, and community relationships of the elementary school in the United States.
_First Semester, Each Year_

EDUC. 202. EDUCATIONAL PSYCHOLOGY I
THREE CREDIT HOURS
Human growth and development through the first twenty years, with special emphasis on the elementary and secondary school years. Prerequisite: Psych. 201.
_First Semester, Each Year_

EDUC. 203. EDUCATIONAL PSYCHOLOGY II
THREE CREDIT HOURS
The psychology of learning. Studies the guidance and fostering of learning activities. Considers the nature, the conditions, and the principles of learning and the principles of teaching.
_Second Semester, Each Year_

EDUC. 220. THEORY AND METHODS OF KINDERGARTEN-PRIMARY INSTRUCTION
THREE CREDIT HOURS
Deals both with the theory and the necessary practical skills to meet the needs of children in Kindergarten and in Grades 1, 2, and 3.
_First Semester, Each Year_

EDUC. 221. PRACTICAL ARTS IN THE KINDERGARTEN AND PRIMARY GRADES
TWO CREDIT HOURS
Creative expression in the use of such materials as papers, textiles, ceramics, and plastics. A study of handwork as an integral part of activities in the schools. Accredited in Art.
_Second Semester, Each Year_

EDUC. 222. PRACTICAL ARTS IN THE INTERMEDIATE GRADES
TWO CREDIT HOURS
Same as Educ. 221, adjusted to the maturity of children in the intermediate grades. Accredited in Art.
_Second Semester, Each Year_

EDUC. 241. ARITHMETIC AND METHODS
THREE CREDIT HOURS
Functional arithmetic for teaching purposes. Aims to insure competency in elementary school arithmetic. Also deals with methods of presentation, diagnosis of number difficulties, remedial instructions, and testing.
_Second Semester, Each Year_

EDUC. 301. CLASSROOM MANAGEMENT
THREE CREDIT HOURS
Deals with the control of the classroom setting in fostering learning. Treats the practical aspects of learning and teaching. Examines discipline as an aspect of school morale and studies ways of gaining acceptable student behavior.
_First Semester, Each Year_

EDUC. 302. PRINCIPLES OF SECONDARY EDUCATION
THREE CREDIT HOURS
A study of the philosophic principles that underlie the purposes and practices of secondary education; the historical background in relation to the present system; the functions, issues, and trends of secondary education; the curriculum of the secondary school.
_Second Semester, Each Year_
EDUC. 303. **Reading in the Elementary School**  THREE CREDIT HOURS
Covers the program of reading. Treats the following problems: reading-readiness, experience reading, methods of meeting individual differences, functional reading, diagnosis in reading, and remedial measures. Observation of teaching in the cooperating schools of the city by prearrangement. Prerequisite: Educ. 203. Required of all students in Elementary Education.

*Second Semester, Each Year*

EDUC. 304. **Adolescent Psychology**  THREE CREDIT HOURS
A study of the inter-related physical, physiological and mental changes associated with adolescence; interests and ideals; social tendencies and adjustments; causal factors in maladjustment and delinquency among adolescents. May be substituted for Educ. 202 by students in Secondary Education.

*First Semester, Each Year*

EDUC. 306. **Child Psychology**  THREE CREDIT HOURS
A general study of the child's mind, its nature and original endowment; characteristics dominant at different ages and their significance for the teacher; the development of mental traits and abilities, of moral life and character, and the creative activities of a child. Required of all students in Kindergarten and Primary Education. May be substituted for Educ. 202 by students in Elementary Education.

*First Semester, Each Year*

EDUC. 307. **Principles of Teaching**  THREE CREDIT HOURS
Meaning of education; function of school; meaning and types of learning and of teaching; organization of subject matter; various types of class procedure; recitation, assignment, questioning, drill, etc.; standards for the evaluation of teaching and learning.

*To be announced*

EDUC. 313. **Principles and Practices of Effective Group Leadership**  THREE CREDIT HOURS
A comprehensive study of the concept of democratic group leadership as an integral part of the teaching-learning situation at all grade levels. Stress is placed upon the fundamental ways of fostering and creating an environment in which learning can be achieved effectively in a group setting. The inter-personal relations of students, teachers, and parents are studied as they play upon the formation and function of the learning group. Prerequisite: Educ. 203.

*Second Semester, Each Year*

EDUC. 318. **Mental Hygiene for Teachers**  THREE CREDIT HOURS
This course explains the contribution which the classroom teacher can make in guiding the development of the normal, integrated personalities of his pupils. Provides basis for evaluating questionable school practices, especially through a constructive view of discipline. Deals primarily with the normal child. Mental health practices for the teacher are also stressed. Required of all Education students.

*Each Semester, 1953-1954*
EDUC. 322. LITERATURE IN THE ELEMENTARY SCHOOL
THREE CREDIT HOURS
Acquaints students with the various fields of children's literature and with adequate evaluative criteria. The contents include the following: history of children’s literature, poetry for different age levels, verse choirs, use of poetry, modern stories in folk-tale style, folk tales, story telling. Required of all students in Elementary Education.
First Semester, Each Year

EDUC. 324. LANGUAGE IN THE ELEMENTARY SCHOOL THREE CREDIT HOURS
Stresses the expressional phase of elementary school language, including oral and written expression, spelling and handwriting. Also treats instructional methods, measurement of accomplishments, and correction of pupil difficulties.
Second Semester, Each Year

EDUC. 325. SOCIAL STUDIES IN THE ELEMENTARY SCHOOL
THREE CREDIT HOURS
Function of the social studies in the elementary school; appraisal of teaching procedures in the field; formulation of definite principles to use in the selection of suitable contents and methods; testing the results of instruction.
Second Semester, 1953-1954

EDUC. 326. MUSIC IN THE ELEMENTARY SCHOOL TWO CREDIT HOURS
Materials to be used in elementary grade school music and their presentation; problems and possibilities of the elementary school music program. Prerequisite: Mus. 141.
Second Semester, Each Year

EDUC. 327. TEACHING OF HOME ECONOMICS IN SCHOOL
THREE CREDIT HOURS
The philosophy of home economics education, curriculum, methods, devices, and materials used in teaching. Preparation and presentation of units and lessons. Observation of teaching in cooperating schools of city.
Second Semester, 1953-1954

EDUC. 328. SECONDARY SCHOOL METHODS IN COMMERCIAL SUBJECTS
THREE CREDIT HOURS
Invokes the principles of teaching in connection with high school commercial subjects. Includes a survey of commercial textbooks, curricula construction, testing programs, professional periodicals, commercial teacher organizations. Observation of teaching in cooperating schools of city.
First Semester, Each Year

EDUC. 340. PRINCIPLES OF EDUCATION TWO-THREE CREDIT HOURS
Studies the fundamental concepts underlying the whole of education. Discusses current educational issues, the evolution of educational aims, educational agencies, the question of religious education and character training.
First Semester, Each Year
EDUC. 403. ARITHMETIC IN THE ELEMENTARY SCHOOL  
THREE CREDIT HOURS

History of number; distribution of content according to grade levels; methods of presentation; diagnosis of number difficulties; remedial instruction; testing.

First Semester, Each Year

EDUC. 404. SECONDARY SCHOOL METHODS IN LATIN  
TWO CREDIT HOURS

Discusses the place and purpose of Latin in the secondary school curriculum; evaluates objectives, methods, and teaching materials.

First Semester, 1953-1954

EDUC. 405. SECONDARY SCHOOL METHODS IN ENGLISH AND LITERATURE  
THREE CREDIT HOURS

Considers ways and means whereby the teacher of English can make his teaching more functional in the lives of students, more modern, more vigorous, and more inspiring. Observation of teaching by prearrangement with cooperating schools. Required for high school certification in English.

First Semester, Each Year

EDUC. 406. SECONDARY SCHOOL METHODS IN SOCIAL STUDIES  
THREE CREDIT HOURS

Aims and values of social studies in high school. General method and special techniques in the field of social studies in relation to basic principles of learning. Attention is given to practical teaching materials and devices. Observation of teaching in local cooperating schools. Required for secondary certification in social studies.

First Semester, Each Year

EDUC. 407. ART IN THE ELEMENTARY SCHOOL  
TWO CREDIT HOURS

Deals with newer methods of teaching art in the elementary school; creative art expression and the use of art elements and principles as the basis for creative approach; organization of units of work, including drawing, painting, design, color, modeling, block printing, lettering, and the mural, as they relate to the integrated school program. Accredit in Art. Second Semester, Each Year

EDUC. 408. SECONDARY SCHOOL METHODS IN MODERN LANGUAGES  
THREE CREDIT HOURS

Considers the functions and values of language study; courses of study; organization of materials; conventional and progressive methods; illustrative materials; selection of texts; tests. Observation of teaching on high school level. Required for secondary school certification in modern languages.

First Semester, 1953-1954

EDUC. 409. SECONDARY SCHOOL METHODS IN MATHEMATICS  
THREE CREDIT HOURS

The objectives of high school mathematics; sequence and correlation of subject matter; methods of teaching; analysis of courses of study and text books; mate-
rials and equipment; current trends. Observation of teaching on high school level. Required for secondary certification in mathematics.

First Semester, Each Year

EDUC. 410. SECONDARY SCHOOL METHODS IN RELIGION
TWO CREDIT HOURS
Presents the teacher of religion with modern methods of instruction; evaluates the relative merits of religion texts; teaches the employment of the principles of correlation and adaptation with view to the practical needs of adolescents; treats the function of Catholic literature and the problem of pupil participation.

Second Semester, 1953-1954

EDUC. 411. SECONDARY SCHOOL METHODS IN SCIENCE
THREE CREDIT HOURS
Discusses the social basis for instruction in science; development of a philosophy for the teaching of science; selection of objectives on the basis of reliable criteria; determination of technique for developing an integrated science curriculum and a review of pertinent research on science teaching. Observation of teaching on high school level. Required for secondary school certification in science.

First Semester, 1953-1954

EDUC. 412. MEASUREMENT IN EDUCATION
THREE CREDIT HOURS
The measurement of student achievement is approached as one important aspect of the broad field of evaluation confronting the future teacher. Attention is directed toward the place of measuring student achievement in the overall evaluative school program. Major emphasis is placed upon the construction of teacher-made achievement tests and the analysis of test results. The fundamentals or basic statistics as they relate to classroom use will be studied. Prerequisite: Completion of required 300 courses in Education.

First Semester, 1953-1954

EDUC. 414. STUDENT TEACHING
SIX-TWELVE CREDIT HOURS
Content includes: weekly conference with Director of Student Teaching; guidance in planning definite teaching units; teaching in actual classroom situations for extended periods under close supervision; evaluating pupil progress; conferences with supervising teachers on teaching procedures employed; participation in general school activities. Required of all Education students, both for the degree and for teaching certification.

Each Semester, Each Year

EDUC. 415. PRINCIPLES OF GUIDANCE
THREE CREDIT HOURS
An exploration of the guidance role of the classroom teacher in the fields of educational, vocational, and social-civic-ethical guidance. The application of basic principles of guidance in the daily contact of teacher and student is emphasized. Prerequisite: Completion of required 300 courses in Education.

Second Semester, Each Year

EDUC. 416. HISTORY OF EDUCATIONAL THOUGHT
THREE CREDIT HOURS
A series of concise interpretations of leading thinkers from Plato to John
Dewey; deals with the world's leading educational ideas. The course endeavors to give reliable direction to the future in education through knowledge of the past. May be applied toward Philosophy requirement for students in the Division of Education.

**EDUC. 417. LIBRARY GUIDANCE FOR TEACHERS**

Three Credit Hours

Trains the teacher to make use of the available services and resources of the standard school library in behalf of a well-rounded education for pupils. Acquaints the class with library organization, reference material, indexes, and bibliography. Not designed for teacher-librarians.

**Second Semester, 1953-1954**

**EDUC. 419. PHILOSOPHY OF EDUCATION**

Three Credit Hours

The application of the fundamental principles of a philosophy of life to the work of education. The course draws up criteria for the intelligent evaluation of educational theory and practice. May be applied toward Philosophy requirement for students in the Division of Education.

**First Semester, Each Year**

**EDUC. 420. MODERN THEORIES OF EDUCATION**

Three Credit Hours

An evaluation of the modern philosophies of education. Attention is directed to the main tenets of each philosophy and the effects on educational theory and practice. May be applied toward Philosophy requirement for students in the Division of Education.

**Second Semester, Each Year**

**EDUC. 422. THE ROLE OF THE SCHOOL IN THE SOCIAL ORDER**

Three Credit Hours

Studies the sociological facts and principles essential to the background of every teacher; an analysis of the sociological objectives of education; surveys and appraises the implications of outside-of-school agencies, such as associational influence, customs, social control, parental education, youth problems, libraries, motion pictures, the press, radio, and the like.

**First Semester, 1953-1954**

**EDUC. 431. VISUAL AND OTHER SENSORY AIDS IN EDUCATION**

Three Credit Hours

Studies the aims and psychological bases of the use of visual and other sensory aids in the classroom; the techniques of the various types, including slides, motion pictures, television, maps, charts, radio, field trips, etc.; demonstration lessons applying sensory methods to the subjects of the curriculum.

**Second Semester, Each Year**

**EDUC. 439. SCHOOL PROVISIONS FOR INDIVIDUAL DIFFERENCES**

Three Credit Hours

Studies the different traits and abilities of pupils and ways whereby teaching might be adjusted to these differences. Special attention focused on the slow learner, the gifted student, and the educationally retarded child.

**Second Semester, 1953-1954—Evening**
ENGLISH 127

EDUC. 441. DIAGNOSIS AND REMEDIAL INSTRUCTION
A study of the major factors associated with learning difficulties, techniques that might be used to diagnose the nature and causes of pupil difficulty, and the methods by which remedial adjustments can be made.

Second Semester, 1953-1954

EDUC. 442. SPEECH CORRECTION AND HEARING THERAPY
Treats the speech and hearing handicaps which frequently confront the teacher in the persons of elementary and secondary school pupils. The course endeavors to point out causes of these defects and ways of correcting them or surmounting them in furthering educational outcomes.

First Semester, 1953-1954

ENGLISH (Eng.)

BRO. WILLIAM WEHRLE, HEAD
BRO. BOLL, FR. DONNELLY, SR. GENEVIEVE MARIE, BRO. KOHLES, FR.
LEES, SR. MARIE EMILIE, BRO. PRICE, BRO. ROESCH, MISS WHETRO

ENG. 100. ENGLISH COMPOSITION
This course, consisting largely of the principles of grammar and the mechanics of composition, is obligatory for those who score below a determined norm on a standardized test. Upperclassmen, at the discretion of the respective deans, may also be required to take or to repeat this course. Five class periods a week.

Each Semester, Each Year

ENG. 101. ENGLISH COMPOSITION
The regular freshman college composition course in which the principles of grammar, punctuation, usage, and rhetoric are presented. Application of these principles is made to exercises and regularly assigned themes.

Each Semester, Each Year

ENG. 141. INTRODUCTION TO JOURNALISM I
An outline survey designed to acquaint the prospective journalist with the field of Journalism.

First Semester, Each Year

ENG. 142. INTRODUCTION TO JOURNALISM II
This is a continuation of Eng. 141, which presents an outline survey designed to acquaint prospective journalists with the field of Journalism.

Second Semester, Each Year

ENG. 221. ENGLISH LITERATURE
A survey of English literature from its beginning to the present day; it includes a study of the background as well as the works of the authors of each period.

Each Semester, Each Year
ENG. 222.  AMERICAN LITERATURE  THREE CREDIT HOURS
A survey of American literature from the Colonial Period to the present day; it presents a study of the background as well as representative works of the different periods.  
*Each Semester, Each Year*

ENG. 241.  REPORTING  THREE CREDIT HOURS
Instruction and practice in gathering and recording news, combining the basic principles of news writing with exercises as assignment materials.  
*First Semester, Each Year*

ENG. 304.  THEME WRITING  THREE CREDIT HOURS
An intensive study of the construction and preparation of a documented paper. A documented paper is required to show that the principles taught have been assimilated.  
*Second Semester, Each Year*

ENG. 305.  MEDICAL TERMINOLOGY  THREE CREDIT HOURS
A study of the Greek and Latin roots which form the foundation of medical terms. To this is added a study of prefixes, suffixes, and compounds.  
*First Semester, Each Year*

ENG. 316.  ADVANCED COMPOSITION  THREE CREDIT HOURS
A study and application of the principles of composition to the various types of writing. Prerequisite: Eng. 101.  
*Each Semester, Each Year*

ENG. 322.  WORLD LITERATURE  THREE CREDIT HOURS
A study of international literature, stressing the classics, beginning with the epic of Homer, and tracing some of the main lines in the development of the literature of the Western cultures. Lectures, discussions, and oral reports are included.  
*First Semester, Each Year*

ENG. 324.  HISTORY OF THE AMERICAN NOVEL  THREE CREDIT HOURS
A study of the American novel from its beginnings to the present day. Outside readings and reports constitute an integral part of the course.  
*First Semester, 1954-1955*

ENG. 325.  TECHNIQUE OF VERSE  THREE CREDIT HOURS
A study of the principles and mechanics of poetic forms, with the purpose of applying what has been learned to exercises in writing verse.  
*First Semester, Each Year*

ENG. 327.  HISTORY OF THE NOVEL  THREE CREDIT HOURS
A study of the English novel from its beginnings to the present day. Outside readings and reports constitute an integral part of the course.  
*Second Semester, 1953-1954*

ENG. 328.  SURVEY OF THE ESSAY  THREE CREDIT HOURS
The history, nature, structure, and style of the essay. The lives and works of the leading essayists are studied.  
*First Semester, 1953-1954*
ENGLISH 129

ENG. 329. SHORT STORY
A study of the characteristics of the writers of the Victorian short story. Various models of the short story will be analyzed. The reading and reporting on specified stories form a part of the course. *First Semester, 1953-1954*

ENG. 330. VICTORIAN POETS
A study of the characteristics of the writers of the Victorian Age through direct contact with their works. The influence of these writers will also be pointed out. *Second Semester, 1954-1955*

ENG. 331. ROMANTIC POETS
A study of the characteristics of the writers of the Romantic Age through direct contact with their works. The influence of these writers will also be pointed out. *First Semester, 1954-1955*

ENG. 341. EDITING
A step-by-step treatment of the technique of publication production. Laboratory work in editing copy, headline building, page make-up, typography, and proof-reading are included. *First Semester, Each Year*

ENG. 342. FEATURE AND EDITORIAL WRITING
Instruction and practice in compiling and writing various types of special feature articles and editorials. *Second Semester, Each Year*

ENG. 351. AMERICAN DOCUMENTARY LITERATURE
A study of influential political documents from the Mayflower Compact to the present day, stressing literary aspects, composition, and rhetoric, as well as the principles of democracy. *First Semester, Each Year*

ENG. 408. BUSINESS ENGLISH
The principles of letter writing are studied and applied in conformity with the best current practices in business. *First Semester, Each Year*

ENG. 414. FRANCIS THOMPSON
A study of the life and times of Francis Thompson, together with a reading and analysis of his outstanding works. *First Semester, Each Year*

ENG. 415. MILTON
A study of *Paradise Lost* and *Paradise Regained* and a selected number of the minor poems of Milton. *Second Semester, 1954-1955*

ENG. 416. BROWNING
An intensive study of the life and times of Robert Browning, together with a reading and analysis of his outstanding works. *Second Semester, 1953-1954*

ENG. 417. EDGAR ALLAN POE
A study of the life and times of Edgar Allan Poe, together with a reading and analysis of his poetry, stories, and essays. *First Semester, 1954-1955*
ENG. 419. Newman
An analytical study of Newman's prose in *The Idea of a University*. The writing of essays modeled on the *Discourse*.

Second Semester, Each Year

ENG. 421. Modern Poetry
A study of the British and American poets of the modern era. The poetic movements characteristic of this period will be studied and applied to the writings of the poets considered.

Second Semester, Each Year

ENG. 422. Introduction to Drama
A survey of the development of the drama of all ages, and of the chief nations from the time of the Greeks to the present day. The reading of typical plays forms an integral part of the course.

First Semester, 1954-1955

ENG. 423. Tragedies of Shakespeare
A comprehensive study of all the Tragedies of Shakespeare. All of the plays will be read. An intensive study of a selected few of the Tragedies will be made.

Second Semester, 1954-1955

ENG. 424. Comedies of Shakespeare
A comprehensive study of all the Comedies will be made with special emphasis upon a selected few.

Second Semester, 1953-1954

ENG. 425. Histories of Shakespeare
A comprehensive study of all the Historical plays of Shakespeare. All of the plays will be read. An intensive study of a selected few will be made.

Second Semester, 1953-1954

ENG. 426. Modern Drama
In this course, a selected number of dramas from the modern period will be read and studied.

Second Semester, Each Year

ENG. 427. Dante
*The Divine Comedy* in English: a comprehensive study of the poem from a literary point of view.

Second Semester, 1954-1955

ENG. 428. Literary Criticism
A study of the beginnings and development of literary criticism. It includes a study of fundamental principles of literary structure and style, together with the various theories advanced.

First Semester, 1953-1954

ENG. 429. Chaucer
A study of the life and times of Chaucer. Emphasis is placed on the study of the *Canterbury Tales*.

Second Semester, 1953-1954

ENG. 430. History of the English Language
The stages of the development of the language, together with the influences shaping its development, will be studied to show what has happened to the
English language from the beginning to the present day. This course is recommended to those majoring in English, as well as those who intend to teach English.

GEOL0GY (Geo.)

BRO. SALETEL, HEAD
MR. G. SPRINGER, MR. STEWART

Geo. 101. Physical Geology
An introductory course in the composition and structure of the earth; its land forms and the agencies active in their production. Three class periods and one laboratory period a week.

Geo. 102. Historical Geology
The geological history of the earth as interpreted from the rocks of its crust; its dynamic, geographic, and climatic changes; animals and plants of the past. Three class periods and one laboratory period a week. Also field work. Prerequisite: Geo. 101.

Geo. 103. Principles of Geography
An analysis and classification of the physical and cultural features of the earth; their pattern of distribution, and their associations. Three class periods a week.

Geo. 104. Economic Geography
This course shows the influence of physiography factors on the agricultural, extractive and manufacturing industries, and the problems involved in transportation and commerce. Three class periods a week. Each Semester, Each Year.

Geo. 201. Mineralogy
A microscopic study of minerals, their chemical and physical properties and economic uses. The course includes a discussion of crystallography and the determination of the more common minerals by their physical properties and blow-pipe analysis. Two class periods and four hours of laboratory a week.

Geo. 202. Optical Mineralogy and Petrography
A study of the optical properties of the rock forming minerals, and the determination of rock types through the use of thin sections and the polarizing microscope. Two class periods and four hours of laboratory a week.

Geo. 203. Regional Geography
A study of the provinces of Europe, Asia, and South America. Physiography is used as a basis for showing economic and cultural developments. Three class periods a week.
GEO. 205. GEOL OGY FOR ENGINEERS THREE CREDIT HOURS
The application of geological principles to engineering problems. A study of weathering, erosion, permafrost, faulting, landslides and similar phenomena. Laboratory work in dimension stones and geologic map interpretation. Two class periods and two hours of laboratory a week. *First Semester, 1953-1954*

GEO. 301. STRUCTURAL GEOLOGY FOUR CREDIT HOURS
The origin and development of structural features of the earth's crust; folding, faulting, volcanism, mountain building, and metamorphism. Three class periods and two hours of laboratory a week. *First Semester, 1953-1954*

GEO. 302. GLACIAL GEOLOGY THREE CREDIT HOURS
The origin of mountain and continental glaciers; their depositional features and corrosive activity; history of glaciation in geologic past with special emphasis upon North American Pleistocene ice advances. Three class periods a week. *Second Semester, 1953-1954*

GEO. 303. FIELD GEOLOGY SIX CREDIT HOURS
Six or eight weeks summer study of structural and age relationship problems in areas containing abundant crystalline and sedimentary exposures. *Summer, 1953*

GEO. 305. INTERMEDIATE PETROLOGY FOUR CREDIT HOURS
Discussion of the processes of igneous intrusion and extrusion, and of the theories of magmatic differentiation; study of the principles and products of metamorphism. Two class periods and four hours of laboratory a week. *First Semester, 1953-1954*

GEO. 307. GEOMORPHOLOGY FOUR CREDIT HOURS
A detailed study of landforms and the erosional processes that develop them. Three class periods and two hours of laboratory a week. *Second Semester, 1954-1955*

GEO. 401. PALEONTOLOGY FOUR CREDIT HOURS
A study of animal life of the geologic past as shown by the fossil record. Three class periods and two hours of laboratory a week. *Second Semester, 1954-1955*

GEO. 403. SEDIMENTATION THREE CREDIT HOURS
The sequence and methods of correlation of the sedimentary rocks of North America, with special attention given to index fossils characteristic of various geologic horizons. Discussion of the processes of sedimentation; diagnosis; classification of sedimentary rocks; detailed study of common rock types. Three class periods a week. *First Semester, 1954-1955*

GEO. 404. PROBLEMS IN GEOLOGY THREE CREDIT HOURS
A consideration of special problems involving advanced work in the laboratory and library; arranged to meet the needs of individual students. *Each Semester, Each Year*
HISTORY (Hist.)

MR. STEINER, HEAD
MR. BEAUREGARD, MR. O'DONNELL, FR. PREISINGER, BRO. ROESCH

HIST. 103-104. ECCLESIASTICAL HISTORY
This course is given at Mount St. John. Enrollment is restricted to members of the Society of Mary.  
Full Year Course, Each Year

HIST. 111. HISTORY OF MODERN EUROPE
A survey of European History from 1500 to 1815. Beginning with a rapid summary of the Renaissance, this course discusses the Protestant Revolution, Catholic Reformation, absolute monarchies, French Revolution, Napoleonic Era, and the Congress of Vienna. Together with Hist. 112 this course serves as an introduction to European History.  
Each Semester, Each Year

HIST. 112. HISTORY OF MODERN EUROPE
A survey of European History from 1815 to the present. After discussing the Congress of Vienna, this course considers the growth of nationalism, liberalism, industrialism, and imperialism, as well as World War I, totalitarianism, World War II, and the United Nations Organization.  
Each Semester, Each Year

HIST. 205. AMERICAN ECONOMIC HISTORY
An intensive study of the development of agriculture, industry, transportation, commerce, and finance against the general background of American political and social history. Accredited in Economics.  
Each Semester, Each Year

HIST. 251. AMERICAN HISTORY TO 1865
A general survey of the development of the American nation from colonial times to 1865. Due consideration is given to political trends, but the economic and social foundations of American institutions are also emphasized.  
First Semester, Each Year

HIST. 252. AMERICAN HISTORY SINCE 1865
This course carries forward the story of the nation and its development after
the Civil War. Stress is laid upon those social, economic, and political problems, a knowledge of which is essential to an understanding of contemporary America.

**Second Semester, Each Year**

**HIST. 301. MEDIEVAL EUROPE**

The development of Europe from the fourth century to the fourteenth century. A resume of theories concerning the medieval epoch is followed by a treatment of the birth of the Middle Ages, Christianity, and the Byzantine, Islamic, and Carolingian Empires. There is also study of feudalism, manorialism, the Crusades, and the growth of national states. **First Semester, 1954-1955**

**HIST. 302. RENAISSANCE AND REFORMATION**

The development of Europe from the fourteenth century to the middle of the seventeenth century. After summarizing theories about this era, the course stresses causes of the period. There follows the emphasis on the economic, political, social, and religious aspects of the Renaissance, Protestant Revolution, and Catholic Reformation. **Second Semester, 1954-1955**

**HIST. 305. HISTORY OF RUSSIA**

The development of the Russian state from earliest times to the present. This course is concerned with the origins of the Russian state, political and economic growth, and a consideration of the development of the Modern Russian state in the period following the Revolution of 1917. **First Semester, 1953-1954**

**HIST. 306. MODERN RUSSIAN HISTORY**

An account of the historical development of the Soviet state from its beginning in 1917 to the present time. Emphasis will be on the application of the economic and political principles of the Soviet regime to the Russian Empire and the effect of these principles on social, religious, and cultural life. **Second Semester, 1953-1954**

**HIST. 307. CULTURAL HISTORY OF EUROPE TO 1830**

A brief review of pre-historic and Oriental art to prepare the ground for a study of modern art. Then a more intensive survey of the basic arts of architecture, painting, sculpture, and music through the various movements in Europe and America: the Greek and Roman; the Byzantine and Saracenic; the Romanesque and Gothic; the Renaissance; the Baroque, the Rococo and the Neo-Classic. Accredited in Art. **First Semester, Each Year**

**HIST. 308. CULTURAL HISTORY OF EUROPE SINCE 1830**

After a brief survey of the basic principles underlying all the arts, and their application to daily life, an intensive study of the Romantic, Realistic and Impressionistic movements, together with a study of the various Modern movements since 1900. Accredited in Art. **Second Semester, Each Year**

**HIST. 309. ANCIENT HISTORY**

A survey of ancient civilizations between 5000 B. C. and 313 A. D. The civili-
zations—Egyptian, Mesopotamian, Anatolian, Syro-Palestinian, Persian, Aegean, Hellenic, Hellenistic, and Roman—will be studied for political, economic, social, religious and cultural factors.

HIST. 311. HISTORY OF THE ANCIENT NEAR EAST  THREE CREDIT HOURS
A detailed study of the civilizations of the Near East between 5000 B.C. and 500 B.C. The civilizations—Egyptian, Mesopotamian, Anatolian, Syro-Palestinian, Persian, and Aegean—will be analyzed regarding political, economic, social, religious and cultural factors. Conducted only in the Division of Arts at Carthagena.

HIST. 312. HISTORY OF ANCIENT GREECE AND ROME  THREE CREDIT HOURS
A detailed study of three civilizations—Hellenic, Hellenistic, and Roman—between 1100 B.C. and 476 A.D. These civilizations will be treated concerning political, economic, social, cultural, and religious elements. To be announced

HIST. 313. CHRISTIAN ANTIQUITY  THREE CREDIT HOURS
This course investigates the origin and cultural setting of early Christianity, the conflict with the pagan Roman Empire and the subsequent emergence of Christianity under Constantine. Special emphasis is placed upon the doctrinal controversies and patristic writers of the fourth and fifth centuries. Conducted only in the Division of Arts at Carthagena. Second Semester, Each Year

HIST. 331-332. SURVEY OF RUSSIAN CIVILIZATION  SIX CREDIT HOURS
Designed to give students an opportunity to acquire an understanding of Russian life and culture. All major factors which form the background of a nation will be considered. For reasons of simplification and convenience, the survey is divided into two parts, with 1917 as the dividing line; effort is made to preserve a balance between the Tzarist and the Soviet periods.

To be announced—Evening

HIST. 351. AMERICAN COLONIAL HISTORY  THREE CREDIT HOURS
A study of the foundations of American nationality. Beginning with a consideration of the European background of American colonization, the course continues with the development of the colonial system, with direct reference to the ideas and institutions that were transplanted from the Old World. Attention is then given to the growth of democratic tendencies and the rise of conflicting points of view leading to the American Revolution. First Semester, 1954-1955

HIST. 356. LATIN AMERICA—THE COLONIAL PERIOD  THREE CREDIT HOURS
The unity or near unity which characterized the Latin America story during the colonial centuries is discussed. Special consideration is given to the Spanish colonies and Brazil. Individuality of Spanish provinces is illustrated and the necessary emphasis is placed on the reason for racial mixture being greater in some areas and less marked in others. Reasons are stated for the same laws governing all colonies—as well as for the same basic loyalties, the same institutions, political and social, economic and religious. First Semester, 1953-1954
HIST. 357. LATIN AMERICA—THE NATIONAL PERIOD  
THREE CREDIT HOURS
The following factors or common denominators in the National Period form the outline of the course: The Latin character—its individualism, its humanism, its emotionalism; political immaturity of early National Latin America; the "Caudillo"; major political parties; Church and State; anti-clericalism; "one-crop" economies; class and race.

Second Semester, 1953-1954

HIST. 401. PRO-SEMINAR IN HISTORY  
TWO CREDIT HOURS
An introduction to the study of research and writing in History. Special emphasis is given to the mechanics of research and the problems encountered in preparing a manuscript for publication. Practical application of the principles of research and composition will be required in the form of a term paper. Required of all History majors. Prerequisite: 12 credit hours in History.

First Semester, Each Year

HIST. 408. THE DIPLOMATIC HISTORY OF THE UNITED STATES  
THREE CREDIT HOURS
Foundations of American foreign policy; diplomacy of continental expansion; special emphasis on diplomatic problems since 1898. Accredited in Political Science.

Second Semester, 1954-1955

HIST. 409. EUROPE SINCE 1914  
THREE CREDIT HOURS
An intensive treatment of Europe from 1914 to the present. Concentration is placed on these topics: causes and outcome of World War I; internal policies of nations between the two World Wars; diplomatic actions leading to World War II; and the impact of World War II.

First Semester, 1953-1954

HIST. 411. HISTORY OF THE FAR EAST  
THREE CREDIT HOURS
A brief review of the early historical development of the main areas of the Far East, followed by a more intensive study of the development of China and Japan in the nineteenth and twentieth centuries. Emphasis is given to the political, religious, cultural, and economic growth of China and Japan. The lesser lands of the Far East are treated in a general way.

Second Semester, 1953-1954

HIST. 427. THE WESTWARD MOVEMENT  
THREE CREDIT HOURS
A history of the expansion of settlement in the United States since 1783. The movement of the frontier to the Pacific Coast will be followed in relation to the development of exploration, Indian relations, land policy, methods of transportation, and the influence of the West upon American ideals and institutions. Prerequisite: Hist. 251 and 252.

Second Semester, 1954-1955

HIST. 448. AMERICAN CONSTITUTIONAL DEVELOPMENT  
THREE CREDIT HOURS
The development of American constitutional philosophy since 1787 under three general heads: the Agrarian Constitution; the Laissez-Faire Constitution; and the Welfare Constitution. Topics will include the Marshall and Taney eras; constitutional problems of slavery; the constitutional problems of federal and state regulation; the constitutional foundations of 19th century capitalism; civil
liberties in the 20th century; the constitutional crises of 1935-1937 and current problems of constitutional interpretation.  

Second Semester, 1953-1954

HIST. 449. RECENT AMERICAN HISTORY  THREE CREDIT HOURS
Contemporary social, economic, and political aspects of the United States and its role as a world power from 1900 to the present, with a broad interpretation of the impact of mature capitalism on American behavior.

Second Semester, 1954-1955

HIST. 451. CIVIL WAR AND RECONSTRUCTION  THREE CREDIT HOURS
Remote and immediate causes of the Civil War, especially from 1850 to 1861; problems of the North and South during the war; the consequences of the war; the efforts to create a new Union, 1865 to 1877, and the new problems created by those efforts.

First Semester, 1954-1955

HIST. 461. THE HISTORY OF MEXICO  THREE CREDIT HOURS
THE COLONIAL PERIOD: The European background; first faltering attempts at government; spiritual and cultural achievements in Colonial Mexico (Franciscans, Dominicans, Augustinians); Jesuit Missionary and educational activities.

INDEPENDENCE: from the Hidalgo uprising through the political system of Porfirio Diaz.

GROPING TOWARDS POLITICAL AND SOCIAL JUSTICE with emphasis on the collapse of the Díaz regime and the recrudescence of blood purges and intolerance and the consequences of Cardenas' utopian scheme.

First Semester, 1954-1955

HOME ECONOMICS (Hec.)

MRS. ROSE, HEAD
MRS. PAYNE, MRS. SELF

HEC. 100. INTRODUCTION TO HOME ECONOMICS  ONE CREDIT HOUR
A course planned to acquaint freshmen with the home economics program and opportunities in the field; problems in personal adjustment. Required of all students majoring in home economics. One class period a week.

First Semester, Each Year

HEC. 101. BEGINNING CLOTHING  THREE CREDIT HOURS
Instructions on the use of the sewing machine and its attachments; the study of commercial patterns and the construction of cotton garments. Three two-hour laboratory periods a week. Hec. 105 recommended as preceding or concurrent.

Second Semester, Each Year

HEC. 102. FOODS I  THREE CREDIT HOURS
A study of the basic principles of food selection and preparation; application of
these basic principles as they relate to commonly used foods in an adequately balanced diet. One class period and two two-hour laboratory periods a week.

**HEC. 103. EDUCATION FOR FAMILY LIFE**
THREE CREDIT HOURS
A course planned for non-home economics majors. Some basic principles of meal planning and preparation, related art and clothing given. Opportunity given for application of these principles. Two class periods and one two-hour laboratory period a week.

**HEC. 105. INTRODUCTION TO RELATED ART**
THREE CREDIT HOURS
A basic course in color and design. Two class periods and one laboratory period a week.

**HEC. 201. FOODS II**
THREE CREDIT HOURS
A study of the problems that will be found in cooking meat, fish, poultry, and various flour mixtures. One class period and two two-hour laboratory periods a week. Prerequisite: Hec. 102.

**HEC. 203. HEALTH AND HOME NURSING**
THREE CREDIT HOURS
A study of personal health and prevention of disease in the family; relation to community health and disease control; important diseases and their prevention; accidents and emergencies in the home. Three class periods a week.

**HEC. 205. ELEMENTARY ACCOUNTING FOR HOME ECONOMICS STUDENTS**
THREE CREDIT HOURS
An introductory course in accounting, acquainting the student with the entire cycle of bookkeeping procedure. Three class periods a week.

**HEC. 214. TEXTILES I**
THREE CREDIT HOURS
A study of the characteristics of textile fibres, yarns, and fabrics as they affect ultimate use and durability. Two class periods and one two-hour laboratory period a week.

**HEC. 221. HOME MANAGEMENT I**
THREE CREDIT HOURS
Study of management of various resources available to the family with a view to promoting family well-being and satisfaction. Three class periods a week.

**HEC. 222. HISTORIC TEXTILES**
THREE CREDIT HOURS
A study of the development of the textile industry in all parts of the world, with emphasis on fibers used, design and color. Three class periods a week. Prerequisite: Hec. 214.

**HEC. 302. MEAL PLANNING AND TABLE SERVICE**
THREE CREDIT HOURS
Principles of menu planning and table service for families in various income
levels and special occasions. A study of glassware, silverware, and china. Laboratory practice in preparation of meals. One class period and two two-hour laboratory periods a week. Prerequisite: Hec. 102 or 201.

**HEC. 303. NUTRITION AND HEALTH**

Three credit hours

Fundamental principles of human nutrition, including requirements of the body for the nutritive essentials, the composition of foods and the planning of adequate diets for health. Three class periods and one two-hour laboratory period a week. Prerequisites or Corequisites: Chem. 100, 200, 400.

*First Semester, 1954-1955*

**HEC. 304. QUANTITY COOKERY**

Three credit hours

The planning, preparing, and serving of foods in large quantities. Use and care of equipment for quantity cookery. One class period and one four-hour laboratory period a week. Prerequisites: Hec. 102, 201.

*Second Semester, 1954-1955*

**HEC. 305. INSTITUTIONAL ACCOUNTING**

Three credit hours

A study of bookkeeping methods used in various types of institutions; perpetual inventory in the field of foods; food stores and inventories. Three class periods a week. Prerequisite: Hec. 205.

*Second Semester, 1954-1955*

**HEC. 307. HOUSEHOLD PHYSICS**

Three credit hours

The principles of physics as applied to household appliances. Three class periods a week.

*Second Semester, 1954-1955*

**HEC. 308. INSTITUTIONAL BUYING**

Three credit hours

Selection and methods of purchasing food in large quantities. Selection and maintenance of institutional equipment.

*Second Semester, 1953-1954*

**HEC. 309. HOUSEHOLD EQUIPMENT**

Three credit hours

A study of the principles involved in the selection, construction, operation, and care of household equipment and its relation to the well-being of the family. One class period and two two-hour laboratory periods a week. Prerequisite: Hec. 307.

*First Semester, 1954-1955*

**HEC. 311. ADVANCED CLOTHING**

Three credit hours

Selection and construction of rayon or silk and woolen garments. Includes a remodeling problem and problems in renovation and repair. Three two-hour laboratory periods a week. Prerequisites: Hec. 101, 105.

*First Semester, Each Year*

**HEC. 312. CHILDREN'S CLOTHING**

Three credit hours

A study of fabrics, design, and decoration of clothing suitable for infants and children. Construction is included. One class period and two two-hour laboratory periods a week. Prerequisites: Hec. 101, 105, 311. *First Semester, 1953-1954*

**HEC. 314. COSTUME, ART AND DESIGN**

Three credit hours

Creative work in selecting, designing, criticizing various types of garments and
their suitability for different types of people. Stress is placed upon the drawing
and designing of costumes. One class period and two two-hour laboratory
periods a week. Prerequisite: Hec. 105.

Second Semester, 1953-1954

HEC. 315. CONSUMER BUYING
Labeling and principles of better buying of the family's clothing, food and
household furnishings. For Juniors and Seniors. Three class periods a week.

Second Semester, 1954-1955

HEC. 316. TEXTILES II
Microscopical, chemical and physical analysis of textile fibers and fabrics. Re­
cent developments in the textile field. Two class periods and one two-hour labo­
ratory period a week. Prerequisite: Hec. 214.

Second Semester, 1953-1954

HEC. 318. FAMILY RELATIONSHIPS
A consideration of the factors necessary for the establishment and maintenance
of happy family relationships. Three class periods a week.

First Semester, Each Year

HEC. 323. DEMONSTRATION METHODS
A study in the presentation of a series of demonstrations; study of publicity
materials, articles, leaflets, and announcements as they would pertain to a
demonstration or presentation. One class period a week. For Juniors and Seniors.

Second Semester, Each Year

HEC. 324. BISHOP CLOTHING CONSTRUCTION METHODS
Trade practices and perfection details used in speeding simple dress construc­
tion, fitting, and tailoring. Blouses, simple dress and suit or coat to be con­
structed. Three two-hour laboratory periods a week.

To be announced—Evening

HEC. 401. ADVANCED NUTRITION
Aims to extend the student's knowledge of the science of nutrition, stressing the
metabolism of food constituents and the recent advances in the field of nu­
trition. Three class periods a week. Prerequisite: Hec. 303.

Second Semester, 1954-1955

HEC. 402. DIET IN DISEASE
Adaptation of diet to disease. Three class periods a week. Prerequisite: Hec. 303.

Second Semester, 1953-1954

HEC. 405. TEACHING OF HOME ECONOMICS IN SCHOOL
The philosophy of home economics education, curriculum, methods, devices,
and materials used in teaching. Preparation and presentation of units and
lessons. Three class periods a week.

First Semester, 1953-1954
HEC. 406. HOME MANAGEMENT II
A study of the goals in home making. Students have an opportunity to put into practice the subject matter previously learned by applying same. One class period a week, individual conferences and laboratory periods to be arranged. Prerequisites: Hec. 102, 201, 302, 321. Second Semester, 1953-1954

HEC. 407. INSTITUTIONAL ORGANIZATION AND MANAGEMENT
A study of the principles of institutional organization and administration applied to the problems of feeding institution groups; problems in personnel management; cost control. Three class periods a week. Second Semester, 1954-1955

HEC. 409. ADVANCED FOODS
A study of the recent developments in foods with special emphasis on food preservation. One class period and two two-hour laboratory periods a week. First Semester, 1954-1955

HEC. 412. HISTORIC COSTUMES
A study of the development of costume from ancient times to the present day; the influences of social and economic conditions upon costume. Two class periods and one two-hour laboratory period a week. For Juniors and Seniors. First Semester, 1953-1954

HEC. 415. TAILORING
Tailored construction applied in the making of coats and suits. Three two-hour laboratory periods a week. Prerequisites: Hec. 101, 105, 311. Second Semester, 1954-1955

HEC. 423. HOME FURNISHINGS I
A study of the problems involved in furnishing a home artistically, including furniture and its arrangement, and the decorative details of room planning. Two class periods and one two-hour laboratory period a week. First Semester, 1953-1954

HEC. 424. HOME ARCHITECTURE
A study of the evolution of the house; the development of its function as a place of shelter and the center of family life; types of architecture. Two class periods and one two-hour laboratory period a week. Prerequisite: Hec. 105. Second Semester, 1955-1956

HEC. 425. CHILD DEVELOPMENT I
A study of the various aspects of child development necessary for an understanding of behavior of children and the factors involved in their guidance. Two class periods and one two-hour laboratory period a week. Second Semester, 1954-1955
HEC. 426. CHILD DEVELOPMENT II
Continuation of Child Development I. Two class periods a week; laboratory periods to be determined. Prerequisite: Hec. 425. Second Semester, 1953-1954

HEC. 427. TEXTILE ECONOMICS
Problems of the textile and clothing industry as they affect the buyer; how industry is affected by present-day laws and trends. Factors affecting fashion, price and style. Three class periods a week. For Seniors.
First Semester, 1954-1955

HEC. 430. HOME FURNISHINGS II
Problem of making slip covers, draperies and refinishing furniture, as it meets the needs of the individual.
Second Semester, 1953-1954

HEC. 431. FIELD WORK
On-the-job training with local firms and organizations in specialized fields, such as interior decoration and textiles.
Each Semester, Each Year

HEC. 432. SPECIAL PROBLEMS IN CHILD DEVELOPMENT
Investigation, discussion and formulation of theory and problems of pre-school children. One conference and four hours laboratory work minimum per week. Prerequisites: Hec. 425, 426. Required of all students taking Nursery School Work.
First Semester, 1954-1955

LANGUAGES
BRO. PERZ, HEAD
FR. BARTHOLOMEW, BRO. BECK, BRO. POIKAS, MISS REYST,
MR. ROSENBERG, FR. RUS

Note: Excepting Latin 101-102, 201-202, all the courses in Latin and Greek are conducted at Mt. St. John, and are restricted to student members of the Society of Mary.

FRENCH (Fr.)

Fr. 101-102. ELEMENTARY FRENCH
Elements of French, including pronunciation, reading, translation, grammar, dictation and conversation.
Full Year Course, Each Year

Fr. 201-202. INTERMEDIATE FRENCH
Grammar review, selected readings from modern authors, exercises in composition and conversation.
Full Year Course, Each Year

Fr. 303-304. MODERN FRENCH LITERATURE
A survey covering the chief literary movements, outstanding authors and works
from the beginning of the eighteenth century to the present time. Lectures, discussions and reports on assigned readings.  

**Fr. 307-308. Advanced French Composition and Conversation**  
**Six Credit Hours**

This course is intended for students who possess a general knowledge of French, but have not as yet mastered certain peculiarities of grammar and other difficulties of the written and spoken language. The course includes translation of texts of increasing difficulty from English into French. The oral exercises are based chiefly on material connected with these translations.  

*Full Year Course, 1954-1955*

**Fr. 401-402. French Literature to the Eighteenth Century**  
**Six Credit Hours**

A survey covering the chief literary movements, outstanding authors and works of this period. Lectures, discussions and reports on assigned readings.  

*Full Year Course, 1953-1954*

**Fr. 405-406. French Literature of the Twentieth Century**  
**Six Credit Hours**

A survey of the literary movements, outstanding authors and works of the present century. Lectures, discussions and reports on assigned readings.  

*Full Year Course, 1953-1954*

---

**German (Ger.)**

**Ger. 101-102. Elementary German**  
**Six Credit Hours**

Elements of German, including pronunciation, reading, translation, grammar, dictation and conversation.  

*Full Year Course, Each Year*

**Ger. 201-202. Intermediate German**  
**Six Credit Hours**

Grammar review, selected readings from modern authors, exercises in composition and conversation.  

*Full Year Course, Each Year*

**Ger. 301-302. German Literature Till 1800**  
**Six Credit Hours**

A survey of German Literature from the earliest times to the period of Romanticism. A study of literary movements, outstanding authors and works: Lectures, discussions and reports on assigned readings.  

*Full Year Course, 1953-1954*

**Ger. 303-304. German Literature Since 1800**  
**Six Credit Hours**

A survey of German Literature since the Classical period. A study of literary movements, outstanding authors and works. Lectures, discussions and reports on assigned readings.  

*Full Year Course, 1953-1954*

**Ger. 305-306. Scientific German**  
**Six Credit Hours**

A reading course intended to familiarize students with the technical vocabulary used in scientific fields.  

*Full Year Course, Each Year*
GER. 307. CHEMICAL GERMAN  
A course intended to train students to acquire a reading knowledge of German chemical literature. Required of students in Chemical Engineering and of those majoring in Chemistry.  
First Semester, 1954-1955

GER. 401-402. CLASSICAL DRAMA  
A study of the dramatic works of Lessing, Goethe and Schiller. Lectures, discussions and reports on assigned readings.  
Full Year Course, 1954-1955

GER. 403-404. MODERN GERMAN PROSE WRITERS  
The Novelle and the novel. A study of the principal authors and works of the eighteenth and nineteenth centuries. Lectures, discussions and reports on assigned readings.  
Full Year Course, 1954-1955

GREEK (Gr.)

Gr. 101-102. ELEMENTARY GREEK  
A study of the essentials of Greek grammar with exercises and readings.  
Full Year Course, Each Year

Gr. 201. INTERMEDIATE GREEK  
Continuation of the study of grammar. Readings from New Testament.  
First Semester, Each Year

Gr. 204. HOMER  
Readings from the Iliad and the Odyssey.  
Second Semester, Each Year

LATIN (Lat.)

Lat. 101-102. ELEMENTARY LATIN  
A college course in Latin fundamentals.  
Full Year Course, Each Year

Lat. 201-202. INTERMEDIATE LATIN  
Second year course in Latin. Readings from classical authors of the pre-Christian periods.  
Full Year Course, Each Year

Lat. 301-302. LATIN COMPOSITION AND CONVERSATION  
This course aims to give an intensive review of inflections and syntax with emphasis on original style and fluency of expression.  
Full Year Course, Each Year

Lat. 305. MEDIEVAL LATIN  
An outline of the main course of Latin literature from 400 A. D. to 1500 A. D. with special attention being given to the classical heritage of the Middle Ages.  
Second Semester, Each Year
LAT. 307. **Readings in Latin Literature**
This course embraces the reading of excerpts from a wide range of Latin authors.

**LAT. 309. Cicero's Essays**
A study of *De Amicitia* and *De Senectute* or other works of Cicero.

**LAT. 310. Selected Letters of Pliny**
A study of the Latin letter as a literary form. The men and the world of the times of Pliny are revealed by his letters.

**LAT. 412. Ecclesiastical Latin**
The object of this course is to acquaint students for the priesthood with the Latin of the theologians.

**LAT. 413. The Confessions of St. Augustine**
Excerpts are taken from the first Nine Books.

**RUSSIAN (Rus.)**

**RUS. 101-102. Elementary Russian**
Designed to familiarize the beginner with the essentials of the spoken and written language. Vocabulary practice, simple sentence structure, conversational drills, and reading of modern text, with equal stress on each.

**RUS. 201-202. Intermediate Russian**
Review of the essentials of grammar, intensive conversational and comprehension exercises, reading of graded modern and contemporary prose and poetry. Prerequisite: Rus. 101-102, or equivalent.

**RUS. 203-204. Scientific Russian**
This course is given only at Wright-Patterson Air Force Base. Prerequisite: Rus. 101-102, or equivalent.

**RUS. 301-302. Russian Reading and Conversation**
Intended for students who possess a general knowledge of Russian, but lack the practical experience of the spoken language. The conversation is based principally on more advanced reading material. Prerequisite: Rus. 201-202, or equivalent.

**RUS. 401-402. Technical and Scientific Russian**
A course intended to train students to acquire a reading knowledge of Russian scientific literature. Special grammatical constructions will be explained, as well as general techniques of translation. Prerequisite: Rus. 301-302.
SPANISH (Span.)

SPAN. 101-102. ELEMENTARY SPANISH SIX CREDIT HOURS
Elements of Spanish, including pronunciation, reading, translation, grammar, dictation and conversation.  
Full Year Course, Each Year

SPAN. 201-202. INTERMEDIATE SPANISH SIX CREDIT HOURS
Grammar review, selected readings from modern authors, exercises in composition and conversation.  
Full Year Course, Each Year

SPAN. 205-206. SPANISH READING AND CONVERSATION SIX CREDIT HOURS
Intended for students who possess a general knowledge of Spanish, but lack the practical experience of the spoken language.  
To be announced—Evening

SPAN. 301-302. SPANISH LITERATURE SIX CREDIT HOURS
A survey of Spanish Literature, with special emphasis on the Golden Age and the modern period. Lectures, discussions and reports on assigned readings.  
Full Year Course, 1954-1955

SPAN. 303-304. SPANISH-AMERICAN LITERATURE SIX CREDIT HOURS
A study of the principal authors and works of the colonial, revolutionary and modern periods. Lectures, discussions and reports on assigned readings.  
Full Year Course, 1953-1954

SPAN. 401-402. MODERN SPANISH PROSE WRITERS SIX CREDIT HOURS
A study of the more important works of the outstanding novelists and essayists of the period from 1830 to the present time. Lectures, discussions and reports on assigned readings.  
Full Year Course, 1953-1954

SPAN. 403. MODERN SPANISH DRAMATISTS THREE CREDIT HOURS
A survey of the literary activities of the important dramatists from 1830 to the present time. Lectures, discussions and reports on assigned readings.  
First Semester, 1954-1955

SPAN. 404. DRAMA OF THE GOLDEN AGE SIX CREDIT HOURS
A study of the significance and principal works of the great dramatists of the sixteenth and seventeenth centuries. Lectures, discussions and reports on assigned readings.  
Second Semester, 1954-1955

MATHEMATICS (Math.)

BRO. BELLMER, HEAD
BRO. BELZ, MR. JEHN, MR. KREIDER,
MR. PECKHAM, MRS. PRATHER, MR. SCHRAUT

MATH. 12. ELEMENTARY ALGEBRA I NO COLLEGE CREDIT
This course is equivalent to the first year of high school algebra. Five periods a week. 
Each Semester, Each Year
MATH. 13. **PLANE GEOMETRY**
This course is equivalent to one year of high school plane geometry. Three class periods a week.

**MATH. 14. ELEMENTARY ALGEBRA II**
This course is equivalent to the second year of high school algebra. Five class periods a week.

**MATH. 15. SOLID GEOMETRY**
This course is equivalent to one semester of high school solid geometry. Three class periods a week.

**MATH. 101. COLLEGE ALGEBRA**
This course covers the fundamentals of second year of high school algebra and continues into topics of college algebra. Logarithms, ratio and proportion, with applications to chemistry, physics, and biology, are stressed. For Science students. Three class periods a week.

**MATH. 102. PLANE TRIGONOMETRY**
Continuation of Math. 101. The usual subjects of plane trigonometry will be covered, together with applications to physics and the use of the slide rule. Prerequisite: Math. 101, Math. 105, or the equivalent of Math. 14 and consent of the instructor. Three class periods a week.

**MATH. 103. MATHEMATICS OF FINANCE I**
This course is similar to Math. 101, but stresses applications to problems in business and finance. For Business students. Three class periods a week.

**MATH. 105. ALGEBRA**
This course reviews the fundamentals of two years of high school algebra and continues into the topics of college algebra. For Science students. Five class periods a week.

**MATH. 107. ALGEBRA**
This course is similar to Math. 105, but is for Business students. Five class periods a week.

**MATH. 115. MATHEMATICAL ANALYSIS**
Primarily for students in engineering and those majoring in one of the physical sciences or mathematics, this course covers the usual topics in plane trigonometry, together with linear and quadratic equations, inequalities, progressions, and the analytical treatment of loci. Prerequisite: Three years of high school mathematics or Math. 13 and 14. Five class periods a week.

**MATH. 116. MATHEMATICAL ANALYSIS**
Continuation of Math. 115. Polar coordinates, complex numbers, theory of
equations, conic sections, solid analytic geometry, and partial fractions. Prerequisite: Math. 115. Five class periods a week.

MATH. 121. COLLEGE ALGEBRA THREE CREDIT HOURS
Following a review of linear and quadratic equations, systems of equations and other topics of high school algebra, the topics covered are: progressions, logarithms, binomial theorem, complex numbers, determinants, partial fractions, theory of equations, and such additional topics in higher algebra as time permits. Prerequisite: Two years of high school algebra, or Math. 14. Three class periods a week.

MATH. 122. TRIGONOMETRY THREE CREDIT HOURS
The usual topics of plane trigonometry with applications; such additional pertinent topics as polar coordinates and complex numbers, if time permits. Open to students with two years of high school mathematics, although three years are advisable. Three class periods a week.

MATH. 123. ANALYTIC GEOMETRY FOUR CREDIT HOURS
The fundamental disciplines connected with plane and solid analytic geometry; the straight line, locus problems, transformation of coordinates, conic sections, the plane, line in space, quadric surfaces; applications to mechanics. Prerequisite: Math. 121 and 122 or equivalent. Four class periods a week.

MATH. 201. DIFFERENTIAL AND INTEGRAL CALCULUS FOUR CREDIT HOURS
Differentiation of algebraic and transcendental functions with application to geometry and to physics. Integration of polynomials with applications to geometry and to physics. Fundamental theorem of integral calculus. Prerequisite: Math. 116 or Math. 123. Four class periods a week.

MATH. 202. DIFFERENTIAL AND INTEGRAL CALCULUS FOUR CREDIT HOURS
Continuation of Math. 201. Integration of algebraic and transcendental functions. Approximate integration; indeterminate forms; infinite series; multiple integrals; application to geometry and physics; partial differentiation. Prerequisite: Math. 201. Four class periods a week.

MATH. 203. MATHEMATICS OF FINANCE II THREE CREDIT HOURS
Simple and compound interest, annuities, amortization and sinking funds, valuation of bonds and the mathematics of life insurance. Prerequisite: Math. 103, or Math. 107. Three class periods a week.

MATH. 301. DIFFERENTIAL EQUATIONS THREE CREDIT HOURS
Equations of the first order and first degree; linear equations of higher order with constant coefficients; the method of Frobenius; Euler’s equations and other special equations; application to physics, chemistry, and engineering. Prerequisite: Math. 202. Three class periods a week.

MATH. 302. THEORY OF EQUATIONS THREE CREDIT HOURS
Complex numbers, integral and rational roots, general solution of the cubic
and quartic equations, isolation of real roots, solution of numerical equations, determinants, system of linear equations, symmetric functions, elimination and resultants. Prerequisite: Math. 202 or registration therein. Three class periods a week.

**Math. 311. Mathematical Statistics**

Three credit hours

Frequency distributions, graphic representation, averages, moments, measures of dispersion, normal curve, curve fitting, correlation theory with the emphasis on the mathematical derivations of the formulas. Prerequisite: Math. 202 or consent of the instructor. Three class periods a week.

First Semester, 1953-1954

**Math. 312. Mathematical Statistics**

Three credit hours


Second Semester, 1953-1954

**Math. 321. Advanced Mathematics for Engineers**

Three credit hours

Hyperbolic functions, elliptic integrals, infinite series. Fourier series, gamma functions, Bessel functions, partial differential equations, application to physics, chemistry and engineering. Prerequisite: Math. 202. (Math. 301 is recommended.) Three class periods a week.

First Semester, Each Year

**Math. 322. Advanced Mathematics for Engineers**

Three credit hours

Introduction to vector analysis and to complex variables, with applications to physics and engineering. Prerequisite: Math. 202. (Math. 321 is recommended.) Three class periods a week.

Second Semester, Each Year

**Math. 331. Statistics for Engineers**

Three credit hours

Measure of central tendency, frequency distributions, dispersions, skewness and kurtosis, sampling and the determination of significant differences, correlation. Includes normal, chi-square, student's t, binomial, and Poisson distributions. Prerequisite: Math. 202.

First Semester, 1953-1954—Evening

**Math. 332. Industrial and Engineering Applications of Statistics**

Three credit hours

A study of the application of statistics to quality control, job evaluation, merit rating and wage determination, personnel selection and testing, time study, design of experiments, and economic and market analysis. Prerequisite: Math. 331.

Second Semester, 1953-1954—Evening

**Math. 401. College Geometry**

Three credit hours

Synthetic treatment of metric Euclidean geometry. Properties of the triangle, quadrangle, quadrilateral, coaxal circles, inversion, notable points, circles connected with a triangle, ruler and compasses construction. Prerequisite: Math. 115 or Math. 122. Three class periods a week.

First Semester, 1954-1955
MATH. 403. BUSINESS STATISTICS
THREE CREDIT HOURS
A survey course to familiarize the student with the methods of collecting, presenting, analyzing and interpreting statistical data. Graphic presentation, logarithmic, and semi-logarithmic charts, frequency distributions, time series, construction of index numbers, measures of dispersion, simple and multiple correlation. Prerequisite: Math. 103. Three class periods a week.

Each Semester, Each Year

MATH. 411. THEORY OF PROBABILITY
THREE CREDIT HOURS
Permutation and combination, complementary, conditional and unconditional compound probabilities, Bernoulli's theorem, Bayes' theorem, probability integral, distribution functions and continuous variables, binomial law, Poisson law, Normal law. Prerequisite: Math. 202. (Math. 311 is recommended.) Three class periods a week.

Second Semester, 1954-1955

MATH. 416. INTRODUCTION TO THE CALCULUS OF FINITE DIFFERENCES
THREE CREDIT HOURS
Divided differences, Lagrange's interpolation formula, difference operators, Herschel's theorem, interpolation, Newton's interpolation formula, interpolation by iteration, inverse interpolation, reciprocal differences, Thiel's interpolation formula, polynomials of Bernoulli and Euler, numerical differentiation and integration. Prerequisite: Math. 202 and consent of the instructor. Three class periods a week.

First Semester, 1954-1955

MATH. 421. ADVANCED CALCULUS
THREE CREDIT HOURS
Limits and continuity, derivatives and differentials, functions of several variables, partial differentiation, Riemann integral, multiple integrals, line integrals, and surface integrals. Prerequisite: Math. 202. Three class periods a week.

First Semester, 1954-1955

MATH. 422. ADVANCED CALCULUS
THREE CREDIT HOURS
Continuation of Math. 421. Infinite series, power series with applications, improper integrals, and implicit functions. Prerequisite: Math. 421. Three class periods a week.

Second Semester, 1954-1955

MATH. 431. VECTOR ANALYSIS
THREE CREDIT HOURS
Vector algebra and calculus gradient, divergence and curl. Application to physics. Prerequisite: Math. 202. Three class periods a week.

First Semester, 1954-1955

MATH. 432. FOURIER SERIES AND BOUNDARY VALUE PROBLEMS
THREE CREDIT HOURS
Fundamental definitions, partial differential equations of physics, orthogonal sets of functions, fundamental properties of Fourier series, uniqueness of expansions, Bessel functions, and Fourier-Bessel expansions. Prerequisite: Math. 321 or Math. 202 and the consent of the instructor. Three class periods a week.

Second Semester, 1954-1955
MATH. 441. INTRODUCTION TO HIGHER ALGEBRA  THREE CREDIT HOURS
The real number concept, sets, polynomial forms, matrices and linear transformations, introduction to the basic concepts of groups, rings, and fields. Prerequisite: Math. 202 and the consent of the instructor. Three class periods a week. Second Semester, 1953-1954

MATH. 451. INTRODUCTION TO HIGHER GEOMETRY  THREE CREDIT HOURS
Projections and rigid motions, theorem of Desargues, the principles of duality, homogeneous coordinates, linear dependence, harmonic division, cross ratio, projective transformations, discussion of projective, affine and metric geometries, projective theory of conics. Prerequisite: Math. 202 and consent of the instructor. Three class periods a week. First Semester, 1953-1954

MATH. 461. INTRODUCTION TO THE THEORY OF FUNCTIONS OF A COMPLEX VARIABLE  THREE CREDIT HOURS
Fundamental concepts, Cauchy integral theorem, analytic functions, analytic continuation, conformal transformations, the calculus of residues, applications to physics and engineering. Prerequisite: Math. 421 or registration therein. Three class periods a week. Second Semester, 1954-1955

MATH. 465. MODERN OPERATIONAL MATHEMATICS  THREE CREDIT HOURS
The Laplace transformation and applications, partial differential equations, the inversion integral, applications to heat conduction, mechanical vibrations, and other problems. Prerequisite: Math. 202 and consent of the instructor. Three class periods a week. First Semester, 1953-1954—Evening

MEDICAL TECHNOLOGY (Met.)

DR. ABRAMSON, HEAD (St. Elizabeth Hospital)
DR. CAES, HEAD (Good Samaritan Hospital)
DR. OOSTING, HEAD (Miami Valley Hospital)
DR. THOMPSON, HEAD (Veterans Administration Hospital)

The work of the senior year in Medical Technology is done at Miami Valley Hospital, St. Elizabeth Hospital, Good Samaritan Hospital, or Veterans Administration Hospital. The courses are conducted by the respective hospital faculties.

MET. 450. INTRODUCTION TO MEDICAL TECHNOLOGY  SIX CREDIT HOURS
A concentrated introduction to medical technology prepares the student for participation in the regular laboratory activities. This consists of two daily lectures on specific subjects pertaining to the laboratory diagnosis of disease stressing the anatomy and physiology of the organ involved followed by practical study of the tests involved.

MET. 451. URINALYSIS AND RENAL FUNCTION  THREE CREDIT HOURS
Instruction in various methods of performing these tests with interpretation
based on anatomical and physiological functions of the organs. Repeated studies stress need for accuracy.

**MET. 452. HEMATOLOGY**

Four Credit Hours

Instruction in various methods for studying the cellular components of the blood with practice to facilitate speed. Interpretation of findings based on anatomical and physiological functions of the cellular components of the blood.

**MET. 453. BACTERIOLOGY, SPUTUM, PARASITOLOGY, FECES, AND SPECIAL FLUIDS**

Four Credit Hours

Instruction in various methods of bacteriological examination of various excreta or secretions of the human body; tests for reactions of the body to specific diseases; tests for and study of various parasites found as pathogenic organisms in the human body.

**MET. 454. CHEMISTRY AND GASTRIC ANALYSIS**

Six Credit Hours

Instruction in biological chemical analyses pertaining to blood and to various excreta of the human body.

**MET. 455. HISTOLOGY AND CYTOLOGY**

Three Credit Hours

Instruction in various methods of preparation for sectioning and staining of tissues in preparation for microscopic examination.

**MET. 456. SEROLOGY AND SPINAL FLUIDS**

Four Credit Hours

Instruction in the mechanism of and the performance of these tests, and some interpretation of the results.

**MET. 457. ELECTROCARDIOGRAPHY; BASAL METABOLISM**

Three Credit Hours

The student familiarizes herself with the more commonly used machines, and masters the techniques of doing basal metabolisms and electrocardiograms.

**MILITARY SCIENCE AND TACTICS (Mil.)**

LT. COL. KINNEY, HEAD

MAJOR HARRIGAN, MAJOR JONES, CAPTAIN LLANA, WOSG LONG,

LT. WEBBER, LT. WHITNEY, M/SGT. GABRIEL, M/SGT. MAUShaRDt,

M/SGT. ROEBUCK, SFC. DAVISON, SFC. EVANS, SFC. LOTT

**MIL. 101-102. FIRST YEAR BASIC COURSE**

Three Credit Hours

To lay the foundation of intelligent leadership through instruction in such cultural subjects as military policy of the United States, military problems of the U. S., and evolution of warfare; to provide training in those military subjects common to all branches of the army such as individual weapons and marksmanship, maps and aerial photographs, first aid and hygiene, and leadership, drill, and exercise of command. Theoretical and practical. Prerequisite to the specialized Advanced Course. **Full Year Course, Each Year**
MIL. 201-202. SECOND YEAR BASIC COURSE
Continuation of the above course, with some specialized branch training and minor tactics. Subjects include: military organization, marksmanship and weapons, tactics and techniques of the rifle squad, and leadership, drill, and exercise of command. Students occupy key non-commissioned positions in the cadet regiment. Prerequisite to the specialized Advanced Course. Outstanding graduates of the Basic Course receive Certificates of Military Training.

Full Year Course, Each Year

MIL. 301-302. FIRST YEAR ADVANCED COURSE
Theoretical and practical instruction in weapons, gunnery, communications, combat intelligence, combat orders, field fortifications and tactics. Prerequisite: completion of the Basic Course. Credit is allowed, under certain limitations, for the Basic Course to World War II veterans and to Korean veterans. Students selected for admission to the Advanced Course receive commutation of subsistence and uniforms from the Government during the two-year course. Attendance at a summer camp is required.

Full Year Course, Each Year

MIL. 401-402. SECOND YEAR ADVANCED COURSE
Continuation of above course. Subjects include military administration, military law, military teaching methods, motors and transportation, supply and evacuation, troop movement, organization, command and staff, tactics, the military team and new developments. Prerequisite: satisfactory completion of First Year Advanced Course. Commissions are awarded, upon satisfactory completion of this course, in the Infantry or other branches of the service.

Full Year Course, Each Year

MUSIC (Mus.)

MR. REICHARD, HEAD
MR. DEGER, MR. ENOCH, MR. HARPER, MR. HEIMANN, MR. KATZ,
MISS KLINE, MRS. MILES, MR. REGER, MISS THOMAS, MR. ZECH

MUS. 102. MUSIC LITERATURE AND APPRECIATION
A study of the masterpieces of music, with special reference to the listener. Its aim is to develop a broader understanding and an intelligent discrimination of music.

Second Semester, Each Year

MUS. 111-112. FIRST YEAR HARMONY
Formation of Scales and Intervals; positions and progressions of triads, seventh chords and their inversions; simple modulations; voice leading. Prerequisite: Knowledge of the fundamentals of music and preparatory study of piano or other keyboard instrument.

To be announced—Evening
MUS. 115-116-117. FIRST YEAR HARMONY  
SIX CREDIT HOURS
The material of the course is essentially the same as Mus. 111-112. Designed for students who study privately with members of the staff. Not open to students with credit for Mus. 111-112. Subject to private instruction fee.

On Request

MUS. 121-122. FIRST YEAR SIGHT SINGING AND EAR TRAINING  
FOUR CREDIT HOURS
Acquiring of technique for hearing melodic, harmonic, and rhythmic elements of music as based on the styles of the 18th and 19th centuries; study of the types of triads and intervals derived from them; practice in rhythmic reading; harmonic, melodic and rhythmic dictation; seventh chords, modal scales, key feeling and modulation. Prerequisite: Knowledge of the fundamentals of music and preparatory study of the piano or other keyboard instrument.

To be announced—Evening

MUS. 141. INTRODUCTION TO MUSIC  
TWO CREDIT HOURS
Designed for the student with no previous experience with the theory of music. Reading and notation of music is developed along with key signatures and fundamental harmonic progression. Simple part-writing, easy sight singing and an introduction to the piano keyboard. Elementary ear training and dictation.

First Semester, Each Year

MUS. 151-152. FIRST YEAR THEORY  
TEN CREDIT HOURS
Designed for Music Majors and students in Music Education; the course combines the materials of Music 111-112 and Music 121-122 into an integrated program. Not open to students who have credit for Mus. 111-112 or Mus. 121-122.

Full Year Course, Each Year

MUS. 211-212. SECOND YEAR HARMONY  
SIX CREDIT HOURS
Continuation of Music 111-112. Further study of modulation; altered and mixed harmonies; melodic embellishment and figuration; analysis. Prerequisite: Mus. 111-112.

To be announced—Evening

MUS. 215-216-217. SECOND YEAR HARMONY  
SIX CREDIT HOURS
Continuation of Mus. 115-116-117. Material essentially the same as Mus. 211-212. Not open to students who have credit for Mus. 211-212. Subject to private instruction fee. Prerequisite: Mus. 115-116-117, or Mus. 111-112. On Request.

MUS. 221-222. SECOND YEAR SIGHT SINGING AND EAR TRAINING  
FOUR CREDIT HOURS
Continuation of Mus. 121-122. Addition of altered chords; practical application of non-harmonic tones in chorale-style harmonic dictation. Two and three-voice contrapuntal dictation. Further practice in sight singing. Prerequisite: Mus. 121-122.

To be announced—Evening

MUS. 231. TEACHING MUSIC IN THE PRIMARY GRADES  
TWO CREDIT HOURS
Materials to be used in primary grade school music and their presentation;
problems and possibilities of the primary school music program. Prerequisite: Knowledge of the fundamentals of music equivalent to Mus. 141.

To be announced—Evening

Mus. 232. Teaching Music in the Elementary Grades

Two Credit Hours

Materials to be used in elementary grade school music and their presentation; problems and possibilities of the elementary school music program. Prerequisite: Knowledge of the fundamentals of music equivalent to Mus. 141.

To be announced—Evening

Mus. 235-236. Voice Class

Four Credit Hours

Discussion and demonstration of the principles of good singing; development of voice; vocal literature. The course may be repeated to a total of eight credit hours with permission of the instructor. Prerequisite: permission of the instructor.

Full Year Course, Each Year

Mus. 251-252. Second Year Theory

Ten Credit Hours

Continuation of Mus. 151-152; for Music Majors and students in Music Education; the course combines the materials of Mus. 211-212 and Mus. 221-222 into an integrated program. Not open to students who have credit for Mus. 211-212 or Mus. 221-222.

Full Year Course, Each Year

Mus. 301. History of Music I

Three Credit Hours

Development of music, instruments, forms, sacred and secular, from the earliest records through the Classical period. The relationship of music to the other arts and to broad movements in society and civilization.

First Semester, Each Year

Mus. 302. History of Music II

Three Credit Hours

Music of the nineteenth century; Romanticism, impressionism; nationalism; beginnings of the modern period. Relationship of music to social and cultural trends in Europe and America during the last one hundred and fifty years.

Second Semester, Each Year

Mus. 303. Modern Music

Two Credit Hours

A survey of contemporary music; its relationship to modernism in the other arts and to present-day society; American music.

To be announced

Mus. 311-312. Eighteenth Century Counterpoint

Four Credit Hours

A study of the contrapuntal technique of the eighteenth century particularly as used in the instrumental works of Johann Sebastian Bach. Original compositions in the forms of the Invention, Chorale-Prelude, and Fugue.

Full Year Course, 1953-1954

Mus. 315-316. The Opera

Six Credit Hours

A survey of opera from Gluck, Mozart and other eighteenth century composers to later Italian opera writers; the Wagnerian music drama; modern trends in opera.

To be announced—Evening
MUS. 321. INSTRUMENTAL CONDUCTING TWO CREDIT HOURS
Methods of controlling tempo and the dynamic elements of instrumental musical groups; technique of the baton; score reading; rehearsal routine; practical experience with campus organizations. Prerequisite: Junior standing in music and permission of the instructor.  
First Semester, Each Year

MUS. 322. INSTRUMENTATION AND ORCHESTRATION THREE CREDIT HOURS
Scoring for string, reed and brass instruments, in small combinations and full orchestra and symphonic band; modern trends and techniques in orchestration. Prerequisite: Junior standing in music and permission of the instructor.  
Second Semester, Each Year

MUS. 325. INSTRUMENTAL CLASS—STRINGED INSTRUMENTS TWO CREDIT HOURS
Class instruction in stringed instruments; teaching of stringed instruments in the schools.  
First Semester, 1953-1954

MUS. 326. INSTRUMENTAL CLASS—REED AND WOODWIND INSTRUMENTS TWO CREDIT HOURS
Class instruction in reed and woodwind instruments; teaching of reeds and woodwinds in the schools.  
First Semester, 1954-1955

MUS. 327. INSTRUMENTAL CLASS—BRASS INSTRUMENTS TWO CREDIT HOURS
Class instruction in brass instruments; teaching brass instruments in the schools.  
Second Semester, 1953-1954

MUS. 331. VOCAL MUSIC IN THE HIGH SCHOOL TWO CREDIT HOURS
Materials used in the general music class and their presentation; glee club, choir, voice class, vocal ensembles. Prerequisite: Junior standing in Music Education.  
First Semester, Each Year

MUS. 332. THE SCHOOL BAND AND ORCHESTRA TWO CREDIT HOURS
A general course in the organization and teaching of instrumental music in the schools; materials; survey of equipment and facilities necessary for the instrumental music program. Prerequisite: Junior standing in Music Education.  
Second Semester, 1954-1955

MUS. 351. CHORAL CONDUCTING TWO CREDIT HOURS
Techniques needed to secure interpretative values in vocal groups; rehearsal routine; practical experience in experimental campus organizations. Prerequisite: Permission of the instructor.  
Second Semester, Each Year

MUS. 411-412. MUSICAL COMPOSITION FOUR CREDIT HOURS
Prerequisites: Mus. 251-252, Mus. 311-312 or Mus. 417-418; other prerequisites to be determined in consideration of the needs of the student; permission of the instructor.  
To be announced
MUS. 413-414. FORM AND ANALYSIS
A study of the structural designs used in musical composition; a survey of forms from the smallest to the largest; melodic figure and motive; sonata-allegro and rondo forms. Prerequisite: Mus. 251-252.

Full Year Course, 1954-1955

MUS. 415-416. MODERN HARMONIC STYLES
Analysis of contemporary harmonic and contrapuntal devices. Original composition in the styles of the composers studied. Prerequisite: Permission of the instructor.

Full Year Course, 1953-1954

MUS. 417-418. SIXTEENTH CENTURY COUNTERPOINT
A study of the medieval modes and the vocal polyphony of the motet and the Mass, up to and including five-part writing. Performance of sixteenth century polyphony and original student compositions. Prerequisite: Permission of instructor.

Full Year Course, 1954-1955

MUS. 421-422. LABORATORY IN ORCHESTRATION
Advanced work in orchestration; special problems in scoring for full orchestra, symphonic band or dance orchestra; transcription of orchestral works for band. Prerequisite: Mus. 322, permission of instructor.

On Request

MUS. 425-426. PROBLEMS IN INSTRUMENTAL MUSIC
Practical problems and experience in instrumental music in actual teaching situations approved by the Department of Music. Prerequisite: Senior standing in Music Education; permission of the Head of the Department.

Full Year Course, Each Year

MUS. 431-432. PROBLEMS IN VOCAL MUSIC
Practical problems and experience in vocal music in actual teaching situations approved by the Department of Music. Prerequisites: Senior Standing in Music Education; permission of the Head of the Department.

Full Year Course, Each Year

MUS. 441-442. HARMONIC ANALYSIS
An analytical study of the harmonic and melodic structures of music from the early classics up to and including some of the modern composers. Prerequisite: Mus. 251-252.

Full Year Course, Each Year

APPLIED MUSIC
Credit for private instructions in piano, organ, violin, voice, stringed or wind instruments is allowed at the rate of two credit hours per lesson a week.

In order to register for credit toward a major in Applied Music, students must have studied sufficient preparatory material. In Piano, this should include ability to play major and minor scales in a moderate tempo in parallel motion,
ability to play major and minor triads in arpeggio form in all keys. The student should have studied Hanon, Vol. I; Pischna; Czerny, Op. 299, or their equivalent; some of the Mozart and Haydn sonatas, Little Preludes and Fugues by Bach, Songs Without Words by Mendelssohn, the Lyric Pieces by Grieg, or the equivalent.

Piano, semester fee ................................................................. $20.00 to $64.00
Voice, semester fee ............................................................... 80.00

(Class instruction in Voice is likewise offered; see course number 235-236.)

Violin, semester fee ............................................................... 32.00 to $64.00
Reed, Woodwind Instruments, semester fee .................................. 40.00
Cornet, Trumpet, Horn, semester fee ......................................... 40.00
Trombone, Baritone, Tuba, semester fee ..................................... 32.00

ENSEMBLES

Orchestra (Dayton Junior Philharmonic Orchestra)
Band (Marching Band, Concert Band)
Chorus
Glee Clubs (Men's Glee Club, Women's Glee Club)
Ensembles (Brass Choir, String, Woodwind Ensembles)

Credit in Applied Music may be earned in Orchestra, Band, Chorus, and Glee Club by students enrolled in music courses. Credit will be allowed at the rate of one-half credit hour per semester in each organization. Maximum: Toward Music Major in A.B. degree, or as elective in other degrees, four hours in all organizations; toward B.M. or B.S. in Mus. Ed. degrees, six credit hours. Prerequisite: Permission of the director.

NURSING EDUCATION (Ned.)

SR. M. MINALIA, HEAD
MRS. BERNER, MISS ERNST, MRS. EVERETT, MISS HORRIGAN,
MISS MITCHELL, MRS. WOESTE, MRS. ZIMMERMAN

All courses in Nursing Education are restricted to registered nurses whose professional qualifications have been approved by the University of Dayton and the Department of Nursing Education.

NED. 326. ADVANCED CLINICAL MEDICAL AND SURGICAL NURSING

THREE CREDIT HOURS

Advanced study and review of the principles and techniques involved in medical and surgical nursing. Consideration is given the latest developments of medical science and most recent information regarding causes, nursing care and prevention of medical and surgical conditions; wide reading of the most recent literature in the field, study of social, economic, and medical factors involved,
research problems, discussions, and reports of various medical and surgical situations with attendance at clinics, demonstrations, special lectures and ward rounds.

NED. 327. **FIELD WORK IN ADVANCED CLINICAL MEDICAL AND SURGICAL NURSING**

Two-three credit hours

Supplementary to Ned. 326. Observation and supervised experience in the hospitals, clinics and other community agencies. Selected experience in the nursing of patients with medical and surgical conditions, special study of social and emotional factors in the conditions with emphasis on rehabilitation and health teaching.

NED. 337. **INTRODUCTION TO HEALTH TEACHING**

Three credit hours

Study of the underlying principles of health teaching. Survey of opportunities for health teaching as part of the total patient care. Development of methods and principles of teaching with application to individual and group instruction.

First Semester, 1953-1954

NED. 344. **LEGISLATION AFFECTING NURSING**

Two credit hours

A study of legislative trends in Nursing and allied health fields with emphasis on legal aspects of nursing.

Second Semester, 1953-1954

NED. 431. **ADVANCED OBSTETRIC NURSING**

Three credit hours

Evaluation of the principles and methods involved in obstetric nursing; study of recent developments in the treatment of obstetric conditions; an analysis of nursing care. Health teaching and utilization of community resources for the promotion of maternal and infant welfare are emphasized.

To be announced

NED. 432. **FIELD WORK IN ADVANCED OBSTETRIC NURSING**

Two-three credit hours

Supplementary to Ned. 431. Practical experience in the application of the principles is stressed. Students participate in clinics, class and home visitation, and have opportunity to participate in total nursing care of the maternity patient.

To be announced

NED. 451. **SURVEY OF HISTORY OF NURSING**

Three credit hours

A study of the development of nursing from its origin to date, with special emphasis on the relationship of nursing history to world history.

Second Semester, 1953-1954

NED. 454. **ADVANCED NURSING OF CHILDREN**

Four credit hours

This course includes review of principles and techniques of the basic clinical course in nursing of children; organized tours to institutions and schools for the care and education of handicapped and neglected children; observation of the well child at day nurseries; attendance at special conferences and clinics. The course covers a period of 24 weeks and includes units in child development and child psychology.

To be announced
NED. 455. **Field Work in Advanced Nursing of Children**  
**Two-Four Credit Hours**

Supplementary to NED 454. Planned experience in various phases of child care; nursing of the new-born; the ill infant; medical and surgical conditions in the young and older child. Experience in the care of children with contagious diseases, orthopedic conditions and other illnesses of childhood is obtained in the departments of St. Elizabeth Hospital and Barney Convalescent Hospital. The experience offers opportunity to apply principles of teaching and management in the Children’s Department.  
*To be announced*

NED. 456. **Advanced Operating Room Technique**  
**Three Credit Hours**

This course includes a review of the principles and methods of the basic course in surgery with analysis and discussion of advanced practice in surgical technique.  
*To be announced*

NED. 462. **Field Work in Advanced Operating Room Technique**  
**Two-Three Credit Hours**

Supplementary to NED 461. Attendance at conferences, clinics, surgical demonstrations, field trips and organized practice experience in the various surgical specialties.  
*To be announced*

NED. 463. **Leadership and Human Relations in Nursing**  
**Three Credit Hours**

Discussion and evaluation of inter-relationship of profession of nursing with allied health groups. Emphasis is placed on contemporary social influences as they are related to nursing. The role of the nurse as a citizen and member of the community is stressed.  
*First Semester, 1953-1954*

NED. 464. **Management of Hospital Nursing Unit**  
**Three Credit Hours**

Principles and methods of organization and management as applied to the departmental unit of the hospital. Consideration of the head nurse’s responsibility as team leader. Discussion of problems of organization and administration in the ward unit.  
*Summer, 1954*

**Philosophy (Phil.)**

FR. RHODES, ACTING HEAD  
MR. BAKER, FR. BLOEMER, FR. BRUDER, FR. DOMBRO, FR. ENDERS,  
MR. HARKENRIDER, FR. HOFSTETTER

PHIL. 101-102. **Logic**  
**Four Credit Hours**

Deductive logic treats of concepts and terms; of judgments and propositions; of inference, particularly in the syllogism. Inductive logic treats of the validity and method of scientific investigation.  
*Full Year Course, Each Year*

PHIL. 103. **Logic**  
**Three Credit Hours**

The nature of the course is the same as Phil. 101-102. Phil. 103 is a one-
semester course offered in night school, summer school, and in the day classes to Catholics in the first semester of their junior year. First Semester, Each Year

PHIL. 105-106. PROBLEMS IN ETHICS SIX CREDIT HOURS
This course is given at Mount St. John. Enrollment is restricted to members of the Society of Mary. Full Year Course, Each Year

PHIL. 205-206. PHILOSOPHICAL PSYCHOLOGY FOUR CREDIT HOURS
Essential difference between living and non-living beings; nature of the vital principle and vital operations in plant and animal life; essential superiority of human life; external and internal sense perception; the origin of ideas and the nature of the intellect; sensory and rational appetition; the nature, origin, and immortality of the soul. Full Year Course, Each Year

PHIL. 303. COSMOLOGY THREE CREDIT HOURS
A study of the principles of motion as found in Aristotle's philosophy of nature; matter and form; potency and act; types of causation. First Semester, Each Year

PHIL. 304. PHILOSOPHY OF MAN FOUR CREDIT HOURS
The nature and act of knowledge; external and internal senses; the appetitive aspect of man; sentient life; rational life; man's intellect and will; liberty; the human soul; the origin of life. Conducted only in the Division of Arts at Carthagena. Second Semester, Each Year

PHIL. 306. EPISTEMOLOGY THREE CREDIT HOURS
A study of the validity of intellectual and sensory knowledge in the light of Thomistic principles, with special reference to the difficulties posed by modern thought. Each Semester, Each Year

PHIL. 307. PHILOSOPHY OF NATURE FIVE CREDIT HOURS
Changeable being and its principles; the multiplicity and nature of bodies; quantity; motion; inorganic mobile being; living being; vegetative and sentient activities. Conducted only in the Division of Arts at Carthagena. First Semester, Each Year

PHIL. 324. ETHICS THREE CREDIT HOURS
A study of the human act in its nature, ends, norms, morality, properties, consequences, and modifiers; man's threefold relation: to God, self, and neighbor. Each Semester, Each Year

PHIL. 404. ONTOLOGY THREE CREDIT HOURS
A study of the existential philosophy of St. Thomas Aquinas; the application of the theory of act and potency to various phases of the problem of the one and the many; a study of causality, substance, and person. First Semester, Each Year
PHIL. 405. THEODICY THREE CREDIT HOURS
A philosophic study of the existence and nature of God; criticism of atheism and agnosticism; the relation of the universe to God; the problem of evil.
*Second Semester, Each Year*

PHIL. 406. HISTORY OF GREEK PHILOSOPHY THREE CREDIT HOURS
This course is a survey of philosophical speculation among the Greeks, with special emphasis on the philosophies of Socrates, Plato, and Aristotle.
*First Semester, Each Year*

PHIL. 407. HISTORY OF MEDIEVAL PHILOSOPHY THREE CREDIT HOURS
This course traces the development of philosophy from the second to the fourteenth century.
*Second Semester, Each Year*

PHIL. 408. HISTORY OF MODERN PHILOSOPHY THREE CREDIT HOURS
This course outlines the development of philosophy from the fourteenth to the twentieth century. It discusses the progress and the retrogressions of Philosophy.
*To be announced*

PHIL. 409. HISTORY OF CONTEMPORARY PHILOSOPHY THREE CREDIT HOURS
A rapid survey of the systems of philosophy that are prominent in Europe and America today.
*To be announced*

PHIL. 413. PHILOSOPHY OF THE STATE THREE CREDIT HOURS
A consideration in the light of Christian thought, of the nature, origin, end, and functions of the state; the nature, forms, and functions of government; law and political authority; the rights and duties of citizens; patriotism, nationalism, and internationalism; the various kinds of political freedom.
*To be announced*

PHIL. 414. PHILOSOPHY OF LAW THREE CREDIT HOURS
Aim of the course is to explain nature of law, natural law, positive law, juridical origin of law, effect of law, limitations of civil law, justice, genetic origin of law, rights, and duties.
*Second Semester, Each Year*

PHIL. 416. HISTORY OF ANCIENT PHILOSOPHY TWO CREDIT HOURS
A study of the development of philosophical thought from the beginnings of speculation among the Greeks until the time of St. Augustine. Special emphasis is placed upon the contributions of Plato and Aristotle. Readings in the works of the authors are an integral part of the course. Conducted only in the Division of Arts at Carthagena.
*First Semester, Each Year*

PHIL. 417. HISTORY OF MEDIEVAL PHILOSOPHY FOUR CREDIT HOURS
The tracing of the development of philosophy under the influence of Christianity from the time of St. Augustine to the full blossoming of Scholastic Philosophy in the thirteenth century is the aim of this course. Interest is centered upon the evolution of a truly Christian philosophy. Conducted only in the Division of Arts at Carthagena.
*Second Semester, Each Year*
PHIL. 418. **HISTORY OF MODERN PHILOSOPHY**  FOUR CREDIT HOURS
This course outlines the breakdown of philosophy at the end of the Medieval Period and studies the principal attempts to supply a philosophy during the period stretching from the thirteenth to the twentieth century. Emphasis is placed upon the contributions and errors of those systems which influence the contemporary scene. Conducted only in the Division of Arts at Carthagena.

*First Semester, Each Year*

PHIL. 419. **HISTORY OF CONTEMPORARY PHILOSOPHY**  TWO CREDIT HOURS
A rapid survey of the beginnings and present day development in Oriental Thought, and of the systems of philosophy that are prominent in Europe and America in this twentieth century. Stress is placed upon the development of Neo-Scholasticism.

*Second Semester, Each Year*

PHIL. 421. **METAPHYSICS I**  THREE CREDIT HOURS
Preface to Metaphysics; a study of the existing of sense perceptible Being in so far as it demands the existing of Subsisting Being—the existence and simplicity of God. Conducted only in the Division of Arts at Carthagena.

*First Semester, Each Year*

PHIL. 422. **METAPHYSICS II**  THREE CREDIT HOURS
An analysis of the attributes of participated Being and of Subsisting Being. Conducted only in the Division of Arts at Carthagena. *First Semester, Each Year*

PHIL. 423. **METAPHYSICS OF KNOWLEDGE**  THREE CREDIT HOURS
The metaphysics of knowing; a metaphysical analysis of the knowledge of man and of the knowledge of God. Conducted only in the Division of Arts at Carthagena.

*Second Semester, Each Year*

PHIL. 424. **PROBLEMS OF METAPHYSICS**  THREE CREDIT HOURS
Special problems of metaphysics in which the primary place is given to a metaphysical analysis of love and finality. Conducted only in the Division of Arts at Carthagena.

*Second Semester, Each Year*

PHIL. 482. **MEDICAL ETHICS**  THREE CREDIT HOURS
Problems of medical practice, professional rights and duties; religion and ethics; problems concerning birth and death; problems concerning marriage and the family, Prerequisite: Phil. 324. *Second Semester, Each Year*

**PHYSICAL AND HEALTH EDUCATION (Phe.)**

MR. SCHWARTZ, HEAD
MR. BAUJAN, MR. BLACKBURN, MR. FERRAZZA,
MR. SAVIN, MISS MONNETTE, MR. NADEAU,
MR. QUINN, MRS. REIL, MR. SPEZZAFERRO

PHE. 101-102. **PHYSICAL EDUCATION**  ONE CREDIT HOUR
The teaching of fundamental skills in various individual sports and recrea-
national activities, while aiming to promote vigorous health through large-muscle activities. Required of freshman men and women. Two class periods a week.

**PHE. 103. HEALTH**  
One-half credit hour  
The course aims to establish and promote individual health and proper health habits through a study of the fundamentals of physical well being. Required of freshman men and women. One class period a week. **First Semester, Each Year**

**PHE. 104. HEALTH**  
One-half credit hour  
Continuation of Phe. 103. For freshman women. One class period a week. **Second Semester, Each Year**

**PHE. 116. METHODS IN MINOR SPORTS (MEN)**  
Two credit hours  
This course deals with instruction in the skills and methods in some of the so-called minor sports such as soccer, speedball, volleyball, touch football, six-man football, and similar games. Three class periods a week. **First Semester, Each Year**

**PHE. 117. TEAM SPORTS (WOMEN)**  
Two credit hours  
Skills and methods needed to teach hockey, soccer, speedball, basketball and volleyball. Four class periods a week. **First Semester, Each Year**

**PHE. 118. RECREATIONAL SPORTS FOR WOMEN**  
Two credit hours  
Skills and methods needed to teach bowling, archery, golf and fencing. Three class periods a week. **Second Semester, Each Year**

**PHE. 119. THEORY AND TECHNIQUES OF OFFICIATING (MEN)**  
One-half credit hour  
A development of knowledge of rules of football, basketball, baseball, and track, and the application of the knowledge to actual game situations. Two class periods a week. **First Semester, Each Year**

**PHE. 120. THEORY AND TECHNIQUES OF OFFICIATING (MEN)**  
One-half credit hour  
Continuation of Phe. 119. Two class periods a week. **Second Semester, Each Year**

**PHE. 130. TEACHING OF FUNDAMENTAL RHYTHMS AND FOLK DANCING IN ELEMENTARY AND SECONDARY SCHOOLS**  
Two credit hours  
Includes a study and practice of simple rhythms, gymnastic dancing and clogging. Some attention will be given to social dancing and conducting of school dances. Two class periods a week. **Second Semester, Each Year**

**PHE. 131A (FOR MEN) PHE. 131B (FOR WOMEN) GAMES OF LOW ORGANIZATION**  
Two credit hours  
Actual teaching of team and non-team games and stunts for progressive game parties, social mixers, noon hour activities, and camp nights. Elementary and secondary school levels. Three class periods a week. **Second Semester, Each Year**
PHE. 132. **Hygiene and Sanitation (men) (women)** two credit hours
Personal health and prevention of disease in the family and community; relation of community health to disease control; important communicable diseases and their control. Lectures, discussions, and directed readings. Two class periods a week.

*First Semester, Each Year*

PHE. 133. **Physical Education Activities (men)**

Conditioning, tumbling, horses, bucks, low and high bar, pyramid building, wrestling, trampoline, stunts with and without equipment. Five class periods a week.

*Second Semester, Each Year*

PHE. 201-202 **Physical Education (women)**

Continuation of Phe. 101-102. Two class periods a week.

*Full Year Course, Each Year*

PHE. 203-204. **Human Anatomy**

A study of the structure of the human body; the skeleton, the muscles, circulatory system, respiratory, digestive and nervous systems. Two class periods a week.

*Full Year Course, Each Year*

PHE. 210. **Coaching Football and Basketball**

Study of theory, strategy, generalship, styles of offense and defense, methods of organizing practice and handling men. Demonstration and practice in fundamentals for all positions. Two class periods a week.

*First Semester, Each Year*

PHE. 212. **Coaching Baseball and Track**

One-half the time will be spent on the theory and practice of each sport. Form and not athletic achievement will be stressed considering the abilities to be acquired. All events and positions will be given due consideration. Two class periods a week.

*Second Semester, Each Year*

PHE. 221. **Theory of Play and Recreation**

The meaning of play; characteristics of the different age periods. Classification and organization of play activities suitable for different age levels. Two class periods a week.

*Second Semester, Each Year*

PHE. 234. **Individual Sports for Women**

Skills and methods needed to teach badminton, tennis, golf and softball. Three class periods a week.

*Second Semester, Each Year*

PHE. 235. **Camping and Playgrounds**

Study of facilities, programs, leadership, and administration of summer camps and playgrounds. Camp standards, program making and cabin counseling will be studied. Three class periods a week.

*First Semester, Each Year*

PHE. 245. **Modern Dance (women)**

Techniques involved in modern dance with emphasis on composition. The study of dance as an art. Three class periods a week. *First Semester, Each Year*
PH. 303. **HUMAN PHYSIOLOGY**
Three Credit Hours
Lectures and laboratory problems demonstrating the physiological bases for objectives and content of physical education programs. Three class periods a week. Prerequisite: Ph. 203-204.
*First Semester, Each Year*

PH. 309. **METHODS IN PHYSICAL EDUCATION**
Two Credit Hours
Application of principle of methodology to physical education; analysis and study of the techniques of measurement devices for grading and classifying students. Practice will be given in leadership in physical education activities. Two class periods a week.
*Second Semester, Each Year*

PH. 323. **PROGRAM BUILDING**
Two Credit Hours
Theory and principles of program construction applied to physical education. Critical analysis of existing programs and evaluation of activities in the light of modern trends. Practical application of principles in the construction of a program for a specific situation. Two class periods a week.
*First Semester, Each Year*

PH. 327. **PREVENTION AND CARE OF ATHLETIC INJURIES**
Two Credit Hours
Deals with the theory and practice of methods employed in proper training for sports and in caring for the common athletic and class injuries. Attention is centered on first aid work and practical application will be made insofar as possible. Two class periods a week. Prerequisite: Ph. 203-204.
*Second Semester, Each Year*

PH. 328. **RECREATIONAL ACTIVITIES (MEN)**
One Credit Hour
Teaching of the skills and methods of presenting individual activities such as tennis, badminton, handball, squash and bowling. Two class periods a week.
*Each Semester, Each Year*

PH. 329. **RECREATIONAL ACTIVITIES (MEN)**
One Credit Hour
Teaching of the skills and methods in golf and archery. Golf clubs must be furnished by the students. Two class periods a week.
*Each Semester, Each Year*

PH. 330. **INSTRUCTOR'S FIRST AID**
Two Credit Hours
A knowledge of first aid for injuries in the home, school, and community. Lectures and discussions on first aid as well as applied laboratory experiences relating to dressing, bandaging, splinting, etc. Two class periods a week. Prerequisite: Ph. 203-204.
*Second Semester, Each Year*

PH. 346. **PROBLEMS IN PHYSICAL EDUCATION FOR WOMEN**
Two Credit Hours
A study of problems in the organization of intramural sports programs for girls and women; policies, activities, types of competition; point systems, awards, and athletic associations. Two class periods a week.
*First Semester, Each Year*
PHYSICAL EDUCATION

PHE. 401. PRINCIPLES OF PHYSICAL EDUCATION  TWO CREDIT HOURS
A study of the aims, scope, and biological aspects of physical education with special treatment of its place in education. Two class periods a week.  
First Semester, Each Year

PHE. 402. ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION  TWO CREDIT HOURS
Problems of organization and administration of physical education with added emphasis on the supervision of required and elective courses, intramural athletics and interschool athletics. Two class periods a week.  
First Semester, Each Year

PHE. 403. PRINCIPLES AND ADMINISTRATION OF HEALTH EDUCATION  TWO CREDIT HOURS
Problems related to the organization and administration of the School Health education including the setting up of a school health council and the school community relationships. Selling the program of Health Education to the community. Two class periods a week.  
First Semester, Each Year

PHE. 405. TESTS AND MEASUREMENTS IN PHYSICAL EDUCATION  TWO CREDIT HOURS
Critical analysis of existing testing methods in physical education. Study of current tests from the practical and theoretical viewpoint. The use of tests in the physical education program. Application of the principles of test construction to specific problems in physical education. Two class periods a week.  
First Semester, Each Year

PHE. 407. MODERN PROBLEMS IN PUBLIC HEALTH  TWO CREDIT HOURS
The public health problems as they exist will be discussed with regard to their effect on living. Field trips will be included. Two class periods a week.  
First Semester, Each Year

PHE. 409. CORRECTIVE PHYSICAL EDUCATION  TWO CREDIT HOURS
This course deals with the corrective or remedial measures to be used in providing proper exercises and procedures in handling individuals with handicapped conditions. Two class periods a week.  
Second Semester, Each Year

PHE. 410. TEACHING OF HEALTH (FOR STUDENTS IN ELEMENTARY EDUCATION)  THREE CREDIT HOURS
A course designed to prepare teachers for a progressive type of health work in schools. Four major objectives: 1) to enrich scientific backgrounds basic to an appreciation of personal and community health; 2) to stimulate interest in better health teaching; 3) to apply scientific knowledge to the solution of school health problems; and 4) to develop standards and techniques for selecting suitable source material to be used in health teaching. Three class periods a week.  
First Semester, Each Year
PHE. 411-412. Teaching of Health (for Physical Education Majors Only)  
Four Credit Hours  
Same course content as Phe. 410, but designed specifically for students majoring in Physical and Health Education. Phe. 411: Second Semester, Each Year  
Phe. 412: First Semester, Each Year

PHYSICS (Phys.)

BRO. GRANDY, HEAD  
MR. ENGLER, MR. HIEBER, MR. ROOT

A major in physics shall consist of 18 to 24 credit hours, exclusive of Phys. 206-207-208. The student intending to specialize in this field should consult with the head of the department in arranging his course.

PHYS. 12. Elementary Physics  
No College Credit  
Primarily intended for those students who never have had a course in physics or wish to review the fundamentals of physics. Five class periods a week.  
Each Semester, Each Year

PHYS. 101. Household Physics  
Three Credit Hours  
A course of lectures, demonstrations and discussions designed for those who require an elementary knowledge of physics. The subject matter is especially adapted for students of home economics. Neither high school nor college mathematics is required. Three class periods a week.  
Second Semester, 1954-1955

PHYS. 201. General Physics  
Four Credit Hours  
This course, especially adapted to the needs of pre-medical and pre-dental students, covers the fields of mechanics and heat. Three class periods and one laboratory period a week.  
First Semester, Each Year

PHYS. 202. General Physics  
Four Credit Hours  
A continuation of Phys. 201, covering the fields of magnetism, electricity, sound and light. Three class periods and one laboratory period a week. Prerequisite: Phys. 201.  
Second Semester, Each Year

PHYS. 206. General Physics  
Four Credit Hours  
This course is intended for students preparing to major in physics or engineering. The laboratory work involves careful determination and precise measurements based on the fundamental laws of physics. Mechanics and Sound comprise the subject matter of the course. Three class periods and one laboratory period a week. Prerequisite: Math. 115-116 or registration in Math. 116.  
Each Semester, Each Year

PHYS. 207. General Physics  
Four Credit Hours  
A continuation of Physics 206, covering the fields of magnetism and electricity.
Three class periods and one laboratory period a week. Prerequisite: Phys. 206.

**PHYS. 208. GENERAL PHYSICS**

A continuation of Phys. 206-207. Subject matter, Heat and Light. Three class periods and one laboratory period a week. Prerequisite: Phys. 206.

**PHYS. 301. THERMODYNAMICS**

The general laws of thermodynamics; entropy, isothermal and adiabatic processes, the cycles; flow of fluids. Three class periods a week. Prerequisite: Math. 202; Corequisite: Phys. 208.

**PHYS. 303. MECHANICS**

This course discusses the fundamental concepts of mechanics; discusses the dynamics and statics of both the particle and the rigid body, constrained motion, oscillations and the motion of aggregates of particles. Brief consideration will be given deformable bodies and mechanics of fluids. Prerequisites: Math. 201-202, Phys. 206, 207, 208.

**PHYS. 305-306. ELECTRICAL ENGINEERING**

A series of lectures and laboratory exercises designed to familiarize the student with the elements of circuit theory, machinery, electronics and measurements. Two class periods and one laboratory period a week. Prerequisite: Phys. 207 and Math. 202.

**PHYS. 311. ATOMIC PHYSICS**

This course develops the concept of granular nature of matter, electricity and radiant energy. Development of Bohr theory and its modifications to fit experimental evidence are stressed to show the need for the more general theory of wave mechanics. Radioactivity and introductory nuclear theory are discussed briefly. Three class periods a week. Prerequisites: Math. 201-202, Phys. 206, 207, 208.

**PHYS. 321. NUCLEAR PHYSICS**

The aim of this course is to give, in concise form, a survey of the present status of investigation of nuclear phenomena from the theoretical point of view. Three class periods a week. Prerequisites: Phys. 206, 207, 208.

**PHYS. 401. VIBRATION AND SOUND**

Discusses vibrating systems, sources of sound, the transmission of sound, the reception of sound, and the application of acoustics. Three class periods a week. Prerequisites: Math. 201-202, Phys. 206, 207, 208. Second Semester, 1954-1955

**PHYS. 404. OPTICS**

This course discusses the wave theory of light, interference, diffraction, dispers-

First Semester, 1954-1955

PHYS. 405. INDUSTRIAL ELECTRONICS
The purpose of this course is to give the students of physics the proper background for later actual experience. Three class periods a week. Prerequisite: Phys. 305-306.

First Semester, Each Year

PHYS. 408. ELECTRICITY AND MAGNETISM
This course discusses the electric field, electrostatic energy, conduction, the electro-magnetic induction, magnetic properties of matter. Also briefly, Maxwell's field equations; introduction to Quantum mechanics. Prerequisites: Math. 201-202, Phys. 206, 207, 208.

First Semester, 1954-1955

PHYS. 411. THEORETICAL PHYSICS
LaPlace's equation, coordinate systems, vectors, LaGrange's equations. Hamilton's equations, heat flow, Schrodinger's equation and the hydrogen atom.

Three class periods a week. Prerequisites: Phys. 206, 207, 208, 311.

Second Semester, 1953-1954

POLITICAL SCIENCE (Pol.)

BRO. A. ROSE, HEAD
BRO. LIEBLER

Required courses for a major in Political Science are: Pol. 201, 202, 314, 412, 414 or 417, 421 or 431.

POL. 201. AMERICAN GOVERNMENT—NATIONAL
A functional study of the origin, organization, and operations of the federal government with a rapid survey of the American system of state and local governments.

Each Semester, Each Year

POL. 202. OHIO GOVERNMENT—STATE AND LOCAL
An examination of the state, county, and local government of Ohio with special reference to Montgomery County and the City of Dayton.

Each Semester, Each Year

POL. 304. EUROPEAN GOVERNMENTS
A general survey of the present status of the nations of Europe from the standpoint of government structure, operation, and policy.

Second Semester, 1954-1955

POL. 306. INTERNATIONAL LAW
An analysis of the development of international law, its theory and application to the various phases of international relations.

First Semester, 1954-1955
POL. 310. POLITICAL PARTIES THREE CREDIT HOURS
A descriptive analysis of the nature and interaction of parties, pressure groups, and the functioning of public opinion on the national and state level.
First Semester, 1953-1954

POL. 314. INTERNATIONAL RELATIONS THREE CREDIT HOURS
An exposition of the dynamic forces influencing nations in their conduct of world affairs.
Second Semester, 1953-1954

POL. 315. THE UNITED NATIONS IN ACTION THREE CREDIT HOURS
An evaluation of the actual achievements of the various organizations and specialized agencies operating under the United Nations.
Second Semester, 1954-1955

POL. 321. PROBLEMS OF THE PACIFIC THREE CREDIT HOURS
A critical examination of the development of the communist front in the Pacific areas and the attempts of the United States and other nations to meet this situation.
First Semester, 1954-1955

POL. 408. AMERICAN FOREIGN POLICY THREE CREDIT HOURS
An analytic study of policies and methods followed by the State Department in its relations with other countries. Accredited in History.
Second Semester, 1953-1954

POL. 410. PUBLIC ADMINISTRATION THREE CREDIT HOURS
A study of the nation-wide Public Administration Service, of local and national departments, and bureaus in their operations.
First Semester, 1953-1954

POL. 412. CONSTITUTIONAL LAW THREE CREDIT HOURS
An exposition of the fundamental principles underlying the Constitution, Common Law, delegated powers of government, etc., with special application to contemporary situations.
Second Semester, 1953-1954

POL. 414. PHILOSOPHY OF LAW THREE CREDIT HOURS
Aim of the course is to explain nature of law, natural law, positive law, juridical origin of law, effect of law, limitations of civil law, justice, genetic origin of law, rights, and duties.
First Semester, Each Year

POL. 415. PAN-AMERICAN RELATIONS THREE CREDIT HOURS
A development of the social, cultural, and political phases of relations among the American countries with special consideration of recent developments. Accredited in History.
Second Semester, 1954-1955

POL. 417. HISTORY OF POLITICAL THOUGHT THREE CREDIT HOURS
A general survey of the development of political philosophy amid the interplay of the opposed principles of autonomy and authority from the days of the Ancient Chinese to and including its culmination in the modern theories of anarchism, democratic liberalism and state absolutism.
Second Semester, Each Year
POL. 421. Government Seminar
Three Credit Hours
Open only to majors in Political Science. Group discussions and projects on pertinent topics. 
First Semester, 1954-1955

POL. 431. Special Problems in the Study of Government
One-Four Credit Hours
Open to selected students with the consent of the Head of the Department. Development of a research problem in government. Each Semester, Each Year

PSYCHOLOGY (Psych.)

FR. ROESCH, HEAD
MR. BOWERS. MR. GEDION, MRS. GALLICO,
MR. CAHALAN, MR. HARKENRIDER, MR. RENSEL

PSYCH. 103. Psychology of Effective Study
Three Credit Hours
This course is designed to improve study habits. Analysis of the individual's problems will be made through self-administered and self-scored tests. This will be followed by a discussion of effective principles and techniques of learning. Practice under supervision will be provided and personal conferences offered. Improved academic achievement and self-management are the aims throughout. Sections are limited to 20 students. Each Semester, 1953-1954

PSYCH. 201. Introductory Psychology
Three Credit Hours
Man as an integrated personality is the object of this introductory course in psychology. Topics treated will include human growth and development, motivation, emotion and adjustment, learning, perceiving and thinking, individual differences, and the application of psychological principles to personal, social, educational and industrial problems. The course aims to prepare students for further studies which will benefit from a knowledge of fundamental psychological concepts. This course is to be replaced by Psych. 204 by students majoring or minoring in psychology. Each Semester, 1953-1954

PSYCH. 202-203. Educational Psychology
Six Credit Hours
Psychological introduction to the science of education. Application of the methods and results of experimental psychology to the problems of training children. First semester treats of human growth and development and the second semester emphasizes psychology of learning. Full Year Course, 1953-1954

PSYCH. 204. General Psychology
Three Credit Hours
A study of the basic principles necessary for an understanding of any of the major fields of psychology. Explains these principles in detail showing how man functions as an integrated organism. There is detailed study of various functions of the organism, e.g. sensation, perception, imagery, thought, intelligence, learning, and volition. Differentiation is made between psychology and other allied sciences and the scientific methods of psychology are evaluated.
Psychology is established as an art and a science. It is recommended that this course be followed by Elementary Statistics and Experimental Psychology. Required of and restricted to students majoring or minoring in psychology, nursing, or pre-medical programs. 

**Psych. 205. Applied Psychology**  
Three Credit Hours  
Emphasizes serviceable applications of psychology to personal adjustment, leadership, employment and consumer behavior. Leadership, cooperation, and role playing in class provide actual applications. Intended primarily for those students not planning further courses in psychology.  
*Each Semester, 1953-1954*

**Psych. 302. Elementary Statistics**  
Three Credit Hours  
This course is an introduction to statistics applied to psychological, social and educational problems. No exceptional mathematical ability or training is necessary beyond high school algebra. Emphasis is placed on the understanding of applied statistics, rather than upon the memorization and derivation of formulae. Each student is allowed, within reason, to set his own pace, thus allowing for individual differences. Measures of central tendency, deviation, correlation, probability curve, and theory of errors are approached through problems and discussion. Required of all students majoring or minoring in psychology and sociology.  
*Each Semester, 1953-1954*

**Psych. 304. Adolescent Psychology**  
Three Credit Hours  
Treats the interrelated physical, mental, social, emotional, moral and aesthetic development of adolescents, alerting the student to causal factors in preparing him to accept and to guide adolescent interests, ideals, and adjustments. Child Psychology is recommended as a prerequisite, though not required.  
*First Semester, 1953-1954*

**Psych. 305. Mental Hygiene**  
Three Credit Hours  
Explains the underlying processes which motivate man in his adjustment to life. Indicates in detail the various mechanisms of behavior that are employed when problem situations arise. Shows the interrelationship of the psychosomatic components in adjustment. Study of the neuroses included. Concentrates on the prevention of psychotic disorders, rather than on their treatment. Prerequisite for Abnormal and Clinical Psychology.  
*Each Semester, 1953-1954*

**Psych. 306. Child Psychology**  
Three Credit Hours  
A longitudinal study of childhood development with some concentration on prenatal growth trends. Explains in detail the genetic sequences appearing in the life of the child, e.g., motor development, sociability, language, intelligence, and imaginative life. Shows how discipline or training should be dependent upon the developmental growth patterns that emerge in the life of the child. Treats children up to the age of puberty.  
*Each Semester, 1953-1954*

**Psych. 307. Psychology of Childhood Problems**  
Three Credit Hours  
Deals with an understanding, from a psychological point of view, of those chil-
children who are handicapped either physically, mentally, socially, or emotionally, when compared to the norms of average childhood development. Concentrates principally upon the early years in so far as adjustment at this level is preparatory to adjustment in adult life. Forms of psychotherapy as applied to children will be discussed.

First Semester, 1953-1954

PSYCH. 308. Experimental Psychology I
Laboratory course comprising individual and group experiments designed to study in detail the psychological factors of vision, hearing, smell, taste and kinesthesis. Experimental work in perception also included. Required of all majors in psychology.

Each Semester, 1953-1954

PSYCH. 309. Experimental Psychology II
Laboratory experimentation in learning, memory, association, suggestibility, emotional reactions, higher thought processes and volition. Emphasizes scientific procedure and experimental design. Required of all majors in psychology.

Second Semester, 1953-1954

PSYCH. 312. Abnormal Psychology
Explains the various types of abnormalities, concentrating principally upon the mental aberrations, whether influenced directly or indirectly by physical causes. Describes the syndrome, gives the etiology of the various disorders. Detailed treatment is given the neuroses, psychoses, mental deficiency, epilepsy, and the sociopathic personality. Various types of psychotherapies are discussed from an eclectic point of view.

Second Semester, 1953-1954

PSYCH. 315. Personality Development
An investigation into the determinants and structure of personality and an exploration of the dynamics and expressive style of personality development. The approach to be made through a critical evaluation of current theories and a discussion of both clinical and experimental findings.

First Semester, 1953-1954

PSYCH. 318. Mental Hygiene for Teachers
This course explains the contribution which the classroom teacher can make in guiding the development of the normal, integrated personalities of their pupils. Provides basis for evaluating questionable school practices, especially through a constructive view of discipline. Deals primarily with the normal child. Mental health practices for the teacher are also stressed. Required of all Education students.

Each Semester, 1953-1954

PSYCH. 402-403. Psychological Tests and Measurements I and II
Opens with discussion of historical background of testing and the ethics involved in this field. Concentration is given to the requirements of tests in general. Intensive study is made of the principal individual tests of intelligence, both verbal and performance. There is additional treatment of verbal and non-verbal group tests of intelligence. The area of infant and baby tests of
intelligence is also included. The second semester treats the clinical interpretation of intelligence tests, the study and evaluation of the projective methods. A practicum is offered in the use of a recognized test of intelligence. Class is limited to 12 students. Permission of instructor required for 403.

*Not offered, 1953-1954*

**PSYCH. 408. SOCIAL PSYCHOLOGY**
THREE CREDIT HOURS

Presents a systematic, dynamic and practical treatment of the social forces affecting behavior. Topics discussed include the methods of social psychology, social learning and motivation, attitude testing, opinion polling, propaganda, communication analysis, rumor, group psychology and social norms. Basic principles and contemporary readings will be critically discussed and evaluated.

*Second Semester, 1953-1954*

**PSYCH. 409. HISTORY OF EXPERIMENTAL PSYCHOLOGY**
THREE CREDIT HOURS

Aims at a clearer view of modern psychology by pointing out its origin in philosophy and science and by tracing its vigorous development since the founding of the first psychological laboratory. The growth of principles and techniques central to modern movements receive emphasis.

*Not offered, 1953-1954*

**PSYCH. 410. AMERICAN SCHOOLS OF PSYCHOLOGY**
THREE CREDIT HOURS

Treats of the historical rise of psychology as a science in America, from its roots in European laboratories, through the early masters of the field in the universities and clinics of the United States, to the phenomenal expansion of American psychological thought and research of today. The various schools, functionalism, dynamic, hormic, structuralism, Gestalt, psychoanalytic, and the neo-scholastic, are exposed for critical evaluation.

*Second Semester, 1953-1954*

**PSYCH. 412. INTERVIEWING AND COUNSELING PROCEDURES**
THREE CREDIT HOURS

Techniques, theories and levels of interviewing and counseling are discussed and evaluated. Practice provided by role playing and by actual counseling situations. Course is recommended for school counselors, social and personnel workers, teachers, and other professional advisers. Permission of the instructor required.

*Second Semester, 1953-1954*

**PSYCH. 413. EDUCATIONAL AND VOCATIONAL TESTING**
THREE CREDIT HOURS

Construction and selection of tests for educational and vocational guidance, aptitude, achievement, interest, mental capacities and special ability areas are investigated by individual and group techniques. Recommended for school guidance counselors and business personnel administrators.

*First Semester, 1953-1954*

**PSYCH. 414. INTERPRETATION AND USE OF GROUP TESTS**
THREE CREDIT HOURS

Designed especially for those in school or industrial testing programs. Actual
testing situations will be used and the proper interpretation and use of test results will be explained. Prerequisites: Psych. 413 and 302.

PSYCH. 420. INDUSTRIAL PSYCHOLOGY
Three credit hours
Introduction to modern psychological efforts to improve human adjustments in an industrial organization and society. Studies the selection of all classes of employees, the factors which favor optimum adjustment and efficiency under working conditions, including morale, incentive, and merit rating. Discusses also the psychology used in advertising, radio, television and other like media. Not offered, 1953-1954

PSYCH. 451. DIFFERENTIAL PSYCHOLOGY
Three credit hours
The problems, methods and results of differential psychology, including the nature and distribution of individual differences, the role of heredity and environment, the organization of psychological traits, sex differences, and differences among racial, national and other common groupings.

PSYCH. 454-455. PHYSIOLOGICAL PSYCHOLOGY I AND II
Six credit hours
Study of the physical structure and function related to and influencing human experience and behavior. It aims to acquaint the student with the role of the special senses, the nervous and the glandular systems in sensation, perception, learning and adjustment. Prerequisite: Human anatomy or physiology. Not offered, 1953-1954

PSYCH. 458. COMPARATIVE PSYCHOLOGY
Three credit hours
This course compares human sensory, nervous, glandular and muscular systems with more primitive animal forms to shed light on the relation between structure and function in human experience and behavior. Head and cerebral dominance is traced from simpler organisms to man.

PSYCH. 460. CLINICAL PSYCHOLOGY
Three credit hours
An introduction to the theory and use of clinical methods and techniques, such as the interview, case history, psychological tests, projective methods, clinical observation, and psychotherapy as used in guidance, education, hospitals, industry and other areas. The interrelationship between clinical psychology and experimental psychology will be considered. Prerequisites: Psych. 305 and 312; recommended 402 and 403.

PSYCH. 461. CLINICAL PRACTICUM
Three credit hours
Opportunities will be provided for students to receive practice in the use of various psychological and clinical techniques. Students may be rotated among several of the local social agencies and institutions, so that they might become familiar with the demands of the various areas of clinical psychology. Permission of instructor required.
PSYCH. 470. CRITIQUE OF PSYCHOANALYTIC THEORY THREE CREDIT HOURS
Will present a historical exposition and critical evaluation of the doctrines of Freud. Will emphasize the distinction between psychoanalysis as a therapeutic method and as a psychological system. Junior or senior standing required.

First Semester, 1953-1954

RADIOLOGICAL TECHNIQUE (Rad.)

DR. NICOLL, HEAD (Miami Valley Hospital)
MISS COTRELL, MR. COTTER
DR. LAND, HEAD (St. Elizabeth Hospital)
SR. LAMBERTINA, MR. LYKINS, MISS MINNICK,
MISS ORDING, SR. PHILOBERTA

The work of the senior year in Radiological Technique is done at Miami Valley Hospital or St. Elizabeth Hospital. The courses are conducted by the respective hospital faculties.

RAD. 451. RADIOLOGICAL PHYSICS THREE CREDIT HOURS
This is a practical course in X-ray physics and its application to radiography. Fundamental electric concepts, electron theory, and the X-ray tube. Basic X-ray generating circuits.

RAD. 452. THE X-RAY MACHINE THREE CREDIT HOURS
A general discussion on the X-ray apparatus; a knowledge of the controls and the indicating instruments on the X-ray panel. Technique of manipulation of the X-ray machine. Essentials of an X-ray generating apparatus.

RAD. 453. PROCESSING TECHNIQUE TWO CREDIT HOURS
Processing technique acquaints the student with development, fixing, and washing of films; procedures—care of films, screens, saucers, etc.; solutions—their composition and action, preparation and care; efficiency—controls, timing, wet viewing; dark room design—equipment, facilities, lighting, ventilation, and drying.

RAD. 454. ROUTINE STANDARD POSITIONING EIGHT CREDIT HOURS
Positioning in general, positioning in particular cases; demonstration; actual positioning with equipment and models; technical factors; systematic radiographic procedure; resultant radiographs; a detailed study of the roentgenogram.

RAD. 455. SPECIAL EXAMINATIONS USING OPAQUE MATERIALS SIX CREDIT HOURS
Examinations with contrast media; initial preparation, medium used; roentgen studies.
RAD. 456. FLUOROSCOPIC PROCEDURE  TWO CREDIT HOURS
Technical factors in fluoroscopy; general assistance to the diagnostician; precautions and protection.

RAD. 457. RADIATION THERAPY  EIGHT CREDIT HOURS
Knowledge of the X-ray for therapeutic purposes. Operation and care of the therapy equipment. Record keeping; positioning of patients under the supervision of the radiologist.

RELIGION (Rel.)

FR. LEIMKUHLER, HEAD
FR. BARTHOLOMEW, BRO. BECK, FR. BRUDER, FR. MONHEIM, FR. STANLEY

REL. 105. DOGMATIC THEOLOGY  TWO CREDIT HOURS
Theology; faith; revelation; God; Trinity; creation; Incarnation; Redeemer; Mary; Redemption; Holy Spirit; grace; the Church; sacraments; the last things.  
First Semester, Each Year

REL. 106. MORAL THEOLOGY  TWO CREDIT HOURS
End of man, human acts, conscience; law; sin; habits and virtues, theological and moral; gifts of the Holy Spirit; commandments; precepts of the Church; evangelical counsels.  
Second Semester, Each Year

REL. 203. CHRISTIAN MARRIAGE  TWO CREDIT HOURS
A detailed study of the encyclical "On Christian Marriage" by Pius XI.  
Second Semester, Each Year

REL. 205. THE EUCHARIST  TWO CREDIT HOURS
The Eucharist; in our lives; worship. The study of the Mass.  
First Semester, Each Year

REL. 321. THE ANSWER TO COMMUNISM  THREE CREDIT HOURS
A detailed study of the encyclical on "Atheistic Communism" by Pius XI with emphasis upon the historical background of Communism, its doctrinal errors, and social justice as the remedy. Accredited in Sociology. (Two credit hours for evening class)  Second Semester, 1954-1955

REL. 325. CHRISTIAN SOCIAL PRINCIPLES  THREE CREDIT HOURS
A detailed study of the encyclical "On Reconstructing the Social Order" by Pius XI with emphasis upon the historical background, papal principles, and their application to current problems in the socio-economic order. Accredited in Sociology. (Two credit hours for evening class)  First Semester, 1954-1955

REL. 330. THE CHURCH: THE MYSTICAL BODY  THREE CREDIT HOURS
A detailed study of the encyclical on "The Mystical Body" by Pius XII with emphasis upon the Church as the basis of the social order, the scope and norm
of society, the basis of authority, and the right approach to non-Catholics. (Two credit hours for evening class)

REL. 331. THE SACRED LITURGY
A detailed study of the encyclical “Mediator Dei” by Pius XII with emphasis upon a “social piety” that stems from the concept of the Mystical Body, and the doctrinal bases for liturgical observances. (Two credit hours for evening class)

REL. 409. OLD TESTAMENT PROPHETS
Special introduction to the Old Testament Prophets. Exegesis of selected passages of Isaiahs, Jeremias, Ezechiel, Daniel. Conducted only in the Division of Arts at Carthagena.

REL. 423. THE PUBLIC LIFE OF CHRIST
A detailed study of the Public Life of Christ with emphasis upon the social message of the Gospels and the role of laymen in the lay apostolate. (Two credit hours for evening class)

REL. 420. RELIGION AND SCIENCE
A study of the relations of religion and science; an inquiry into the foundations of religion and science; proof of compatibility of religion and science as demonstrated from history. Science is shown as a source of prayerful contemplation of creation. (Two credit hours for evening class)

REL. 430. MARIOLGY
A detailed study of the prerogatives of the Mother of God, the doctrine of each and their relationships with each other, as well as their applications to the Marian apostolate. (Two credit hours for evening class)

REL. 431. CHURCH AND STATE
A careful study of the nature and end of the Church and the State in the light of Christian principles; an appraisal of the application of these principles in the light of history; and the establishment of the norm of cooperation. Accredited in Political Science. (Two credit hours for evening class)

SECRETARIAL STUDIES (Sec.)

MRS. MILLER, HEAD
MRS. CIVILLE, MR. KRIEGBAUM

SEC. 101. ELEMENTARY SHORTHAND
Gregg Shorthand is the system employed. Using the functional method, the entire theory is covered during the first semester. Transcription is introduced. Five class periods a week.
SEC. 102. ELEMENTARY SHORTHAND
Gregg theory is reviewed. Reading practice continues but transcription is emphasized. Five class periods a week.  
Each Semester, Each Year

SEC. 103. ELEMENTARY TYPEWRITING
The keyboard is memorized. Drill is given in the function and care of the machine. A slow copying ability is the aim of this course. Five class periods a week. For use of typewriter, $5.00 per semester.  
Each Semester, Each Year

SEC. 104. ELEMENTARY TYPEWRITING
The aim is to develop further skill in the use of the typewriter and to provide some experience in letter arrangement and simple tabulations. Five class periods a week. For use of typewriter, $5.00 per semester.  
Each Semester, Each Year

SEC. 105. SECRETARIAL ACCOUNTING
A short course in accounting especially designed for private secretaries; covers the fundamental principles of accounting as applied to mercantile and personal service enterprises operated by sole proprietors. Two class periods and two laboratory periods a week.  
First Semester, Each Year

SEC. 106. SECRETARIAL ACCOUNTING
This course develops further the accrual basis of accounting for mercantile enterprises, with emphasis on partnership transactions, but with an introduction to corporation accounting. Practice sets of a general nature are introduced. Two class periods and two laboratory periods a week.  
Second Semester, Each Year

SEC. 107. PERSONAL TYPEWRITING
The aim is to familiarize the student with the keyboard and the various parts of the machine and to apply the typing machine to personal typing problems. Three class periods a week. For use of typewriter, $3.00 per semester.  
Each Semester, Each Year

SEC. 108. PERSONAL TYPEWRITING
The students are encouraged to bring in personal problems of their own, such as themes, outlines, postal card messages, personal letters, etc. Continued emphasis is placed on the improvement of skill so that vocational typewriting power may be developed for those students who will continue in other typing classes. Three class periods a week. For use of typewriter, $3.00 per semester.  
Each Semester, Each Year

SEC. 110. SECRETARIAL MATHEMATICS
Review and practice of the more common mathematical usages found in business offices; development of proficiency in these functions. Three class periods a week.  
First Semester, Each Year

SEC. 201. ADVANCED SHORTHAND
Principles are reviewed. Graded dictation is begun. Sustained writing periods are increased. Five class periods a week.  
Each Semester, Each Year
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEC. 202</td>
<td><strong>Advanced Shorthand</strong></td>
<td>Three</td>
<td>Rapid reading is emphasized. Practical office dictation speeds are employed. Five class periods a week.</td>
</tr>
<tr>
<td>SEC. 203</td>
<td><strong>Advanced Typewriting</strong></td>
<td>Three</td>
<td>Advanced practice in various office skills. Survey of all letter forms and tabulation. Five class periods a week. For use of typewriter, $5.00 per semester.</td>
</tr>
<tr>
<td>SEC. 204</td>
<td><strong>Advanced Typewriting</strong></td>
<td>Three</td>
<td>Designed to develop practice in business forms, more complicated tabulations, legal typing, etc., with emphasis upon office production standards; speed work. Five class periods a week. For use of typewriter, $5.00 per semester.</td>
</tr>
<tr>
<td>SEC. 205</td>
<td><strong>Secretarial Theory</strong></td>
<td>Three</td>
<td>A study of the duplicating processes, including mimeograph and hectograph. Practice in the use of the dictaphone, sound scriber, calculating machines, bookkeeping machinery. Filing practice is also studied. Three lecture and two laboratory periods a week.</td>
</tr>
<tr>
<td>SEC. 206</td>
<td><strong>Secretarial Theory</strong></td>
<td>Three</td>
<td>Advanced training in color duplicating processes, dictating machine, and filing techniques. Three lecture and two laboratory periods a week.</td>
</tr>
<tr>
<td>SEC. 301</td>
<td><strong>Methods in Social-Business Subjects</strong></td>
<td>Three</td>
<td>Objectives, instructional materials, teaching procedures, curricular organization and other teaching problems in the Social-Business program; emphasis on visual aids and projects in the field. Three class periods a week.</td>
</tr>
<tr>
<td>SEC. 302</td>
<td><strong>Teaching of Commercial Subjects</strong></td>
<td>Four</td>
<td>This course applies to the general principles of teaching high school commercial subjects. It includes a survey of commercial textbooks, curricula construction, testing programs, professional periodicals, commercial teacher organizations, commercial clubs, etc. Four class periods a week.</td>
</tr>
<tr>
<td>SEC. 303</td>
<td><strong>Dictation and Transcription</strong></td>
<td>Three</td>
<td>Rapid dictation and transcription. Phraseology of a technical nature is taken up. Three class periods a week.</td>
</tr>
<tr>
<td>SEC. 304</td>
<td><strong>Dictation and Transcription</strong></td>
<td>Three</td>
<td>Industrial and civil service testing programs are studied. Three class periods a week.</td>
</tr>
</tbody>
</table>
SEC. 403. ADVANCED DICTATION AND TRANSCRIPTION THREE CREDIT HOURS
Gregg Reporting Shortcuts are studied. Rapid dictation and transcription. Three class periods a week.  
First Semester, Each Year

SEC. 404. ADVANCED DICTATION AND TRANSCRIPTION THREE CREDIT HOURS
Gregg Shortcuts are continued. Legal dictation and transcription. Three class periods a week.  
Second Semester, Each Year

SEC. 409. OFFICE MANAGEMENT TWO CREDIT HOURS
The technical skill of a secretary must be supplemented by various other abilities. This course is concerned with the management and organization of a modern office, handling appointments, managing callers, bank procedures. Two class periods a week.  
Second Semester, Each Year

SEC. 410. OFFICE WORK THREE CREDIT HOURS
First-hand information and experience in actual office work. Each student spends not less than sixty clock hours working in some office. Prerequisite: Consent of the instructor. May be taken either semester as a whole, or one hour either semester and two hours the other.  
Each Semester, Each Year

SOCIOLOGY (Soc.)

MR. HUTH, HEAD
FR. FRIEDEL, MR. KASCHAK, MRS. NIELSEN

The following courses are required of all students who select Sociology as their major subject: Soc. 201, 202, 401, and 414.

Soc. 201. GENERAL SOCIOLOGY THREE CREDIT HOURS
The basic course in the principles of sociology; an introduction to the fundamental concepts of modern sociology. A systematic explanation of man's social nature, types of groups and institutions, social processes, and social change. A prerequisite for specialized courses in sociology.  
Each Semester, Each Year

Soc. 202. SOCIAL PROBLEMS THREE CREDIT HOURS
This course deals with the facts of social pathology, the maladjustments of society. The aim is to provide a clear understanding of the causes, extent, treatment, mitigation, and prevention of abnormal conditions affecting society. Required for advanced courses in sociology.  
Each Semester, Each Year

Soc. 203. SOCIOLOGY FOR NURSES ONE CREDIT HOUR
A short course in the principles and problems of sociology with special application to the nursing profession; nurse-patient situations; nurse-doctor problems; nurse-staff relationships; problems of the nurse concerning the patient's relatives and friends.  
First Semester, Each Year
Soc. 301. Marriage and the Family
A general survey of the social nature of the family; its organization through courtship, marriage, and parenthood; its primary role in the development of personality; the influence of social and economic changes; means of ensuring family integrity; programs for the improvement and reconstruction of family life. 
First Semester, 1953-1954

Soc. 303. Population
A study of the growth, decline, distribution and classification of population; analysis of population theories; birth, death, and morbidity rates; relation of numbers to resources; human migration; future growth of population in the United States and its consequences; world population problems. 
First Semester, 1954-1955

Soc. 304. Minority Groups
This course is concerned with the contributions of the "Old" and the "New" immigration to American life; immigration laws and policies; adjustment problems of the Negro, the Jew, and the immigrant; techniques of social control by the dominant group; types of minority counter-assertions.
Second Semester, 1953-1954

Soc. 305. Introduction to Social Work
This course is designed to introduce the preprofessional student to the field of social work. Among the fields included are: community organization, social casework, social group work, corrections, rehabilitation of the handicapped, and public welfare administration. The relationship of social work to other social developments, historical and contemporary, will be explained. 
First Semester, 1953-1954

Soc. 307. Criminology and Penology
A review of the etiology, extent, treatment, and means for the prevention of crime; history and methods of punishment; administration of criminal law; police systems; prisons and prison reform; indeterminate sentence, probation, parole, and pardon; objectives of the new penology. 
First Semester, 1953-1954

Soc. 308. Anthropology
An introductory course in cultural and physical anthropology; the social, economic, political, religious, and artistic life of primitive people in relation to contemporary civilization; a study of customs, their form, meaning, use, and function. 
Second Semester, 1954-1955

Soc. 309. Urban Sociology
A course dealing with the origin, development, nature and significance of urban communities; types of cities; structure and functions of the city; characteristics of urban populations; major problems of the city, including city planning. 
Second Semester, 1954-1955

Soc. 310. Rural Sociology
History of the rural community and its social organization. An analysis of the
family-farm system; the evolution and functioning of rural institutions; the ecology of rural problems such as housing, health, education, religion, morals, communication, and recreation; the characteristics of rural population.

Second Semester, 1953-1954

Soc. 313. Juvenile Delinquency THREE CREDIT HOURS
This is a study of the causes, extent, treatment, and prevention of juvenile delinquency. Among the topics considered are: the home, school, church, state, police, and juvenile court; child guidance clinics; bureaus of juvenile research; probation and parole; correctional institutions. Second Semester, 1954-1955

Soc. 316. Elementary Statistics THREE CREDIT HOURS
Frequency distributions, central tendency, dispersion, percentiles, probability curve and elementary theory of errors, theory of curve fitting and least squares, correlation table and coefficients of correlation. First Semester, Each Year

Soc. 317. Christian Social Principles THREE CREDIT HOURS
The purpose of this course is to examine the facts and trends of contemporary society in their moral setting, and to show their agreement or disagreement with sound principles of social welfare. It deals with the forces of destruction and of evil which beset man, and of the means of protecting and promoting his integrity in modern social life. First Semester, 1954-1955

Soc. 401. Social Research THREE CREDIT HOURS
The problems and methods of research in sociology and in social work. Methods of observation, collection, recording, classifying, evaluating, interpreting, and presenting social data statistically; planning and completing reports. A required course for majors in sociology. First Semester, 1954-1955

Soc. 404. Social Institutions THREE CREDIT HOURS
An analysis of the structure, functions, concepts, and problems of the basic social institutions, such as the family, the church, the state, the school, and economic institutions; an evaluation of their contributions. Conducted only in the Division of Arts at Carthagena. Second Semester, Each Year

Soc. 406. Social Movements THREE CREDIT HOURS
Social movements as collective enterprises to establish new social orders. Types, formation, and organization of movements. A factual study of the development of the more recent social movements. Cooperatives, organizations for youth, labor movements, rural movements, and corporate tendencies; sociology of fashion, reform, countermovements, and revolution. Second Semester, 1953-1954

Soc. 413. Reading and Research in Sociology ONE TO THREE CREDIT HOURS
With the consent of the department head, a student who is prepared by training and experience to do independent work may register for this reading and
research course. The work may be in any sociological field for which the student has an adequate background.  

Soc. 414. Seminar  
This is a required course for sociology majors.  

Soc. 418. Community Organization  
An analysis of the nature and operation of social processes in urban and rural development; the history and functions of agencies designed to guide and enrich community life; methods of using institutions and equipment in the establishment of programs for the general welfare.  

Soc. 421. Group Behavior  
This course examines representative aspects of group behavior, including gangs, crowds, mobs, publics, classes and masses; collective behavior as illustrated in motion pictures and literature; social movements as stages in institutional disorganization and reorganization.  

Soc. 431. Police Administration  
This course is given for the student of police problems, regardless of his rank or station. It describes superior practices in all branches and at all levels of police service. It analyzes the organization, structure, administrative practices, and operating procedures of police forces in the United States. This analysis is not by comparisons between departments, but by consideration of the fundamental purpose of each practice and the principles which should be followed in its achievement.  

SPEECH (Spe.)  
FR. PREISINGER, HEAD  
MR. BIERBROOK, MR. MCGRATH  

Valuable experience in all phases of the theatre can be obtained by joining the University Players.  

Spe. 100. Voice and Diction  
The speaking voice; training in voice improvement and effective utterance in daily life; the correction of the ordinary speech defects. This course is primarily for Speech Majors.  

Spe. 101. Fundamentals of Effective Speaking  
The basic principles of speech composition and delivery. Practice in preparing and presenting short, informative, entertaining and convincing talks. Methods are applicable to social and business conversation, as well as to public speaking.  

Spe. 201. Speaking Techniques  
The theory and practice of the application of the fundamentals of speech work
in the special problems that the student will face in life. Practice in reading, speaking, and critical survey work throughout. **Second Semester, 1953-1954**

**SPE. 202. INTERPRETATIVE READING**  
**THREE CREDIT HOURS**  
The reading of poetry and prose for private and professional use to enable the student to develop a deeper intellectual and emotional appreciation of literature. Practice and theory are combined throughout. **First Semester, 1954-1955**

**SPE. 203. ACTING I**  
**THREE CREDIT HOURS**  
Study and practice in the fundamentals of acting technique, involving the physical, mental and emotional processes by means of the voice, imagination and bodily movements.  
**Each Semester, Each Year**

**SPE. 204. DRAMATIC TECHNIQUE**  
**THREE CREDIT HOURS**  
A comprehensive course embracing the fundamentals of acting, stage movements, interpretation, and stagecraft. Assigned projects to meet special group interests.  
**Second Semester, 1954-1955**

**SPE. 301. SPEECH COMPOSITION**  
**THREE CREDIT HOURS**  
The special methods by which speech is made clear, interesting and forceful before various groups of audiences, and on the ordinary occasions that the student is often called on to face in life. The writing and study of written speeches is emphasized.  
**First Semester, 1955-1956**

**SPE. 302. ARGUMENTATION AND DEBATE**  
**THREE CREDIT HOURS**  
Analysis of the arguments that arise in conversation and group discussion and debate. Practice in finding evidence, brief-making, and presenting oral arguments in actual debating exercises.  
**To be announced**

**SPE. 303. ADVANCED INTERPRETATIVE READING**  
**THREE CREDIT HOURS**  
This is a continuation of the fundamental course in this subject. Individual work and reading is stressed much more than in the previous course. Prerequisite: Spe. 202.  
**Second Semester, 1954-1955**

**SPE. 304. ACTING II**  
**THREE CREDIT HOURS**  
This is a follow-up of the elementary course in acting. Much more individual training is here given. Prerequisite: Spe. 203.  
**Second Semester, 1953-1954**

**SPE. 305. STAGECRAFT AND LIGHTING**  
**THREE CREDIT HOURS**  
This is a more detailed treatment of the problems met with in the study of elementary dramatic technique. Stage mechanics, scene construction, painting, backstage organization, and the technical problems met with in lighting a play. Prerequisite: Spe. 204.  
**Second Semester, 1953-1954**

**SPE. 306. RADIO FUNDAMENTALS**  
**THREE CREDIT HOURS**  
This course treats the elementary problems involved in adapting the principles of effective speaking to the radio. Practice is given in announcing, radio drama, etc.  
**First Semester, 1954-1955**
SPE. 401. ADVANCED PUBLIC SPEAKING
This course takes for granted a modicum of skill and confidence in speech making. Then the advanced principles of personal development, audience psychology, speech composition and delivery are studied. Special types of speaking situations and their requirements are looked into. Constant practice.
Second Semester, 1955-1956

SPE. 402. PLAY DIRECTING
The fundamentals of play directing: script selection, casting, rehearsal steps, stage business, tempo, etc. Problems ordinarily met in school dramatics will be discussed.
First Semester, 1954-1955

SPE. 403. HISTORY OF THE THEATRE I
The history of the non-literary aspects of the theatre, from ancient Greece to the days of Shakespeare. This is a course in appreciation of dramatic art, as well as its history.
First Semester, 1953-1954

SPE. 404. HISTORY OF THE THEATRE II
The course of theatrical art from Shakespeare to the present day. When time allows, the history and appreciation of motion picture art is included.
Second Semester, 1953-1954

SPE. 405. RADIO DRAMATICS
This course continues the fundamentals of radio work, and emphasizes especially play production on the radio and television. Practice in dramatizing radio scripts. Prerequisite: Spe. 306.
Second Semester, 1953-1954

SPE. 406. THE TEACHING OF SPEECH IN SECONDARY SCHOOLS
This course treats the problems met with by the beginner in teaching speech work in secondary schools, the conducting of assemblies, of speech contests, and of school play production.
Second Semester, 1954-1955
College of Engineering

GENERAL STATEMENT

The Engineering curricula in each of the fields of Chemical, Civil, Electrical, Industrial, and Mechanical Engineering are drawn up for a four year period. No effort is spared to acquaint the student thoroughly with fundamental principles and to give him a clear insight into the analysis of engineering problems. While emphasis is laid on fundamental theory, continued attention is paid to the solution of practical problems for the purpose of illustrating scientific principles and pointing out their industrial applications.

The broader responsibilities of the Engineering profession demand that the professional training of an Engineer include at least an acquaintance with the humanities, in order that scientific discoveries and developments by Engineers may result in the real advancement of man. To help the young Engineer achieve his purpose in life, the University offers in addition to the prescribed Engineering subjects a wide selection of courses in the Arts and Sciences and Business Administration.

ADMISSION REQUIREMENTS

For admission to the Freshman Engineering Class, students must present fifteen entrance units in the following prescribed and elective subjects:

PRESCRIBED SUBJECTS

<table>
<thead>
<tr>
<th>Subject</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>3</td>
</tr>
<tr>
<td>Algebra</td>
<td>1½</td>
</tr>
<tr>
<td>Geometry, Plane and Solid</td>
<td>1½</td>
</tr>
<tr>
<td>Physics or Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>Social Science</td>
<td>1</td>
</tr>
</tbody>
</table>

Note—Students lacking Solid Geometry may be admitted, but will be required to earn credit in it during the first semester.

ELECTIVE SUBJECTS

<table>
<thead>
<tr>
<th>Subject</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>

Note 1—Credit will not be allowed transfer students for a course in which the lowest passing grade was received.

Note 2—Before being definitely assigned to a Mathematics course, transfer students are to take a qualifying test. Placement in Mathematics is on the basis of this test.

GRADERS AND SCHOLARSHIP

Grades are based on daily work, tests, mid-semester and semester examinations. Class periods are of fifty minutes' duration; laboratory periods, from two to three hours.
The official marks with their meanings and quality points are as follows:

A—Excellent ............................................... .4 quality points*
B—Good ....................................................... .3 quality points*
C—Fair .......................................................... 2 quality points*
D—Passing .................................................... 1 quality point*
WP—Withdrew, Passing ................................ 0 quality point
WF—Withdrew, Failing .................................. 0 quality point
F—Failed ..................................................... 0 quality point
I—Incomplete .................................................... 0 quality point

*For each credit hour allowed for the course.

The credit hours of each course denote the number of class periods and laboratory periods devoted to the course each week during one semester. The grades of A, B, C, and D entitle the student to four, three, two, and one quality points respectively, for each credit hour. The quality point average is found by dividing the total number of quality points obtained by the number of credit hours carried by the student.

D, although passing, indicates work in some respects below standard grade. In many cases it will be necessary to repeat the course in question. The decision rests with the Dean and the department in which the course was taken.

An F indicates failure in a course due to poor scholastic work, or to absence without justification. In such cases required courses must be repeated at the next opportunity.

A grade of I may be given at the discretion of the instructor to any student who, for reasons beyond his control, has not completed some portion of the work of the term, provided that the rest of the work has been of satisfactory grade. The I must be removed within four weeks from the close of the semester, or be changed to an F.

A student desiring to do summer session work should confer with the Dean.

In general, if it appears from the record that a student is not meeting the requirements of the College of Engineering, either scholastically or otherwise, he may be placed on probation or he may be requested not to return to Engineering.

Probationary status is implied when the quality point average for any semester is below 2.0.

A quality point average of less than 1.5 requires permission from the Dean for continuance in Engineering. If permission is granted, the student must repeat all courses for which the semester grade was below C.

DEGREES

The degrees—Bachelor of Chemical, Civil, Electrical, Industrial, and Mechanical Engineering—are conferred at commencement if the following requirements have been fulfilled:
1) All prescribed courses outlined in the respective curricula must have been passed with a grade D or better;
2) The cumulative quality point average must be at least 2.0;
3) The student must have attended the College of Engineering at the University of Dayton during his senior year, and have carried at least thirty credit hours;
4) The student must not be obliged to the University financially.

Degrees "With Honors" are awarded to students who have earned a cumulative point average of 3.5 for the first seven semesters.

FRESHMAN CURRICULUM FOR ENGINEERING

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rel. or Phil.</td>
<td>Religion or Philosophy</td>
</tr>
<tr>
<td>Mil.</td>
<td>101-102</td>
</tr>
<tr>
<td>Math.</td>
<td>115-116</td>
</tr>
<tr>
<td>Chem.</td>
<td>107-108</td>
</tr>
<tr>
<td>G.E.</td>
<td>101</td>
</tr>
<tr>
<td>G.E.</td>
<td>102</td>
</tr>
<tr>
<td>Eng.</td>
<td>101</td>
</tr>
<tr>
<td>Phys.</td>
<td>206</td>
</tr>
<tr>
<td>Phe.</td>
<td>101-102</td>
</tr>
<tr>
<td>Phe.</td>
<td>103</td>
</tr>
<tr>
<td>G.E.</td>
<td>105</td>
</tr>
</tbody>
</table>

CHEMICAL ENGINEERING (Ch.E.)

BRO. WOHLLEBEN, HEAD
MR. SOFIANOPULOS

THE COURSE of Chemical Engineering has for its main objective the training of men for technical and executive positions in the chemical industries.

The various phases of general and analytical chemistry are studied coordinately with mathematics, physics and mechanics; these studies constitute a basis for the topics of the last two years which are devoted more specifically to problems of chemical engineering equipment, control, and design. The flow of fluids, thermodynamics, theory of unit operations, and analytical control are studied in the third and fourth years. Cooperatively with the Departments of Civil, Mechanical, and Electrical Engineering, the subjects of heat-power, metallurgy, materials testing, and the principles of electrical engineering are pursued.
## CURRICULUM

### Freshman Year

(See Page 190)

### Sophomore Year

<table>
<thead>
<tr>
<th></th>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rel. or Phil.</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Mil. 201-202</td>
<td>1.5</td>
<td>0</td>
</tr>
<tr>
<td>Math. 201-202</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Phys. 207-208</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Chem. 205-206</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Ger. 101-102</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

### Junior Year

<table>
<thead>
<tr>
<th></th>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.E. 301a</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>G.E. 202</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>G.E. 303</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>G.E. 305</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Chem. 303-304</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Chem. 305-306</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Ch.E. 302</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>M.E. 304a</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Ger. 307</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

### Senior Year

<table>
<thead>
<tr>
<th></th>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ch.E. 401-402</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Ch.E. 403</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>E.E. 301-302</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Ch.E. 405-406</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Ch.E. 412</td>
<td>—</td>
<td>0</td>
</tr>
<tr>
<td>Ch.E. 408</td>
<td>—</td>
<td>0</td>
</tr>
<tr>
<td>Ch.E. 410</td>
<td>—</td>
<td>1</td>
</tr>
<tr>
<td>G.E. 402</td>
<td>—</td>
<td>2</td>
</tr>
<tr>
<td>Spec. 101</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

*The choice of Electives is subject to the approval of the Head of the Department and the Dean.*
COURSES OF INSTRUCTION

CH.E. 302. CHEMICAL ENGINEERING CALCULATIONS  TWO CREDIT HOURS
This course includes stoichiometry, gas and vapor behavior, thermophysics, thermochemistry and the application of these principles to industrial problems. Two class periods a week. Prerequisites: Chem. 205, 206; Phys. 206, 207, 208.
Second Semester, Each Year

CH.E. 401-402. INDUSTRIAL CHEMISTRY  SIX CREDIT HOURS
The important chemical and allied manufacturing processes are studied. Utilization of waste products and the economic phases of the chemical industry are also stressed. Three class periods a week. Prerequisite: Chem. 305.
Full Year Course, Each Year

CH.E. 403. TECHNICAL ANALYSIS  THREE CREDIT HOURS
This course provides training in the analytical methods needed for plant control and treats of examination of solid, liquid, and gaseous fuels, lubricants, ferrous and non-ferrous alloys, saponifiable oils, etc. Three laboratory periods a week. Prerequisites: Chem. 303-304, 305-306.
First Semester, Each Year

CH.E. 405-406. UNIT OPERATIONS  SIX CREDIT HOURS
This course, which deals with the unit operations of chemical processes, includes in lectures and discussions the theory and application of fluid flow, heat flow, and methods of separation of mixtures. The solution of problems forms an important part of the course. Three class periods a week. Prerequisites: Chem. 303-304, 305-306, M.E. 301a.
Full Year Course, Each Year

CH.E. 407. PLANT INSPECTION VISITS
Under faculty guidance, the students make occasional plant inspection visits so as to become acquainted with the unit processes and plant equipment in actual operations.

CH.E. 408. PLANT DESIGN  ONE CREDIT HOUR
The needed information on equipment and its correlation, initial costs, materials of construction, and maintenances, are presented as a preliminary to the solution of individually assigned problems in plant design. Periodic progress reports and discussions gradually lead to the blue-print stage. One class period a week.
Second Semester, Each Year

CH.E. 410. SEMINAR  ONE CREDIT HOUR
Students are assigned a variety of topics which are individually developed and orally presented in weekly seminar meetings. The papers are informally discussed. Students become familiar with the current trends and journal literature. One class period a week for Junior and Senior years.

CH.E. 412. ADVANCED ORGANIC LABORATORY  THREE CREDIT HOURS
In this course, a study is made of the solubilities, functional groups, and derivatives of organic compounds in view of their identification and separation. Ex-
Experimental problems include organic combustions, hydrogenations, and estimation of functional groups. This work affords opportunities for originality and literature research. Three laboratory periods a week. Prerequisites: Chem. 305-306.

CIVIL ENGINEERING (C.E.)

MR. BALDINGER, ACTING HEAD
MR. CHAMBERLAIN, BRO. THOMSON

The curriculum is designed to give a thorough education in the principles fundamental to the civil engineering profession, so that the student is prepared to pursue to advantage any field of civil engineering practice.

During the first two years, emphasis is placed on those subjects underlying all engineering—English, mathematics, chemistry, physics, drawing, surveying. The third and fourth years are devoted principally to technical subjects relative to hydraulic, sanitary, structural and highway engineering.

Engineering projects, completed or under construction, are visited under the guidance of the instructors. Close association is maintained with the Dayton Section of the American Society of Civil Engineers and the Dayton Chapter of the National Society of Professional Engineers.

CURRICULUM

Freshman Year
(See Page 190)

Sophomore Year

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rel. or Phil. Religion or Philosophy</td>
<td>2 0</td>
</tr>
<tr>
<td>Mil. 201-202 Second Basic Military</td>
<td>1 1/2 0</td>
</tr>
<tr>
<td>Math. 201-202 Calculus</td>
<td>4 0</td>
</tr>
<tr>
<td>Phys. 207-208 Physics</td>
<td>3 1</td>
</tr>
<tr>
<td>Eng. 222 American Literature</td>
<td>3 0</td>
</tr>
<tr>
<td>Spe. 101 Fund. of Effective Speaking</td>
<td>3 0</td>
</tr>
<tr>
<td>C.E. 201-202 Elementary Surveying</td>
<td>2 1</td>
</tr>
<tr>
<td>G.E. 202 Statics</td>
<td>—</td>
</tr>
</tbody>
</table>

Junior Year

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>G.E. 301 Dynamics</td>
<td>3 0</td>
</tr>
<tr>
<td>G.E. 303 Strength of Materials</td>
<td>3 0</td>
</tr>
<tr>
<td>G.E. 307 Hydraulics</td>
<td>4 0</td>
</tr>
</tbody>
</table>
### COURSES OF INSTRUCTION

**C.E. 201. ELEMENTARY SURVEYING**

Elements of plane surveying, including care and use of instruments, measuring distances and angles, differential levelling. Application to topographic and construction surveys. Two class periods and one field period a week. Prerequisite: Math 115.

*First Semester, Each Year*

**C.E. 202. ELEMENTARY SURVEYING**

Theory of stadia surveying, plane table, simple horizontal and vertical curves, and U. S. Public Land surveys. Application to maps, plans and profiles. Two class periods and one field period a week. Prerequisite: C.E. 201.

*Second Semester, Each Year*

**C.E. 301. ROUTE SURVEYING**

Field and office work necessary for the location and layout of railroads and highways; other route surveys; transition curves; earthwork. Three class periods and one field period a week. Prerequisite: C.E. 202.

*First Semester, Each Year*
C.E. 302. ADVANCED SURVEYING      THREE CREDIT HOURS
Triangulation, plane table and hydrographic surveys; astronomical observations
for latitude, longitude, time and azimuth. Two class periods and one field period
a week. Prerequisite: C.E. 202. Second Semester, Each Year

C.E. 304. ADVANCED STRENGTH OF MATERIALS      THREE CREDIT HOURS
The determination of deflection and the solution of statically indeterminate
problems by the moment area method; the stress determination in beams of
sharp curvature; the study of thick-walled cylinders, unsymmetrical bending,
combined stresses; a review of stresses on different planes at a point; a study
and comparison of the theories of failure. Three class periods a week. Prereq-
usite: G.E. 303. Second Semester, Each Year

C.E. 306. THEORY OF STRUCTURES      FIVE CREDIT HOURS
The analytical and graphical methods of stress determination in statically de-
terminate structures, together with a study of influence lines. Five class periods
a week. Prerequisite: G.E. 303. Second Semester, Each Year

C.E. 401. STRUCTURAL DESIGN      FOUR CREDIT HOURS
Structural steel design including a railroad plate girder, a highway bridge and
miscellaneous building details. Two class periods and two drawing periods a
week. Prerequisite: C.E. 306. First Semester, Each Year

C.E. 402. STRUCTURAL DESIGN      FOUR CREDIT HOURS
Reinforced concrete design including arch and rigid frame analysis and the de-
sign of typical panels of buildings. Two class periods and two drawing periods a
week. Prerequisites: C.E. 306, 407. Second Semester, Each Year

C.E. 405. HIGHWAY ENGINEERING      THREE CREDIT HOURS
The fundamentals of highway economics and design; construction and main-
tenance; alignments; plans and specifications; highway materials; traffic control.
Three class periods a week. Prerequisites: C.E. 202, G.E. 303. First Semester, Each Year

C.E. 406. INDETERMINATE STRUCTURES      THREE CREDIT HOURS
The determination of stresses and deflections of statically indeterminate frames
and trusses by the classic and modern methods, including Castigliano’s Theo-
rem, least work, moment and shear distribution. Three class periods a week. Prerequisite: C.E. 306. Second Semester, Each Year

C.E. 407. REINFORCED CONCRETE     FOUR CREDIT HOURS
The first course in the theory and design of reinforced concrete structures; the
study of earth pressure; design of retaining walls and footings. Four class pe-
riods a week. Prerequisite: G.E. 303. First Semester, Each Year

C.E. 408. SEMINAR      ONE CREDIT HOUR
Practice in the presentation and discussion of papers dealing with civil engineer-
ing subjects; occasional lectures by prominent engineers. Periodically, meetings
of the Student Chapter of the American Society of Civil Engineers are substituted for seminar sessions. The Chapter sponsors engineering inspection trips and attendance at the monthly meetings of the Dayton Section of the American Society of Civil Engineers. One class period a week for Junior and Senior years.

C.E. 411. WATER SUPPLY
The theory, development and improvement of water supplies for domestic, manufacturing, and fire service; population prediction; quality and quantity of surface and underground waters; demand and consumption; hydraulics of reservoirs, pipe lines, distribution systems and pumping machinery. Three class periods a week. Prerequisite: G.E. 307.

C.E. 412. SANITARY ENGINEERING
Sewage, sewerage and sewage disposal. Design of a small sewerage system for sanitary and storm flow. Three class periods a week. Prerequisite: G.E. 307.

C.E. 414. SOIL MECHANICS
Correlated lectures and experiments on the fundamental properties of soils and soil mechanics; elementary soil tests. One class period and one laboratory period a week. Prerequisites: G.E. 303, 307.

ELECTRICAL ENGINEERING (E.E.)
BRO. L. ROSE, HEAD
MR. DUNN, BRO. HOLIAN, MR. MORGAN, MR. SCHMIDT

THE CURRICULUM of Electrical Engineering is planned with the primary objective of providing a thorough knowledge of the fundamental laws of electricity and the application of these laws in Electrical Engineering.

Courses are arranged to give students of Electrical Engineering an understanding of the basic principles and practices in the fields of Electrical Power and Electrical Communications. Some degree of specialization in these fields is provided according to the abilities and interests of the individual students.

Proper attention is directed to an appreciation of the practical economic factors in the electrical world, and to the cultural and social qualities necessary for a successful career in the Engineering Profession.

CURRICULUM
Freshman Year
(See Page 190)

Sophomore Year

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>2nd</td>
<td>1½</td>
<td>0</td>
<td>1½</td>
<td>0</td>
</tr>
</tbody>
</table>

Rel. or Phil. Religion or Philosophy
Mil. 201-202 Second Basic Military
<table>
<thead>
<tr>
<th>Course</th>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior Year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G.E. 301 Dynamics</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>G.E. 303 Strength of Materials</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>G.E. 305 Materials Testing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E.E. 303-304 Electrical Measurements</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>E.E. 307 D. C. Machines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M.E. 301a Thermodynamics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E.E. 308 Communication Engineering I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E.E. 312 Engineering Electronics</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Math. 301 Differential Equations</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>E.E. Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E.E. 401-402 A. C. Machinery</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>E.E. 405-406 Electrical Design</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>E.E. 413 Communication Engineering II</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>M.E. 304a Heat Power</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>G.E. 402 Contracts and Specifications..</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. E. 410 Seminar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. E. Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

**E.E. ELECTIVES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Lect.</th>
<th>Lab.</th>
</tr>
</thead>
<tbody>
<tr>
<td>E.E. 407 Illuminating Engineering</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>E.E. 408 Electrical Transients</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>E.E. 409 Industrial Electronics</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>E.E. 412 Power Transmissions, Distribution</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>E.E. 415 Ultra-High Frequencies I</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>E.E. 416 Ultra-High Frequencies II</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>E.E. 417 Thesis</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### COURSES OF INSTRUCTION

#### E.E. 201. ELEMENTS OF ELECTRICAL ENGINEERING

A general survey course presenting the basic theories of magnetic and electric circuits and their application to engineering. Three class periods and one laboratory period a week. Corequisite: Phys. 207.  
*First Semester, Each Year*

#### E.E. 301-302. ELECTRICAL ENGINEERING

For Chemical, Civil, and Mechanical Engineering students. A series of lectures and laboratory exercises designed to familiarize the student with the elements of circuit theory, machinery, electronics, and measurements. Two class periods and one laboratory period a week. Prerequisites: Phys. 207, Math. 202.  
*Full Year Course, Each Year*

#### E.E. 303-304. ELECTRICAL MEASUREMENTS

A lecture and laboratory course in the measurement of electrical quantities: resistance, inductance, capacitance, electromotive force, current and power. Study of galvanometers, bridges, and potentiometers. Calibration of instruments. Two class periods and one laboratory period a week. Prerequisite: E.E. 201; Corequisite: E.E. 305.  
*Full Year Course, Each Year*

#### E.E. 305. ALTERNATING CURRENT CIRCUITS

Vector and complex quantities applied to alternating currents. Single phase circuit analysis; non-sinusoidal waves; balanced and unbalanced polyphase systems. Three class periods and one problem period a week. Prerequisite: E.E. 201; Corequisite: Math. 202.  
*Each Semester, Each Year*

#### E.E. 307. DIRECT CURRENT MACHINES

Theory, construction and characteristics of generators; commutation, armature reaction, parallel operation, speed control, machine testing and efficiency, special machines and automatic controllers. Three class periods and one laboratory period a week. Prerequisite: E.E. 201.  
*First Semester, Each Year*

#### E.E. 308. COMMUNICATION ENGINEERING I

Coupled circuits; network theorems; resonance; infinite line; reflection; filters. Three class periods and one laboratory period a week. Prerequisite: E.E. 312.  
*Second Semester, Each Year*

#### E.E. 312. ENGINEERING ELECTRONICS

Theory, construction and characteristics of vacuum tubes, thyratrons, photo-
tubes, and the technical application of these electronic devices and circuits. Three class periods and one laboratory period a week. Prerequisite: E.E. 305.

Second Semester, Each Year

E.E. 401-402. Alternating Current Machinery  Eight Credit Hours
A study of the basic principles of operation and performance of transformers, synchronous machines, polyphase and single phase motors, and the rotary converter. Three class periods and one laboratory period a week. Prerequisite: E.E. 305.

Full Year Course, Each Year

E.E. 405-406. Electrical Design  Six Credit Hours
In this course, the student is required to complete an original design of each of the following types of machinery: a lifting electro-magnet; a direct current generator; an alternator or synchronous motor; an induction motor; a transformer. Two class periods and one design period a week. Corequisites: E.E. 401, 402.

Full Year Course, Each Year

E.E. 407. Electrical Illumination  Three Credit Hours
The nature of light and the mechanics of vision; illumination, brightness and distribution of light; proper utilization of lamps and luminaries for comfortable and efficient seeing; industrial and commercial lighting designs. Three class periods a week.

First Semester, Each Year

E.E. 408. Electrical Transients  Three Credit Hours
Transient response of simple circuits and networks to D. C. and A. C. voltages; oscillations and damping; transients in coupled and resonant circuits; transients in circuits with variable parameters. Three class periods a week. Prerequisite: E.E. 305.

Second Semester, Each Year

E.E. 409. Industrial Electronics  Three Credit Hours
Purpose and function of electronic controls; arc welding; resistance welding; service instruments; rectifiers; recorders. Three class periods a week. Prerequisite: E.E. 312.

First Semester, Each Year

E.E. 409a. Industrial Electronics  Three Credit Hours
Intended to give Chemical and Mechanical engineers, as well as students of physics, the proper background for later actual experience. Three class periods a week. Prerequisite: E.E. 302.

First Semester, Each Year

E.E. 410. Seminar  One Credit Hour
Weekly meetings of students and members of the staff for presentation of papers by the students and lectures by engineers in active practice. One class period a week for Junior and Senior years.

E.E. 411. Inspection Visits
Visits are made to various power and industrial plants in and about Dayton, Ohio. Occasionally, a more extended trip is made to other large industrial centers. Formal reports of such trips are required.
E.E. 412. POWER TRANSMISSION
Mechanical features of conductors and supports. Electrical characteristics of lines; system stability; distribution system. Three class periods a week. Prerequisite: E.E. 305.

E.E. 413. COMMUNICATION ENGINEERING II
Impedance transformation; equalizers; communication systems. Three class periods and one laboratory period a week. Prerequisite: E.E. 308.

E.E. 415-416. ULTRA-HIGH FREQUENCY THEORY AND PRACTICE
Electromagnetic waves; Maxwell’s equations; transmission lines, wave guides, cavity resonators; radiation and reflection. Practical microwave generators and systems. Three class periods a week, first semester; two class periods and one laboratory period a week, second semester. Prerequisite: E.E. 308.

E.E. 417. THESIS
Independent project in a field selected by the student and approved by the faculty. Open to Seniors in the second semester as an elective or alternate for E.E. 406.

E.E. 418. CONTROL OF POWER MACHINERY
A study in the application of power machinery to industry and methods of control in each case. Emphasis is placed on automatic starters, speed control, and electronic applications. Three class periods a week. Corequisite: E.E. 401.

E.E. 419. SERVOMECHANISMS
A study of the analysis of closed-loop control systems. This includes an investigation into the operating principles of the various types of controllers and follow-up links, transient and steady state stability and the Nyquist stability criterion. Operational calculus is developed and used throughout. Three class periods a week. Prerequisite: Math. 301, E.E. 302, or equivalent.

E.E. 420. SYMMETRICAL COMPONENTS
A course dealing with the theory and applications of Symmetrical Components to unbalanced polyphase circuits. Two class periods and one problem period a week. Prerequisite: E.E. 401; Corequisite: E.E. 412. Second Semester, Each Year

INDUSTRIAL ENGINEERING (I.E.)

The main objective of the Industrial Engineering curriculum is the education of students to fill executive and administrative positions in technical fields, manufacturing industries and public utilities. Courses are arranged to provide an understanding of the human, technical and financial factors involved in the
solution of management problems in an industrial society. Major emphasis is placed upon a thorough understanding of basic scientific principles, applied engineering, economics and accounting and the application of scientific methods to the solution of management problems.

With the proper choice of options and elective subjects, students who graduate from the industrial engineering curriculum should be prepared to serve in many areas of industrial and technical activity including: planning, organizing and controlling production; sales or purchasing; management of manpower; administration of manufacturing plants; financial control; technical supervision or engineering administration.

The basic scientific, engineering and management courses will be the same for all industrial engineering students. However, through the use of options the student is permitted to select an area of technical specialization from the fields of civil, electrical or mechanical engineering and a management option to prepare him for general administration or marketing. Students must select the technical field at the beginning of their sophomore year. The student may reserve until the beginning of the senior year the selection of the management option. By providing for both technical and management specialization, the program presents a wide variety of educational situations to prepare students for many different positions in industrial and technical organizations.

CURRICULUM

PROGRAM I

Specialization in the Field of Civil Engineering

Freshman Year
(See Page 190)

Sophomore Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Lect.</th>
<th>Lab.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rel. or Phil.</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Mil. 201-202</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Phys. 207-208</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Math. 201-202</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Spe. 101</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Eco. 201-202</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>G.E. 202</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>C.E. 201-202</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lect.</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Lab.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Lect.</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Lab.</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Lect.</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Lab.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Lect.</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Lab.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Lect.</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Lab.</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
### Junior Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acct. 203</td>
<td>Survey of Accounting</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Acct. 310</td>
<td>Cost Accounting Analysis</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Eng. 222</td>
<td>American Literature</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>G.E. 305</td>
<td>Materials Testing</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>G.E. 303</td>
<td>Strength of Materials</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>G.E. 301</td>
<td>Dynamics</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Psych. 201</td>
<td>Introductory Psychology</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 316</td>
<td>Industrial Management</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>G.E. 307</td>
<td>Hydraulics</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>C.E. 306</td>
<td>Theory of Structures</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

### Marketing Option

#### Senior Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus. 317</td>
<td>Labor Management</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Math. 331</td>
<td>Statistics for Engineers</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Math. 332</td>
<td>Industrial and Engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Application of Statistics</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>C.E. 407</td>
<td>Reinforced Concrete</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>C.E. 414</td>
<td>Soil Mechanics</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>G.E. 402</td>
<td>Contracts and Specifications</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>I.E.</td>
<td>Seminar</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Bus. 305</td>
<td>Principles of Marketing</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Bus. 301</td>
<td>Corporation Finance</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 310</td>
<td>Salesmanship</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Bus. 311</td>
<td>Sales Management</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 414</td>
<td>Industrial Purchasing</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bus. 306</td>
<td>Advanced Marketing</td>
<td>-</td>
<td>3</td>
</tr>
</tbody>
</table>

### Administrative Option

#### Senior Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus. 317</td>
<td>Labor Management</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Math. 331</td>
<td>Statistics for Engineers</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Math. 332</td>
<td>Industrial and Engineering</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### PROGRAM II

**Specialization in the Field of Mechanical Engineering**

**Freshman Year**

(See Page 190)

**Sophomore Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Lect.</th>
<th>Lab.</th>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rel. or Phil.</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Mil. 201-202</td>
<td>1½</td>
<td>0</td>
<td>1½</td>
<td>0</td>
</tr>
<tr>
<td>Math. 201-202</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Phys. 207-208</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Spe. 101</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Eng. 222</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>G.E. 202</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Eco. 201-202</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>M.E. 205a</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

**Junior Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Lect.</th>
<th>Lab.</th>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>G.E. 301</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>G.E. 303</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>G.E. 305</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Acct. 203</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>M.E. 301a</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Math. 331</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Psych. 201</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Bus. 316</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Acct. 310</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>M.E. 309</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>M.E. 306</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>
### MARKETING OPTION

#### Senior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus. 317</td>
<td>Labor Management</td>
<td>3</td>
</tr>
<tr>
<td>M.E. 303</td>
<td>Metallurgy</td>
<td>2</td>
</tr>
<tr>
<td>M.E. 304a</td>
<td>Heat Power</td>
<td>3</td>
</tr>
<tr>
<td>G.E. 402</td>
<td>Contracts and Specifications</td>
<td>—</td>
</tr>
<tr>
<td>Math. 332</td>
<td>Industrial and Engineering</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Applications of Statistics</td>
<td>—</td>
</tr>
<tr>
<td>M.E. 308</td>
<td>Fluid Mechanics</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td>I.E.</td>
<td>Seminar</td>
<td>1</td>
</tr>
<tr>
<td>Bus. 301</td>
<td>Corporation Finance</td>
<td>—</td>
</tr>
<tr>
<td>Bus. 305</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 310</td>
<td>Salesmanship</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 311</td>
<td>Sales Management</td>
<td>—</td>
</tr>
<tr>
<td>Bus. 414</td>
<td>Industrial Purchasing</td>
<td></td>
</tr>
<tr>
<td>Bus. 306</td>
<td>Advanced Marketing</td>
<td>—</td>
</tr>
</tbody>
</table>

#### ADMINISTRATIVE OPTION

#### Senior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus. 317</td>
<td>Labor Management</td>
<td>3</td>
</tr>
<tr>
<td>M.E. 303</td>
<td>Metallurgy</td>
<td>2</td>
</tr>
<tr>
<td>M.E. 304a</td>
<td>Heat Power</td>
<td>3</td>
</tr>
<tr>
<td>G.E. 402</td>
<td>Contracts and Specifications</td>
<td>—</td>
</tr>
<tr>
<td>Math. 332</td>
<td>Industrial and Engineering</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Applications of Statistics</td>
<td>—</td>
</tr>
<tr>
<td>M.E. 308</td>
<td>Fluid Mechanics</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td>I.E.</td>
<td>Seminar</td>
<td>1</td>
</tr>
<tr>
<td>Bus. 301</td>
<td>Corporation Finance</td>
<td>3</td>
</tr>
<tr>
<td>Bus. 421</td>
<td>Theory of Organization</td>
<td>—</td>
</tr>
<tr>
<td>Bus. 305</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Bus.</td>
<td>Administrative Elective</td>
<td>—</td>
</tr>
<tr>
<td>G.E.</td>
<td>Technical and Managerial Reports</td>
<td>—</td>
</tr>
</tbody>
</table>

### COURSES OF INSTRUCTION

The industrial engineering programs are made up of courses listed under various departments, as indicated in the curriculum outlined above. For description of these courses, consult the respective departments.
MECHANICAL ENGINEERING (M.E.)

BRO. PARR, HEAD

MR. ALBERTS, MR. SAVITSKI, BRO. WEBER, MR. WESTBROCK

The curriculum of mechanical engineering is designed to give the student knowledge of the fundamental principles of science and the application of these principles to pertinent problems.

Basic studies in mathematics and the sciences are pursued in the first two years and departmental subjects are taken up in the last two years. The course of studies comprises lectures, recitations and discussions, laboratory practice, and inspection visits.

Every attempt is made to impress the student with the responsibilities that rest upon the Mechanical Engineer in the active field, whether engaged as designer, builder, operator, organizer, manager or executive.

CURRICULUM

Freshman Year
(See Page 190)

Sophomore Year

<table>
<thead>
<tr>
<th>Course</th>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rel. or Phil.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Mil. 201-202 Second Basic Military</td>
<td>1½</td>
<td></td>
</tr>
<tr>
<td>Math. 201-202 Calculus</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Phys. 207-208 Physics</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>C.E. 201 Surveying</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Eng. 222 American Literature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spe. 101 Fundamentals of Effec. Speak.</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>G.E. 202 Statics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M.E. 205-206 Production Methods and Shop Practices</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Junior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>G.E. 301 Dynamics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>G.E. 303 Strength of Materials</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>G.E. 305 Materials Testing</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>E.E. 301-302 Electrical Engineering</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>M.E. 301-302 Thermodynamics</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>M.E. 304 Heat Power</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M.E. 305 M. E. Laboratory</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>M.E. 308 Fluid Mechanics</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
M.E. 309-310 Mechanics of Machinery .......... 1 1 2 0
M.E. 303 Metallurgy .................................... 2 1 — —
C.E. 304 Adv. Strength of Materials .... — — 3 0

**Senior Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>G.E. 402 Contracts and Specifications.</td>
<td>— —</td>
<td>2 0</td>
</tr>
<tr>
<td>M.E. 401-402 Internal Combustion Engines</td>
<td>3 0</td>
<td>3 0</td>
</tr>
<tr>
<td>M.E. 403 Heating, Air Conditioning ...</td>
<td>3 2</td>
<td>— —</td>
</tr>
<tr>
<td>M.E. 404 Refrigeration .......</td>
<td>— —</td>
<td>3 0</td>
</tr>
<tr>
<td>M.E. 406 M. E. Laboratory .............</td>
<td>— —</td>
<td>0 2</td>
</tr>
<tr>
<td>M.E. 407-408 Machine Design ..........</td>
<td>2 1</td>
<td>2 1</td>
</tr>
<tr>
<td>M.E. 409 Heat Transmission ...........</td>
<td>3 0</td>
<td>— —</td>
</tr>
<tr>
<td>M.E. 414 Seminar ......................</td>
<td>— —</td>
<td>1 0</td>
</tr>
<tr>
<td>Electives ....................................</td>
<td>6 0</td>
<td>6 0</td>
</tr>
</tbody>
</table>

**M.E. ELECTIVES**

<table>
<thead>
<tr>
<th>Course</th>
<th>1st Semester</th>
<th>2nd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.E. 303 Metallurgy (elective for non-Mechanicals)</td>
<td>— —</td>
<td>2 1</td>
</tr>
<tr>
<td>M.E. 416 Mechanical Vibrations ......</td>
<td>— —</td>
<td>2 1</td>
</tr>
<tr>
<td>M.E. 411 Pumps and Compressors ......</td>
<td>3 0</td>
<td>— —</td>
</tr>
<tr>
<td>M.E. 413 Non-Ferrous Metallurgy ......</td>
<td>3 0</td>
<td>— —</td>
</tr>
</tbody>
</table>

**COURSES OF INSTRUCTION**

M.E. 205-206. **Production Methods and Shop Practices**

**SIX CREDIT HOURS**

Lectures on production control, inspection, cost estimates, gear and cam production methods, interchangeable and progressive manufacturing methods, automatic machines and their economical employment; design, production, maintenance, and use of jigs, fixtures, tools and gauges; mass production and assembly systems; current practice in tolerance, finish, and class of fit. Exercises in the use of hand and machine tools and measuring instruments. Also, exercises requiring the use of standard tool-room equipment, and practice based on foregoing principles. Two class periods and one laboratory period a week. Prerequisites: Math. 115, Phys. 206, G.E. 101.

*Full Year Course, Each Year*

M.E. 205a. **Machine Shop Practice**

**THREE CREDIT HOURS**

Lectures on use of tools and gauges; current practice in tolerance, finish and class of fit. Exercises in the use of hand and machine tools and measuring instruments. Also, exercises requiring the use of standard tool-room equipment, and practice based on foregoing principles. For non-Mechanical Engineering stu-
dents. Two class periods and one laboratory period a week. Prerequisites: Math. 115, Phys. 206, G.E. 101.

**M.E. 301-302. THERMODYNAMICS**

The general laws of thermodynamics as applied to gases, saturated and superheated vapors; entropy; isothermal and adiabatic processes; compressors and steam engines; internal combustion engine cycles; flow of fluids. Three class periods a week. Prerequisite: Math. 202; Corequisite: Phys. 208.

**Full Year Course, Each Year**

**M.E. 301a. THERMODYNAMICS**

The general laws of thermodynamics; entropy; isothermal and adiabatic processes; the cycles; flow of fluids. Three class periods a week. For non-Mechanical Engineering students. Prerequisite: Math. 202; Corequisite: Phys. 208.

**Each Semester, Each Year**

**M.E. 303. METALLURGY**

Structure and properties of metals and alloys; iron and steel; critical points; equilibrium diagrams of iron-carbon alloys; heat treatment of steel; metallographic analysis of metals; non-ferrous alloys. Two class periods and one laboratory period a week. Prerequisite: Chem. 108; Corequisite: G.E. 305.

**First Semester, Each Year**

**M.E. 304. HEAT POWER**

The steam power plant; fuels and stokers, boilers and auxiliaries, condensers; chimney and draft equipment; steam engines and turbines; pumps; air compressors; water supply and purification; coal and ash handling machinery. Three class periods and two laboratory periods a week. Prerequisite: M.E. 301.

**Second Semester, Each Year**

**M.E. 304a. HEAT POWER**

Course content same as M.E. 304. Three class periods and one laboratory period a week. For non-Mechanical Engineering students. Prerequisite: M.E. 301a.

**Each Semester, Each Year**

**M.E. 305. MECHANICAL ENGINEERING LABORATORY**

Measurement of pressure, temperature, volume; planimeters; indicators; dynamometers; calorific determination of fuels; flue gas analysis; air flow; lubricants. Detailed reports of experiments performed. Two laboratory periods a week. Prerequisite: Phys. 208.

**First Semester, Each Year**

**M.E. 308. FLUID MECHANICS**

Laws and theory relative to compressible and incompressible fluids; momentum relations for steady flow; resistance of immersed bodies; dynamic lift and propulsion; lubrication; pumps; turbines; fluid couplings; fluid power and control systems. Three class periods a week. Prerequisite: M.E. 301.

**Second Semester, Each Year**
M.E. 309. MECHANICS OF MACHINERY
Two Credit Hours
Kinematics of machinery; linkwork; cams; gearing—spur, bevel, screw, etc.; flexible connectors; intermittent motion mechanisms; trains of mechanisms. One class period and one drawing period a week. Prerequisites: Math. 202, Phys. 206, G.E. 102.
First Semester, Each Year

M.E. 310. MECHANICS OF MACHINERY
Two Credit Hours
Criterion of constraint, velocity, images, velocity polygons, acceleration, Coriolis' Law, inertia forces of machine parts, and balancing of engines. Two class periods a week. Prerequisite: M.E. 309.
Second Semester, Each Year

M.E. 401-402. INTERNAL COMBUSTION ENGINES
Six Credit Hours
A critical study of the Otto and Diesel cycles is made involving researches in fuels, combustion, detonation, knock testing, engine performance, exhaust gases, and engine vibration. Three class periods a week. Prerequisites: M.E. 301, 302, 305.
Full Year Course, Each Year

M.E. 403. HEATING AND AIR CONDITIONING
Five Credit Hours
The mechanical problem of heating and air conditioning a room is studied from the thermodynamic viewpoint. The effect of conditioned air on occupants receives attention. Three class periods and two laboratory periods a week. Prerequisites: M.E. 301, 302, 305; Corequisite: M.E. 409. First Semester, Each Year

M.E. 404. REFRIGERATION
Three Credit Hours
Thermodynamics of mechanical refrigeration; refrigerating systems; refrigerants; heat transfer; application of refrigeration. Three class periods a week. Prerequisites: M.E. 301, 302, 305.
Second Semester, Each Year

M.E. 406. MECHANICAL ENGINEERING LABORATORY
Two Credit Hours
Complete tests are made on a power plant, steam engine, refrigerator, and an internal combustion engine. Two laboratory periods a week. Prerequisites: M.E. 304, 305, 401.
Second Semester, Each Year

M.E. 407-408. MACHINE DESIGN
Six Credit Hours
Stress analysis; columns; screw fastenings; rivets; keys and couplings; connectors and drives; gearing; bearings; springs; brakes, friction clutches and friction drives; cams; welding; design problems. Two class periods and one design period a week. Prerequisites: C.E. 304, G.E. 301, 303, M.E. 309.
Full Year Course, Each Year

M.E. 409. HEAT TRANSMISSION
Three Credit Hours
Consideration is given to methods of heat transfer, laws of radiation, conduction and convection, dimensional analysis, film theory. Heat transfer from fluid to fluid through a separating wall is correlated with the flow characteristics of the fluids. Special attention is given to test methods, to prediction of heat exchanger performance, and to the economic factors affecting design. Three class periods a week. Prerequisite: M.E. 301; Corequisite: M.E. 308.
First Semester, Each Year
M.E. 411. PUMPS AND COMPRESSORS  THREE CREDIT HOURS
Special attention is given to the design of pumps for viscous and corrosive fluids. Reciprocating and rotary compressors are studied. Three class periods a week. Prerequisite: M.E. 308.
First Semester, Each Year

M.E. 413. NON-FERROUS METALLURGY  THREE CREDIT HOURS
Structure and properties of non-ferrous alloys. Working, casting, heat treatment and use of alloys of aluminum, magnesium, copper, nickel, tin, zinc and miscellaneous metals. Two class periods and one laboratory period a week. Prerequisite: M.E. 303.
First Semester, Each Year

M.E. 414. SEMINAR  ONE CREDIT HOUR
Required of all junior and senior Mechanical Engineering students. One class period a week for Junior and Senior years.

M.E. 415. INSPECTION VISITS
Junior and senior inspection trips are arranged for the second semester. Visits are made to selected manufacturing establishments and engineering projects. Plant layouts and organization are studied.

M.E. 416. MECHANICAL VIBRATIONS  THREE CREDIT HOURS
Vibrations without damping; damped vibrations; vibration of systems with several degrees of freedom; vibration isolation and absorption; theory of balancing; the Mobility Method; mechanical and electrical models of vibration systems. Two class periods and one laboratory period a week. Prerequisite: M.E. 310.
Second Semester, Each Year

GENERAL ENGINEERING (G.E.)
MR. BALDINGER, MR. CHAMBERLAIN, MR. WEHMANEN, MR. SPROWL

COURSES OF INSTRUCTION

G.E. 101. ENGINEERING DRAWING  THREE CREDIT HOURS
Practice in lettering and the use of instruments; orthographic projection, working drawings, auxiliary views, sections and conventions, dimensioning, drawings; pictorial drawings, isometric and oblique; technical sketching. Two lecture periods and four laboratory hours a week. First Semester, Each Year

G.E. 102. DESCRIPTIVE GEOMETRY  THREE CREDIT HOURS
Auxiliary and oblique views; line and plane problems; surfaces, intersections and developments, warped surfaces, applications to drawing and engineering problems. Two lecture periods and four laboratory hours a week. Prerequisite: G.E. 101.
Second Semester, Each Year

G.E. 105. ENGINEERING SURVEY  NO CREDIT
An orientation course designed to give the freshman students a general view of
the engineering profession. It discusses engineering education, methods of study, and engineering curricula; historical background, achievements, and social and economic effects of engineering. One class period a week.

First Semester, Each Year

G.E. 202. STATICS THREE CREDIT HOURS
A study of the fundamental principles of mechanics; force systems, resultants and equilibrium statics, friction, center of gravity, moments of inertia of areas. Three class periods a week. Prerequisites: Math. 201, Phys. 206.

Each Semester, Each Year

G.E. 301. DYNAMICS THREE CREDIT HOURS
Kinematics of particles and rigid bodies, moments of inertia of masses, kinetics of rigid bodies, work, energy and power, impulse and momentum. Three class periods a week. Prerequisites: G.E. 202, Math. 202. First Semester, Each Year

G.E. 303. STRENGTH OF MATERIALS THREE CREDIT HOURS
The study of stresses and strains in tension, compression, shear and torsion; riveted and welded joints; shear and moment diagrams; stresses and deflections of beams and columns; stresses at a point, including Mohr's circle. Three class periods a week. Prerequisites: G.E. 202, Math. 202. Each Semester, Each Year

G.E. 305. MATERIALS TESTING ONE CREDIT HOUR
A laboratory course to acquaint the student with A. S. T. M. standards and procedures in the physical tests of steel, timber and concrete. Mechanical tests include those of tension, compression, flexure, torsion, hardness and impact. One laboratory period a week. Corequisite: G.E. 303. Each Semester, Each Year

G.E. 307. HYDRAULICS FOUR CREDIT HOURS
A basic course in the principles of hydrostatics and hydrodynamics: pressures exerted by water at rest or in motion; measurement of fluid flow; fundamentals of dimensional analysis and dynamic similarity; flow of water in pipes and open channels, with application of basic principles to the flow of other fluids; hydraulic turbines and centrifugal pumps. Four class periods a week. Prerequisite: G.E. 202. First Semester, Each Year

G.E. 402. CONTRACTS AND SPECIFICATIONS TWO CREDIT HOURS
Lectures and assigned readings covering the essential elements of contracts, specifications and professional ethics; legal relations, rights and responsibility of the engineer. Two class periods a week. Second Semester, Each Year
The Technical Institute is a two-year college program of technical training for individuals preparing for positions in production, operations, and supervision. Also included is training for such supporting engineering positions as laboratory assistant, experimental technician, and draftsman. All curricula as developed by the University of Dayton are practical in nature and are designed to meet the needs of individuals and industry. Each course is carefully organized, using suggestions of persons actually working in the industrial situation. In addition, the following definition of Technical Institute curricula as used by the Engineers' Council for Professional Development (ECPD) in accrediting such curricula, has been the basic guide for the University of Dayton Technical Institute.

"Curricula to be considered are technological in nature and lie in the post-high school area. They differ in content and purpose from those of the vocational school on one hand and from those of the engineering college on the other. Curricula in this field are offered by a variety of institutions and cover a considerable range as to duration and content of subject matter, but have in common the following purposes and characteristics:

1. The purpose is to prepare individuals for various technical positions or lines of activity encompassed within the field of engineering, but the scope of the programs is more limited than that required to prepare a person for a career as a professional engineer.

2. Programs of instruction are essentially technological in nature, based upon principles of science and include sufficient post-secondary school mathematics to provide the tools to accomplish the technical objectives of the curricula.

3. Emphasis is placed upon the use of rational processes in the principal fundamental portions of the curricula that fulfill the stated objectives and purposes.

4. Programs of instruction are briefer, and usually more completely technical in content than professional curricula, though they are concerned with the same general fields of industry and engineering. Such designations as Engineering Aide, Technical Aide, Associate in Engineering, and Engineering Associate are appropriate designations to be conferred upon the graduates of programs of Technical Institute type.

5. Training for artisanship is not included within the scope of education of Technical Institute type."

PROGRAMS OF STUDY

Programs of study are offered in Electrical, Industrial and Mechanical Technology on both a day and evening basis. Courses required and descriptions
are included in the following pages. Each program is composed of certain basic courses covering fundamental and non-technical subjects and courses in the major field. The fundamental subjects are mathematics, physics, chemistry, English, drawing and industrial management. Non-technical subjects include psychology, economics, speech and government. Upon satisfactory completion of the prescribed courses in a program of study, a diploma granting an Associate in Engineering Degree is awarded.

ADMISSION REQUIREMENTS

Applications for admission to the Technical Institute may be secured from the Director of the Technical Institute or the University Admissions Office. Any applicant who has been graduated from an accredited high school or secondary school may be admitted. Any applicant who is not a high-school graduate but who can submit evidence of an equivalent background of experience or training may be considered for admission.

GUIDANCE AND COUNSELING

The facilities of the Guidance Center are available for Technical Institute students. Staff members experienced in this type of program will be on hand before and during registration. Prospective students are encouraged to visit the campus or telephone for information regarding any of the programs offered. Part-time evening students are particularly advised to consult with the Director of the Technical Institute before attempting to register for any semester.

FEES

Current fees of the University of Dayton apply to all Technical Institute classes. These and other administrative details are shown on other pages of this catalogue.

VETERANS

Veterans must secure approval in advance from the Veterans Administration for attendance at Technical Institute classes. This approval is apart and separate from admission to the University. All programs of study are approved by the Veterans Administration.

CREDITS

All courses in the Technical Institute are evaluated on a semester hour basis. Recitation and similar classroom work generally require outside preparation, while laboratory or practice periods are usually self-contained.

ELECTRICAL TECHNOLOGY

The program in Electrical Technology, with options in Industrial Elec-
tricity and Radio and Television, follows a common plan of study during the first year and provides specialization in the second year.

Industrial Electricity, Option A, is designed to prepare students primarily for technological services with electrical utilities, with manufacturers of electrical equipment, in electrical maintenance and instrument departments of industrial plants, and in related positions. This major field of specialization stresses the application of direct- and alternating-current theory to electrical machinery and instruments. Emphasis is placed upon courses in circuits theory, machinery, electrical measurements, electronic control, and related courses in mathematics, physics, and chemistry.

Radio and Television, Option B, is designed to prepare students primarily for technological services with equipment manufacturers and for the installation and maintenance of receivers. Emphasis is placed upon courses in circuit theory, receiver circuits and fundamentals, electrical measurements, and related courses in mathematics, physics, and chemistry.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Cr. Hours</th>
<th>Subject</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Drawing</td>
<td>3</td>
<td>Electrical Circuits</td>
<td>4</td>
</tr>
<tr>
<td>Business English</td>
<td>1½</td>
<td>Electrical Shop Practices</td>
<td>3</td>
</tr>
<tr>
<td>Industrial Org. &amp; Prod.</td>
<td>3</td>
<td>Electrical Code</td>
<td>1½</td>
</tr>
<tr>
<td>Industrial Math. I</td>
<td>3</td>
<td>Effective Speaking</td>
<td>1½</td>
</tr>
<tr>
<td>Physics: Mechanics</td>
<td>3½</td>
<td>Applied Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Industrial Chemistry</td>
<td>2½</td>
<td>Industrial Math. II</td>
<td>3</td>
</tr>
</tbody>
</table>

**SECOND SEMESTER**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Cr. Hours</th>
<th>Subject</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronics</td>
<td>4</td>
<td>Radio Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>Electrical Measurements</td>
<td>4</td>
<td>Television Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>Report Writing</td>
<td>3</td>
<td>Electronic Circuit Diagrams</td>
<td>1</td>
</tr>
<tr>
<td>Economics of Industry</td>
<td>3</td>
<td>American Political Ideas and Practices</td>
<td>3</td>
</tr>
<tr>
<td>Physics: Heat, Light, Sound</td>
<td>3½</td>
<td>Elements of Supervision</td>
<td>3</td>
</tr>
</tbody>
</table>

**SECOND SEMESTER**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Cr. Hours</th>
<th>Subject</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical Machinery</td>
<td>4</td>
<td>20 Radio Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>Motor Control</td>
<td>4</td>
<td>21 Television Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>Electrical Blue Prints</td>
<td>1</td>
<td>22 Electronic Circuit Diagrams</td>
<td>1</td>
</tr>
<tr>
<td>American Political Ideas and Practices</td>
<td>3</td>
<td>21 American Political Ideas and Practices</td>
<td>3</td>
</tr>
<tr>
<td>Elements of Supervision</td>
<td>3</td>
<td>2 Elements of Supervision</td>
<td>3</td>
</tr>
</tbody>
</table>

**INDUSTRIAL TECHNOLOGY**

This major field of specialization is designed to prepare students primarily for technological services in the industrial engineering areas of production planning and control, plant layout, quality control, job evaluation, and cost con-
trol. It also covers the essentials of management with which foremen, supervisors, and administrative personnel in general are concerned.

Typical jobs are time-study man, methods planner, production control clerk, stock supervisor, cost analyst, job analyst, and personnel interviewers.

Emphasis is placed upon courses in motion and time study, job evaluation, wage incentive, production and operation planning, plant layout, industrial safety, and courses in mathematics, physics, and chemistry.

**First Year**

**FIRST SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DM</td>
<td>1</td>
</tr>
<tr>
<td>GS</td>
<td>4</td>
</tr>
<tr>
<td>IT</td>
<td>1</td>
</tr>
<tr>
<td>PS</td>
<td>1</td>
</tr>
<tr>
<td>PS</td>
<td>11</td>
</tr>
<tr>
<td>PS</td>
<td>21</td>
</tr>
</tbody>
</table>

**SECOND SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GS</td>
<td>1</td>
</tr>
<tr>
<td>GS</td>
<td>11</td>
</tr>
<tr>
<td>IT</td>
<td>3</td>
</tr>
<tr>
<td>IT</td>
<td>8</td>
</tr>
<tr>
<td>IT</td>
<td></td>
</tr>
<tr>
<td>PS</td>
<td>2</td>
</tr>
<tr>
<td>PS</td>
<td>13</td>
</tr>
</tbody>
</table>

**Second Year**

**FIRST SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GS</td>
<td>2</td>
</tr>
<tr>
<td>GS</td>
<td>3</td>
</tr>
<tr>
<td>GS</td>
<td>22</td>
</tr>
<tr>
<td>IT</td>
<td>4</td>
</tr>
<tr>
<td>IT</td>
<td>10</td>
</tr>
<tr>
<td>PS</td>
<td>12</td>
</tr>
</tbody>
</table>

**SECOND SEMESTER**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GS</td>
<td>21</td>
</tr>
<tr>
<td>IT</td>
<td>2</td>
</tr>
<tr>
<td>IT</td>
<td>6</td>
</tr>
<tr>
<td>IT</td>
<td>7</td>
</tr>
<tr>
<td>IT</td>
<td>9</td>
</tr>
<tr>
<td>IT</td>
<td>13</td>
</tr>
</tbody>
</table>

**MECHANICAL TECHNOLOGY**

Mechanical Technology has been developed with two options, Mechanical Design, Option A, and Tool Design, Option B. The first year is common to both options and the student need not select his option until the start of his second year.

Emphasis is placed upon courses in drafting and design, industrial materials and methods of manufacture and related courses in mathematics, physics, and chemistry.

Mechanical Design, Option A, is designed to prepare students primarily for technological services in drafting and design departments, mechanical maintenance divisions, testing and inspection laboratories, and related industrial production units. This field of specialization stresses the fundamentals of mechanics and mechanisms as applied to industrial problems.

Tool Design, Option B, is designed to prepare students primarily for technological services in tool engineering involving the selection of methods, tools, and machines for economical production.
### Courses of Instruction

**DRAFTING AND MECHANICAL TECHNOLOGY (DM)**

**DM 1. TECHNICAL DRAWING** THREE CREDIT HOURS

An introduction to technical drawing with the emphasis upon the use of instruments, lettering, orthographic projection and conventional industrial practices. One hour of class and five hours of laboratory a week. Prerequisite or corequisite: PS 1.

**DM 2. GRAPHICAL COMPUTATION** THREE CREDIT HOURS

Fundamental descriptive and analytic geometry principles as applied to the solution of engineering problems: included are intersections and developments of planes and solids, layout of objects in space and clearance. One hour of class and five hours of laboratory a week. Prerequisite: DM 1; Prerequisite or corequisite: PS 2.
TWO AND ONE-HALF CREDIT HOURS  
Preparation of complete working drawings from layouts for interchangeable manufacture, computation of fits, limit dimensions and tolerances. One and one-half hours of class and three hours of laboratory a week. Prerequisites: DM 2, and IT 3.

DM 4. Tool Drawing  
TWO AND ONE-HALF CREDIT HOURS  
Fundamental tool drawing principles and methods. One and one-half hours of class and three hours of laboratory a week. Prerequisites: DM 2, and IT 3.

DM 5. Die Design  
THREE CREDIT HOURS  
Fundamental principles of the design and construction of piercing, blanking, forming, drawing, progressive and compound dies. One hour of class and five hours of laboratory a week. Prerequisite: DM 4.

DM 6. Jig and Fixture Design  
TWO AND ONE-HALF CREDIT HOURS  
Fundamental principles of the design and construction of drill and combination jigs, and milling, reaming and tapping fixtures. One and one-half hours of class and three hours of laboratory a week. Prerequisite: DM 4.

DM 7. Gage Design  
TWO AND ONE-HALF CREDIT HOURS  
Design of gages for interchangeable manufacture. One and one-half hours of class and three hours of laboratory a week. Prerequisite: DM 4.

THREE CREDIT HOURS  
A study of the use of hand and machine tools and measuring instruments as well as standard physical testing equipment such as the Rockwell hardness tester and tensile machines. One hour of class and five hours of laboratory a week. Prerequisites: PS 2, PS 11, DM 1.

DM 20. Mechanics: Statics and Dynamics  
THREE CREDIT HOURS  
Forces acting on rigid bodies at rest and in motion. Three hours of class a week. Prerequisites: PS 2, and PS 11.

THREE CREDIT HOURS  
Stress and strain; riveted and welded joints; torsion; shear; bending and deflection of beams; combined stresses; columns. Three hours of class a week. Prerequisite: DM 20.

DM 22. Machine Design  
TWO AND ONE-HALF CREDIT HOURS  
Fundamentals of design and experimental procedure in the calculation of machine members and elements of testing. One and one-half hours of class and three hours of laboratory a week. Prerequisites: IT 3, and DM 20.

DM 23. Mechanism  
THREE CREDIT HOURS  
Fundamentals of displacements, motions and velocities, design of linkages, gears, cams and flexible connections. One hour of class and five hours of laboratory a week. Prerequisites: DM 3, DM 20.
GENERAL STUDIES (GS)

GS 1. EFFECTIVE SPEAKING ONE AND ONE-HALF CREDIT HOURS
Organization and presentation of spoken material with special emphasis on voice and physical delivery and audience reaction. One and one-half hours of class a week.

GS 2. CONFERENCE LEADERSHIP ONE AND ONE-HALF CREDIT HOURS
Training and practice in conducting and participating in small group conferences, shop committees, instructional groups and problem solving groups. One and one-half hours of class a week. Prerequisite: GS 1.

GS 3. REPORT WRITING THREE CREDIT HOURS
The preparation and presentation of industrial reports. Three hours of class a week. Prerequisite: GS 4.

GS 4. BUSINESS ENGLISH ONE AND ONE-HALF CREDIT HOURS
Review of basic principles of grammar, spelling and punctuation, with special emphasis on composition as used in business letter writing. One and one-half hours of class a week.

GS 11. APPLIED PSYCHOLOGY THREE CREDIT HOURS
Fundamentals of psychology as applied to normal behavior and personal adjustment, with special emphasis on possible uses in industrial application. Three hours of class a week.

GS 21. AMERICAN POLITICAL IDEAS AND PRACTICES THREE CREDIT HOURS
Fundamentals of democratic processes in government and the practices in which they function. Three hours of class a week.

GS 22. ECONOMICS IN INDUSTRY THREE CREDIT HOURS
Basic economic principles as applied to major industrial problems. Three hours of class a week.

ELECTRICAL TECHNOLOGY (ET)

ET 1. ELECTRICAL CIRCUITS FOUR CREDIT HOURS
Nature of direct and alternating current; practical concepts of power, power factor, resistance, reactance, and impedance; simple a.c. and d.c. circuit calculations. Three hours of class and three hours of laboratory a week. Prerequisites: PS 2, PS 11.

ET 2. ELECTRONICS FOUR CREDIT HOURS
Principles of operation of the more common types of vacuum and gas tubes, thyristors, photoelectric cells and simple circuits used with them. Three hours of class and three hours of laboratory a week. Prerequisite: ET 1.

ET 3. ELECTRICAL MEASUREMENTS FOUR CREDIT HOURS
Fundamentals of direct and alternating current measuring instruments and
methods of measurement, with particular emphasis on industrial applications. Three hours of class and three hours of laboratory a week. Prerequisite: ET 1.

ET 5. Electrical Shop Practices
Three Credit Hours
Fundamentals of electrical equipment installation and maintenance. One hour of class and five hours of laboratory a week.

ET 6. Electrical Code
One and One-Half Credit Hours
A study of the National Electrical Code to provide safe practices in the installations of electrical equipment in buildings. One and one-half hours of class a week.

ET 10. Electrical Machinery
Four Credit Hours
Fundamentals of the construction and application of direct current and alternating current machines and apparatus to industrial uses. Three hours of class and three hours of laboratory a week. Prerequisite: ET 1.

ET 11. Motor Control
Four Credit Hours
Industrial uses of standard controllers for electric motors. Three hours of class and three hours of laboratory a week. Prerequisite or corequisite: ET 10.

ET 12. Electrical Blueprints and Diagrams
One Credit Hour
Standards and symbols used on electrical blueprints and wiring diagrams primarily for control circuits. Three hours of laboratory a week. Prerequisite: DM 1.

ET 20. Radio Fundamentals
Four Credit Hours
Elementary principles of operation and structural details of fundamental units of radio apparatus. Three hours of class and three hours of laboratory a week. Prerequisite: ET 2.

ET 21. Television Fundamentals
Four Credit Hours
Elementary principles of operation and structural details of basic television equipment with primary emphasis on receivers. Three hours of class and three hours of laboratory a week. Prerequisite or corequisite: ET 20.

ET 22. Electronic Circuit Diagrams
One Credit Hour
Standards and symbols used on electronic circuit diagrams. Prerequisite: DM 1; Prerequisite or corequisite: ET 21.

INDUSTRIAL TECHNOLOGY (IT)

IT 1. Industrial Organization and Production
Three Credit Hours
A survey of the operational, financial, marketing and accounting activities of industrial organization. Also included is a detailed survey of the duties of management as related to the production function of planning, control, personnel and human factors. Three hours of class a week.
IT 2. ELEMENTS OF SUPERVISION THREE CREDIT HOURS
A study of the supervisor's relation to his men and his place in developing an effective production team. Three hours of class a week. Prerequisites: IT 1, GS 11.

IT 3. INDUSTRIAL MATERIALS AND METHODS OF MANUFACTURE TWO AND ONE-HALF CREDIT HOURS
A study of modern materials used in industry with emphasis on their chemical and physical properties and methods by which they may be fabricated. One and one-half hours of class and three hours of laboratory a week.

IT 4. MOTION AND TIME STUDY THREE CREDIT HOURS
Fundamentals of work simplification and motion economy using the techniques of motion and time study for the development of effective methods of production. Two hours of class and four hours of laboratory a week. Prerequisites: IT 1 and PS 2.

IT 5. PERSONNEL RELATIONS AND LABOR LEGISLATION THREE CREDIT HOURS
The relations of labor and management and legislation affecting such relations as are handled by the personnel department. Three hours of class a week. Prerequisite: IT 2.

IT 6. JOB EVALUATION AND WAGE DETERMINATION THREE CREDIT HOURS
Job evaluation methods; determining requirements of jobs; establishing grade levels; development of basic rates, salary classification and performance rating. Three hours of class a week. Prerequisites: IT 2, IT 8.

IT 7. ELEMENTS OF COST CONTROL THREE CREDIT HOURS
A survey of the methods of breakdown and cost analysis of labor, material and overhead. All related to modern industrial practices. Three hours of class a week. Prerequisite: IT 1.

IT 8. PRODUCTION METHODS AND CONTROL THREE CREDIT HOURS
Principles and the techniques used in production; current practices in production planning, routing, scheduling and dispatching; study of production standards, labor efficiency and costs; quantity and quality control. Three hours of class a week. Prerequisites: IT 1, IT 3.

IT 9. INDUSTRIAL SAFETY ONE AND ONE-HALF CREDIT HOURS
Basic principles of industrial accident prevention and organization for mechanical safeguards, fire prevention, occupational disease, hygiene and first aid, safety codes, compensation and safety education programs. One and one-half hours of class a week. Prerequisite: IT 1.

IT 10. PLANT LAYOUT TWO AND ONE-HALF CREDIT HOURS
A study of the economical arrangement of stocks, machines and layout of aisles for efficient material handling and production. One and one-half hours of class and three hours of laboratory a week. Prerequisites: DM 1, IT 8.
IT 11. **Operation Planning**  
**One and One-half Credit Hours**  
Pre-production planning of the most economical methods, machines, operations, and materials for the manufacture of a product. One and one-half hours of class a week. Prerequisites: IT 1, IT 3.

IT 12. **Production Procedures**  
**One and One-half Credit Hours**  
Primarily for students enrolled in mechanical technology, Tool Design, Option B. A survey of production control, scheduling, dispatching, material handling, motion and time study and layout of production equipment. One and one-half hours of class a week. Prerequisite: IT 11.

IT 13. **Quality Control**  
**One and One-half Credit Hours**  
An introduction to the techniques of industrial process control using statistical methods. One and one-half hours of class a week. Prerequisite: PS 2.

**PHYSICAL SCIENCE (PS)**

PS 1. **Industrial Mathematics I**  
**Three Credit Hours**  
A review of the fundamentals of arithmetic and a study of selected topics from geometry and algebra with application to industrial problems. Three hours of class a week.

PS 2. **Industrial Mathematics II**  
**Three Credit Hours**  
Selected topics from algebra and trigonometry with particular emphasis on industrial problems. Three hours of class a week. Prerequisite: PS 1.

PS 11. **Physics: Mechanics**  
**Three and One-half Credit Hours**  
A study of the laws of simple machines, forces, linear and angular motion, conditions of equilibrium and fluids. Three hours of class and one and one-half hours of laboratory a week. Prerequisite or corequisite: PS 1.

PS 12. **Physics: Heat, Light and Sound**  
**Three and One-half Credit Hours**  
The elementary principles of heat, light and sound with particular emphasis on industrial application. Three hours of class and one and one-half hours of laboratory a week. Prerequisite: PS 11.

PS 13. **Physics: Electricity**  
**Three and One-half Credit Hours**  
The basic principles of electricity and their application in industry. Three hours of class and one and one-half hours of laboratory a week.

PS 21. **Introduction to Industrial Chemistry**  
**Two and One-half Credit Hours**  
A survey of the general principles of chemistry including elements and their simpler compounds. Special emphasis on topics of importance in industrial activities. One and one-half hours of class and three hours of laboratory a week. Prerequisite: PS 1.
Degrees and Awards

DEGREES AWARDED
June 7, 1952

College of Arts and Sciences

BACHELOR OF ARTS

(No reference to the city of residence is made of those graduates who live in Dayton, Ohio.)

Norbert George Adelman, C.PP.S.
Thomas Edward Anderson

*Joan Claire Batsche
Richard E. Beach
Paul Leo Becquet, C.PP.S.
Richard Lincoln Beischel, C.PP.S.
D. Jeanne Billett
Peter John Boyle
John Charles Bramlage

*Charles E. Brant
Helen A. Brown
†August H. Bruegge
Dolores Ann Carcelli
William Faulkner Clinard
William Edward Conley
Thomas Anthony Conway, C.PP.S.
†George R. Cornett
Thomas Jonas DeBrosse, C.PP.S.
†George Robert Derham
James Howard Dugal, C.PP.S.
Leo Joseph Fullenkamp, C.PP.S.
Harold H. Galbraith
†Paul Ira Hansford
Robert Frank Heck
†James Ching-Yu Ho
Robert Byrne Hoff
Mary Ruth Hofferbert
James Louis Horvath
†Armando Luis Irizarry
Mary Ann Isenecker
Jessie Golena Johnson
Edward John Joyce, C.PP.S.
Richard Joseph Kalaf, C.PP.S.
William Richard Kehl
Paul Morgan Kelly
Joseph Anthony Kilo, C.PP.S.
*Epiphanie Clara Kokkinou
Robert Clare Kunisch, C.PP.S.
Joseph Edward Lazur, C.PP.S.

*Frank Lewis, Jr.
Myron Burry Lodge

Monroeville, Ohio
West Hempstead, New York
Springfield, Ohio
Garden City, Kansas
Cincinnati, Ohio
Floral Park, New York
Brookville, Ohio
Breese, Illinois
Sharon, Pennsylvania
Painesville, Ohio
Roseville, Michigan
Piqua, Ohio
Bellerose, New York
Jackson, Michigan
St. Henry, Ohio

Nanking, China

Cleveland, Ohio
Ponce, Puerto Rico

Cleveland, Ohio
St. Joseph, Missouri
Connersville, Indiana
Sidney, Ohio
Uniontown, Pennsylvania
Athens, Greece
Toledo, Ohio
Whiting, Indiana

*Awarded the Alpha Sigma Tau Honor Key, signifying a cumulative Point Average for seven semesters of 3.50 based on 4.00 quality points.
†In absentia.
Richard Marvin Lovett, C.P.P.S.  
Patrick Joseph Luby  
John Joseph McKay, C.P.P.S.  
Richard Raymond Mickley  
Cletus A. Moorman  
Anna Marie Muldoon  
Mary Ellen Nagle  
Mary Ellen Neff  
James Edward Nyhan, Jr.  
Cletus Edward Oberst  
Aloysius Franklin O'Dell, C.P.P.S.  
Paul Joseph Osweiler  
Julie Marie Pflaum  
Ernest Willibald Ranly, C.P.P.S.  
Richard Victor Riedy  
John Edward Riley  
James Henry Schrader, C.P.P.S.  
Raymond Henry Schultheis, C.P.P.S.  
*Donald G. Schweller  
Joseph Anthony Sebastiani, C.P.P.S.  
Paula Monica Shay  
Lois Marie Shepherd  
Edward Joseph Spillan  
Robert Adam Tilger  
Samuel Joseph Ventura  
Vera Ann Wallace  
Earl Roy Williams  
Donald Wolff  
Charles Edward Zimmer  

Cincinnati, Ohio  
Zanesville, Ohio  
Pittsburgh, Pennsylvania  
Louisville, Ohio  
St. Henry, Ohio  
Stuart, Iowa  
Tipp City, Ohio  
Owensboro, Kentucky  
Jackson, Michigan  
St. Henry, Ohio  
Sandusky, Ohio  
Hartville, Ohio  
Verona, Pennsylvania  
Cincinnati, Ohio  
Springfield, Ohio  
Newark, Ohio  
Fairborn, Ohio  
Miamisburg, Ohio

BACHELOR OF FINE ARTS

Thomas Raymond Bertsch  
†Patrick Darner  
Peter Paul Rudokas  
Toledo, Ohio

BACHELOR OF SCIENCE

Elmar Robert Altwicker  
George Edward Baujan  
James Anthony Baumgarten  
*Kenneth Arthur Busch  
Robert Joseph Busse, Jr.  
†Mildred Lois Crowell  
Alice Marie Duffy  
William Edmund Ferris  
Thomas Mitchell File  
Chen Fu  
Janet Murray Garner  
Robert Francis George  
Eugene John Hoying  
Clyde Hughes  
Robert Bailey Huston  
David Lawrence Kelble  
Jack Edward Kester  
*Leonard Joseph Kucharski  
James Joseph Lehmann  
Leopold William Like  
Owensboro, Kentucky  
Minster, Ohio  
Delaware, Ohio  
Tsinan, Shantung, China  
Cambridge, Ohio  
Anna, Ohio  
Cleveland, Ohio  
New Bavaria, Ohio
DEGREES 223

William P. Loe
Paul N. McFall
Gene Paul Omlor
†George Tadashi Oshiro
John Louis Pruzzo
John Vincent Pustinger, Jr.
Thomas Eugene Reichard
William Gene Rindler
William John Rueger
*George Eugene Ryschkewitsch
†Redmond Thomas Sage
James Stephen Sasala
Carmine James Scalzitti
*Rosemary Estelle Schmidt
*Walter Richard Schuler
Doris Irene Shields
Jackson Marchant Sparks
Margie Ann Stout
Mary Louise Theodoras
†Ralf Barth Trusler
James Joseph Tumbusch
Lester Evans Wall
†Richard Irvin Weaver
Richard Donald Wissing
†Harry You Mun Wong
*Henry Loy Yim

Springfield, Ohio
Honolulu, Hawaii
Monessen, Pennsylvania
Versailles, Ohio
University Heights, Ohio
Louisville, Kentucky
Marion, Ohio
Greenville, Ohio
Feesburg, Ohio
Vandalia, Ohio
Columbus, Ohio
Richwood, Ohio
West Manchester, Ohio
Louisville, Kentucky
Honolulu, Hawaii
Kaneohe, Oahu, Hawaii

BACHELOR OF SCIENCE IN HOME ECONOMICS
Janet Irene Finke
Claire Heimann
Marguerite Ann Howley
Carolyn Joanne Koehler
Marilyn Jeanne Liston
Julie Ann Raney
Virginia B. Tate

Miamisburg, Ohio

BACHELOR OF SCIENCE IN MEDICAL TECHNOLOGY
Ernest Harold Clark
Helen Robinette Johnson

BACHELOR OF SCIENCE IN NURSING
Mary Catherine Sullivan

Mt. Sterling, Ohio

BACHELOR OF SCIENCE IN NURSING EDUCATION
Hazel M. Aslakson
Ruby Catherine Cope
Inez Jean Kelly
Mary Louise Lafayette
Jean Mary McNeill
Helen Beverley Miller
Maxie D. Miller
Bernardine Ann Morasco
Marion Frances Owen
Una Walker

Onancock, Virginia
Hamilton, Ohio
Springfield, Ohio
West Carrollton, Ohio
Jefferson, North Carolina
Grafton, West Virginia
Covington, Ohio
BACHELOR OF SCIENCE IN EDUCATION

Clarence Edward Alexander, Jr. Willoughby, Ohio
Ellen Marie Ammann Xenia, Ohio
Joseph Norman Banister Waynesville, Ohio
Joseph Willard Bath Corona, California
Charles Walter Bernard
†Sr. M. Florecita Bidart, C.P.P.S. Middletown, Ohio
George C. Biersack New Carlisle, Ohio
Donald Edward Bolton Chillicothe, Ohio
Charles Cyrus Braunmiller
Ralph Douglas Brown
Elwood Shroder Bucher
Eugene Joseph Burg
William Thomas Christian Brookly, New York
Ned Ryan Cofer Fairborn, Ohio
Robert Eugene Crawford Miamisburg, Ohio
*Naomi Aline Cress
Donald Raymond Crossley Oak Harbor, Ohio
Joan Lillian Crowe
Betty Florine Cunningham
William David Cutcher
Robert J. Daniszewski
Donald E. Darling Yokohama, Japan
Jorge Emmanuel da Silva, S.M.
Ferne H. Deaver
Robert Eugene Deming
Mary Elizabeth Dillon
James B. Douglass
Barbara Louise Emerick
Robert Francis Enright Middletown, Ohio
†Paul Ferrero Raton, New Mexico
Doris Edna Finch
Margaret Belle Folkerth
Barbara Turner Galbraith
Clayton H. Gantner, Jr.
Charles Joseph Gausling, S.M.
Charles Lee Grigsby
Jeannyne D’Arce Gunckel
Louis Robert Helmlinger
Alfonso Daniel Herman
Willia Mae Hicks
Charmaine Ruth Hilgeford
Joanne Mary Hoelderle
James Lavern Hough
Patricia Jane Jellison
George Henry John
Eugene Charles Joseph
John Edward Kelley
Robert Matthew Kirkpatrick
Margaret M. Kunka
Martha Virginia Lasswell
Robert H. Lehner
Jean Kolstein Lieberman
Donald Lee Loefler
Loretta A. Lohr
†Ernest A. J. Lucas, C.P.P.S.
Rosalie Marie McAvoy
†William Gerard McDonald

Payne, Ohio
Lebanon, Ohio
West Alexandria, Ohio
Medina, Ohio
Martins Ferry, Ohio

Euclid, Ohio
Fostoria, Ohio
Detroit, Michigan
Brooklyn, New York
Jane Jacobson McIntire
†Evelyn Mae Marsico
Edward Joseph Maushart, S.M.
Donald Edward Meineke
Eugene Edward Miller
Jeanne Marie Moore
Eugene Frank Moorman
Titus Joseph Muzi
†Curtis Eugene Niles
Leland Vincent Norris, Jr.
Robert J. Nunes, S.M.
Chester John Nyberg
Walter Daniel O'Brien
John Thomas O'Donnell
Margaret Joan Oldiges
Aloysius Louis O'Neill
William Sharp O'Neill
*Alfred C. Pax
†Bernard F. Pleimann, S.M.
Jean M. Potter
Owen Michael Quinlan
Rosemarie Elizabeth Rauscher
†Edward J. Reidy
Otis Carleton Rhoades, Jr.
Eugene Edward Rice
*John Clarence Richard
John Murad Samaha, S.M.
Erika Elizabeth Schulhof
Russell Walter Scott
Charles Myron Shartle, Jr.
Patricia L. Sherman
†William Henry Stevens
Joseph D. Stockklein
Lena Belle Stouffer
Bettie Jeanne Stringklein
Marlo Michael Termini
Vernon Eugene Thomas
*Joseph Bourne Tierney
Joseph S. Vicario
Norman Walter Weber
Bertie M. Williams
Eugenia Estella Wilson
Ruth B. Wilvert
Martha Ellen Youngman
Sam P. Zaidain
John Albert Zimmerman

DEGREES

Pittsburgh, Pennsylvania
Minster, Ohio
Dennison, Ohio
Puunene, Maui, Hawaii
Miamisburg, Ohio
Washington C. H., Ohio
Fremont, Ohio
New Weston, Ohio
Norwood, Ohio
Monessen, Pennsylvania
Chicago, Illinois
Waterbury, Connecticut
Glouster, Ohio
San Francisco, California
Toledo, Ohio
Garfield Heights, Ohio
Xenia, Ohio
Philadelphia, Pennsylvania
Bellefontaine, Ohio
Tallapoosa, Georgia

BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION

Norman Frederick Atkinson
Ronald Joseph Berg
James Neal Bily
Theodore Edward Borgert, Jr.
John L. Brandt, Jr.
Gerald Eugene Busch
Allen B. Caldwell
Louis Joseph Cannarozzi
Miguel Jose Carbonell

Lombard, Illinois
LaGrange, Illinois
New Hyde Park, New York
Cleveland, Ohio
Utado, Puerto Rico
Leo D. Carner
John Edward Cashdollar
Joseph Paul Civille
Michael Henry Cooper
Leo William Crotty
Emery J. Csizma
William Francis Curley
Edward Anthony Ednie
Theodore William Elliott, Jr.
William Albert Enouen
John A. Erickson
Jose Luis Fernandez
Robert Franklin Fischer
Joseph M. Garcia
George Francis Gavin
Robert Norman Goodpaster
Donald E. Graham
Richard Eugene Hageman
William Edwin Hallerman
James Peter Hannon
Clyde Harris, Jr.
Walter Joseph Heberle
Robert D. Heigel
Glenn D. Hester
William Francis Hilbert
* Giles Linden Hoefler
Nancy C. Hohler
* William Edward Huth
James Harold Janney
Leonard F. Jindra
Matthew E. Joefreda
James Joseph Keil
James Patrick Kilbane, Jr.
William Fred Kissell, Jr.
William W. Klare
Raymond E. Konczal
* William D. Kopp
Jacob Leonard Kreidler
Samuel F. Lackey, Jr.
Paul M. Lee, Jr.
James Richard McCaffery
Alfred Henry McCloskey
James Joseph McCoy
John L. Mahle, Jr.
Robert E. Marshall
Francis Paul Marsico
Eugene Ehret Mauch
Donald Joseph Maurer
Cletus John Miller
Robert Joseph Misiewicz
Joseph Aloysius Moeder
Willis Moore
Lawrence Walton Morgan
Robert Vaughn Noonan
Ray Lester Norris
Yoshiharu Ohara
David L. Pfeiffer
Doyle G. Pook
Patricia Ellen Radican

Miamisburg, Ohio
Cleveland, Ohio
Chicago, Illinois
Floral Park, New York
Cleveland, Ohio
San Juan, Puerto Rico
Steubenville, Ohio
Chicago, Illinois
Springfield, Ohio
Sandusky, Ohio
Cleveland, Ohio
Toledo, Ohio
Cleveland, Ohio
Toledo, Ohio
Sandusky, Ohio
South Bend, Indiana
Jamaica, New York
Zanesville, Ohio
Caldwell, Ohio
Toledo, Ohio
Celina, Ohio
Elyria, Ohio
DEGREES 227

*Joseph Eugene Reardon
Paul C. Regan
George H. Reynolds
Rodney Allen Rich
William R. Rosencrans
Francis Henry Schmitz
Earl E. Shelton
Richard P. Sherrer
Lawrence A. Shively
Mark J. Smith
John Michael Stanch
F. W. Tangeman
Robert G. Taylor
Thomas E. Vogt
Larry Robert Voss
Donald William Warning
Paul Jacob Weaver
Elvin Dane Weeks
Robert Joseph Westendorf
Carl Patrick Wheelersburg
*Beverly J. Whisler
Tedford Robert White
Robert L. Wise
Kenneth Robert Woolley
Thaddeus S. Wyrostek
Gerald Patrick York
William Charles Zaenglein
Daniel Michael Zamorski
Lakewood, Ohio
Miamisburg, Ohio
Marion, Ohio
Cleveland, Ohio
Evansville, Indiana
Warren, Rhode Island
South Amboy, New Jersey

College of Engineering

BACHELOR OF CHEMICAL ENGINEERING

Otto John Drescher
Jose Vicente Ferrara
*Ronald Carl Hoke
Carl D. King, Jr.
Monterrey, Mexico
Xenia, Ohio

BACHELOR OF CIVIL ENGINEERING

Felix George Andrews
Donald Walter Burbrik
David L. Gage
Donald Edward Grimme
Thomas Francis Harrigan, Jr.
Neal T. Kurfiss
Nathaniel Krauth Reich
John Louis Reisch
Kenneth Paul Smith
Dale Fisher Spencer
Raymond Joseph Stith
Thomas S. Yamada
West Hempstead, New York
Cincinnati, Ohio
Fort Thomas, Kentucky
Hollis, New York
St. Louis, Missouri
Germantown, Ohio
Honolulu, Hawaii

BACHELOR OF ELECTRICAL ENGINEERING

John Edward Dixon
William John Hovey
Andy Edward Klamo  Middletown, Ohio
Elmer Herman Luthman  Upper Sandusky, Ohio
Donald Nicholas Seifert

BACHELOR OF INDUSTRIAL ENGINEERING

Richard Louis Albrecht
Lawrence A. Wiles

BACHELOR OF MECHANICAL ENGINEERING

Theodore Robert Bricker  Bellevue, Ohio
Martin Joseph Briehl, Jr.
Melvin Henry Brooks
Frank Joseph Caldwell
Ralph John Janotta
Edward Frank Jauch
Hubert P. Koesters
Carl D. Kretzler
Richard Joseph McGrath
Eduardo J. Mulanovich
George E. Offenbacher
Paul Pius Ohmer, Jr.
Leonard Nino Passalacqua
Edwin Henry Rauscher, S.M.
William M. Roberts
†Jose Luis Saide H.
Charles Junius Stapp
Henri Jean Troin

Dalton, Pennsylvania
Lima, Peru
Cincinnati, Ohio
Chicago, Illinois
Miamisburg, Ohio
Monterrey, Mexico
Glen Cove, New York

Honorary Degrees
DOCTOR OF HUMANITIES

James M. Cox
Edward A. Deeds
Charles F. Kettering

August 3, 1952

College of Arts and Sciences

BACHELOR OF ARTS

Clarence Ralph Setser
Frances Angela Shay
Samuel M. Thornton

BACHELOR OF SCIENCE

Ronald Roland Hartman

BACHELOR OF SCIENCE IN HOME ECONOMICS

Lois Margaret Miller  Elizabethville, Pennsylvania
BACHELOR OF SCIENCE IN MEDICAL TECHNOLOGY
Jean Claire Ransick
Cincinnati, Ohio

BACHELOR OF SCIENCE IN NURSING
Margaret Josephine Eklund

BACHELOR OF SCIENCE IN NURSING EDUCATION
†Karen Harue Tanaka
Honolulu, Hawaii

BACHELOR OF SCIENCE IN EDUCATION
Kendall William Amlin
Miamisburg, Ohio
Gertrude Arnett
Columbus, Ohio
Lorraine Denton Bartlett
Tuckahoe, New York
Rawlinson E. Barritteau
Cincinnati, Ohio
Charles William Baxter
Delphos, Ohio
William R. Behringer, S.M.
Fairborn, Ohio
Isidore Dominick Berardi
Brooklyn, New York
Thomas James Bruggeman, S.M.
Chicago, Illinois
Thomas Castle
Washington, D. C.
William Francis Clark

Thalia W. Johnson
Parma Heights, Ohio
Pauline Louise Kelley
Uniontown, Pennsylvania
James Francis Kunes, S.M.
Evansville, Indiana
Robert Bernard Locke, S.M.
Bridgeville, Pennsylvania
Richard August Lochrlein, S.M.
Pittsburgh, Pennsylvania
Joseph S. McDonald, S.M.
Fairborn, Ohio
Clyde Henry Miller, S.M.
Brooklyn, New York
Orlou B. Naragon

†Sr. M. Julienne Fennerty, C.S.J.
Washington, D. C.
Eleanor Elizabeth Franzer

Margaret Bates Getter

Margaret Wheeldong Hart

Robert Emmett Hughes, S.M.

Karen Harue Tanaka

Kendall William Amlin

Gertrude Arnett

Lorraine Denton Bartlett

Rawlinson E. Barritteau

Charles William Baxter

William R. Behringer, S.M.

Isidore Dominick Berardi

Thomas James Bruggeman, S.M.

Thomas Castle

William Francis Clark

Thalia W. Johnson

Pauline Louise Kelley

James Francis Kunes, S.M.

Robert Bernard Locke, S.M.

Richard August Lochrlein, S.M.

Joseph S. McDonald, S.M.

Clyde Henry Miller, S.M.

Orlou B. Naragon

†Sr. M. Julienne Fennerty, C.S.J.

Eleanor Elizabeth Franzer

Margaret Bates Getter

Margaret Wheeldong Hart

Robert Emmett Hughes, S.M.

Karen Harue Tanaka
College of Engineering

BACHELOR OF ELECTRICAL ENGINEERING

Cornelius Edward Mandel, Jr. Laurelton, New York

Awards

The Rev. Charles Polichek First Award of Excellence in Philosophy:

EPHANIE CLARA KOKKINOU, of Athens, Greece

The Rev. Charles Polichek Second Award of Excellence in Philosophy:

FRANK LEWIS, JR., of Dayton, Ohio

The Victor Emanuel, '15, in memory of Mrs. Albert Emanuel, Award of Excellence in the Senior Chemical Engineering Class:

RONALD CARL HOKH, of Dayton, Ohio

The Victor Emanuel, '15, in memory of Mrs. Albert Emanuel, Award of Excellence in the Junior Chemical Engineering Class:

JACK COMBS, of Dayton, Ohio

The Harry F. Finke, '02, Award of Excellence in the Senior Civil Engineering Class:

RAYMOND JOSEPH STITH, of Dayton, Ohio

The Mrs. J. Edward Sweetman, in memory of Mr. J. Edward Sweetman, Award of Excellence in the Junior Civil Engineering Class:

RICHARD FRANCIS THOMAS, of Dayton, Ohio

The Anthony Horvath and Elmer Steger Award of Excellence in the Senior Electrical Engineering Class:

ELMER HERMAN LUTHMAN, of Dayton, Ohio

The Mrs. Louise A. and Mrs. Lucille Hollenkamp, in memory of Bernard F. Hollenkamp, Award of Excellence in the Senior Mechanical Engineering Class:

THEODORE ROBERT BRICKER, of Dayton, Ohio

The Martin C. Kuntz, '12, Award of Excellence in the Junior Mechanical Engineering Class:

NELSON DAVID WOLF, of Dayton, Ohio

The Charles Huston Brown, in memory of Brother William Haebe, Award of Excellence in the Senior Class of Business Organization:

WILLIAM EDWARD HUTH, of Dayton, Ohio
The President's Award of Excellence in Debating:
DONALD G. SCHWELLER, of Dayton, Ohio

The Mathematics Club Alumni Award of Excellence in the Senior Class:
JACK EDWARD KESTER, of Dayton, Ohio

The Mathematics Club Alumni Award of Excellence in the Junior Class:
ANTHONY JOSEPH EVERS, of Lakewood, Ohio

The Miami Valley Alumnae (Sorosis) Award of General Excellence in both academic and extracurricular activities:
MARY ELLEN NAGLE, of Dayton, Ohio

The Phi Alpha Theta Scholarship Key, awarded on the basis of excellence in the study of History:
PAUL JOSEPH OSWEILER, of Dayton, Ohio

---

**Enrollment**

**DAY CLASSES**

September, 1952

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seniors</td>
<td>304</td>
<td>50</td>
<td>354</td>
</tr>
<tr>
<td>Juniors</td>
<td>260</td>
<td>79</td>
<td>339</td>
</tr>
<tr>
<td>Sophomores</td>
<td>296</td>
<td>73</td>
<td>369</td>
</tr>
<tr>
<td>Freshmen</td>
<td>601</td>
<td>136</td>
<td>737</td>
</tr>
<tr>
<td>Unclassified</td>
<td>46</td>
<td>32</td>
<td>78</td>
</tr>
<tr>
<td>Religious</td>
<td>114</td>
<td>61</td>
<td>175</td>
</tr>
<tr>
<td></td>
<td>1,621</td>
<td>431</td>
<td>2,052</td>
</tr>
</tbody>
</table>

**EVENING CLASSES**

September, 1952

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,214</td>
<td>488</td>
<td>1,702</td>
</tr>
</tbody>
</table>
INDEX

Academic Council, 11
Academic Requirements, 49-52
Accounting, 65, 66, 102, 103
Accreditation, 43
Administration, 11-13
Administrative Assistants, 13
Administrative Council, 11
Administrative Officers, 12
Admission, 47, 55, 63, 71, 84, 188, 212
Art, 58, 59, 77, 78, 103, 104
Arts, Division of, 48, 55-62
Arts, Division of, at Carthagena, 39, 40, 48, 62
Arts and Sciences, College of, 48, 55-188
Associate Board of Lay Trustees, 11
Athletics, 45, 46
Biology, 85, 105-107
Board of Trustees, 11
Business Administration, Division of, 48, 63-70
Business Education, 78, 79
Business Organization, 65, 66, 67, 107-114
Award of Excellence, 44, 230
Calendar, 4-10
Campus and Buildings, 43
Carthagena, Division of Arts at, 39, 40, 48, 62
Changes and Withdrawals, 52
Chemical Engineering, 48, 190-193
Awards of Excellence, 44, 230
Chemistry, 86, 114-117
Children’s Theatre, 45
Civil Engineering, 43, 48, 193-196
Awards of Excellence, 44, 230
Clothing and Textiles, 90
College of Arts and Sciences, 48, 55-188
College of Engineering, 48, 188-210
Committees, Standing, 14, 15
Courses of Instruction, 102-187, 192, 193
194-196, 198-200, 206-210, 215-220
Curriculum, 48
Dayton Art Institute, 40, 48, 58, 59
Debating, Award of Excellence, 44, 230
Degrees, Requirements for, 49, 56, 63, 71, 72, 84, 189, 190
Degrees and Honors, 221-231
Degrees Awarded in 1952, 221-230
Dietetics and Institutional Management, 91
Division of Arts, 48, 55-62
Division of Arts at Carthagena, 39, 40, 48, 62
Division of Business Administration, 48, 63-70
Division of Education, 48, 71-83
Division of Science, 48, 84-101
Drafting and Mechanical Technology, 215, 216
Economics, 65, 67, 68, 117-120
Education, 120-127
Education, Division of 48, 71-83
Education, Elementary, 73, 80-83
Education, Secondary, 74, 82, 83
Educational Aims, 42
Electrical Engineering, 43, 48, 196-200
Award of Excellence, 44, 230
Electrical Technology, 212, 213, 217, 218
Elementary Education, 73, 80-83
Engineering, College of, 43, 48, 188-210
English, 127-131
Enrollment, 231
Expenses, 53, 54, 212
Extracurricular Activities, 45
Faculty, 16-41
French, 142, 143
Full-time Students, 53, 54
General Engineering, 209-210
General Information, 42-47
General Studies, 217
Geology, 87, 131-133
The University of Dayton

1. Field House
2. Albert Emanuel Library
3. Business Annex
4. Old Gymnasium
5. St. Mary's Hall
6. Chaminade Hall
7. Chapel
8. St. Joseph's Hall
9. Stadium
10. Music Building
11. Alumni Hall
12. Meyer-Zehler Hall
13. ROTC Building
14. Mechanical Engineering Building
15. Student Union
16. Chemistry Annex