Duquesne University
Pittsburgh, Pennsylvania

UNDERGRADUATE CATALOG
1983-1985

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The provisions of this catalog are to be considered directive in character. The University reserves the right to make any changes that seem necessary or desirable, including fees, tuition and room and board.
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Remission Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 14</td>
<td>Wednesday Latest Date for Fall Semester Pre-Registration with Pay-By-Mail Option</td>
<td>Latest Date for 80% Tuition Remission for TOTAL WITHDRAWAL from the University</td>
</tr>
<tr>
<td>August 25</td>
<td>Wednesday Final Registration</td>
<td>Latest Date for 40% Tuition Remission for TOTAL WITHDRAWAL from the University</td>
</tr>
<tr>
<td>August 26</td>
<td>Thursday Final Registration</td>
<td>Latest Date for 20% Tuition Remission for TOTAL WITHDRAWAL from the University</td>
</tr>
<tr>
<td>August 27</td>
<td>Friday Final Registration</td>
<td></td>
</tr>
<tr>
<td>August 28</td>
<td>Saturday Latest Date to Register Without Late Fee</td>
<td></td>
</tr>
<tr>
<td>August 28</td>
<td>Saturday Latest Date to Cancel Fall 1982 Registration without Penalty</td>
<td></td>
</tr>
<tr>
<td>August 30</td>
<td>Monday Fall Semester Begins</td>
<td></td>
</tr>
<tr>
<td>September 6</td>
<td>Monday Holiday Labor Day</td>
<td></td>
</tr>
<tr>
<td>September 7</td>
<td>Tuesday Latest Date to Register and for Change of Schedule</td>
<td></td>
</tr>
<tr>
<td>September 11</td>
<td>Saturday Latest Date to Declare Pass/Fail No remission of tuition for reduced class schedule after this date</td>
<td></td>
</tr>
<tr>
<td>September 17</td>
<td>Friday Latest Date for December 1982 Graduates to Apply for Graduation</td>
<td></td>
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<tr>
<td>September 18</td>
<td>Saturday Latest Date for 40% Tuition Remission for TOTAL WITHDRAWAL from the University</td>
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<tr>
<td>September 25</td>
<td>Saturday Latest Date for 20% Tuition Remission for TOTAL WITHDRAWAL from the University</td>
<td></td>
</tr>
<tr>
<td>October 15</td>
<td>Friday Latest Date for Undergraduates to remove Temporary 1 Grades from Spring Semester and Summer Session 1982 1 grades not removed on or before this date convert to F's</td>
<td></td>
</tr>
<tr>
<td>October 22</td>
<td>Friday Due Date for Instructors to Submit Undergraduate 1 Grade Removal Grades</td>
<td></td>
</tr>
<tr>
<td>October 22</td>
<td>Friday Latest Date to Submit Mid-Term Grades</td>
<td></td>
</tr>
<tr>
<td>October 25</td>
<td>Monday Latest Date for December Graduates to Submit Thesis Outline</td>
<td></td>
</tr>
<tr>
<td>October 29</td>
<td>Friday Latest Date for Undergraduates other than First Semester Freshmen to Withdraw with W Grade</td>
<td></td>
</tr>
<tr>
<td>November 1</td>
<td>Monday Holiday All Saints Day</td>
<td></td>
</tr>
<tr>
<td>November 2</td>
<td>Tuesday Latest date to follow the Monday class schedule Pre-registration for Spring Semester Begins Other dates Nov 17 18 19 20 29 30 Dec 1 (W H F S M T W)</td>
<td></td>
</tr>
<tr>
<td>November 20</td>
<td>Saturday Last Class before Thanksgiving Holidays</td>
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<tr>
<td>November 29</td>
<td>Monday First Class Day after Thanksgiving Holidays</td>
<td></td>
</tr>
<tr>
<td>December 1</td>
<td>Wednesday Latest Date for Spring Semester Pre-Registration with Pay-By-Mail Option</td>
<td></td>
</tr>
<tr>
<td>December 6</td>
<td>Monday Latest Date for December 1982 Graduates to submit Thesis and take Comprehensives</td>
<td></td>
</tr>
<tr>
<td>December 8</td>
<td>Wednesday Holiday Immaculate Conception</td>
<td></td>
</tr>
<tr>
<td>December 10</td>
<td>Friday Latest Date for First Semester Freshmen to Withdraw with W Grade</td>
<td></td>
</tr>
<tr>
<td>December 16</td>
<td>Thursday Final Examinations Begin Other dates Dec 17 18 20 21 22 (H F S M T W)</td>
<td></td>
</tr>
<tr>
<td>December 22</td>
<td>Wednesday Fall Semester Ends Latest Date for December graduating students to pay accounts and complete degrees Latest Date for Graduate Students to Remove 1 Grades from the Spring Semester and Summer Session</td>
<td></td>
</tr>
<tr>
<td>December 22</td>
<td>Wednesday Latest Date for Graduate Students to Remove 1 Grades from the Spring Semester and Summer Session</td>
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**SPRING SEMESTER-1983**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>January 6</td>
<td>Thursday Latest Date for Spring Semester Pre-Registration with Pay-By-Mail Option</td>
</tr>
<tr>
<td>January 7</td>
<td>Thursday Final Registration</td>
</tr>
<tr>
<td>January 8</td>
<td>Saturday Latest Date to Register without Late Fee</td>
</tr>
<tr>
<td>January 8</td>
<td>Saturday Latest Date to Cancel Spring 1983 Registration without Penalty</td>
</tr>
<tr>
<td>January 10</td>
<td>Monday Spring Semester Begins</td>
</tr>
<tr>
<td>January 15</td>
<td>Saturday Latest Date to Register and for Change of Schedule</td>
</tr>
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<td>January 21</td>
<td>Friday Latest Date to Declare Pass/Fail No remission of tuition for a reduced class schedule obtained after this date</td>
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<td>January 22</td>
<td>Saturday Latest Date for 80% Tuition Remission for TOTAL WITHDRAWAL from the University</td>
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<td>January 28</td>
<td>Friday Latest Date for 40% Tuition Remission for TOTAL WITHDRAWAL from the University</td>
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<tr>
<td>January 29</td>
<td>Saturday Latest Date for 20% Tuition Remission for TOTAL WITHDRAWAL from the University</td>
</tr>
<tr>
<td>February 5</td>
<td>Saturday Reading Day</td>
</tr>
<tr>
<td>February 14</td>
<td>Monday Latest Date for Undergraduates to Remove Temporary 1 Grade from the Fall 1982 Semestre 1 Grades not removed on or before this date convert to F's</td>
</tr>
<tr>
<td>February 15</td>
<td>Tuesday Latest Date for Undergraduates other than First Semester Freshmen to Withdraw with W Grade</td>
</tr>
<tr>
<td>February 25</td>
<td>Friday Latest Date for Reporting Mid-Term Grades</td>
</tr>
<tr>
<td>March 4</td>
<td>Friday Latest Date for Undergraduates other than First Semester Freshmen to Withdraw with W Grade</td>
</tr>
<tr>
<td>March 9</td>
<td>Tuesday Last Class before Easter Holidays</td>
</tr>
<tr>
<td>March 11</td>
<td>Friday First Class Day after Easter Holidays</td>
</tr>
<tr>
<td>March 15</td>
<td>Friday Latest Date for Spring Semester Begins April 6-14 incl (H F S M T W)</td>
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<tr>
<td>March 29</td>
<td>Tuesday Latest Date for May 1983 Graduates to Submit Thesis and Take Comprehensives</td>
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<tr>
<td>April 6</td>
<td>Wednesday Latest Date for May 1983 Graduates to Submit Thesis and Take Comprehensives</td>
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<tr>
<td>April 8</td>
<td>Friday Latest Date for May 1983 Graduates to Submit Thesis and Take Comprehensives</td>
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<td>April 15</td>
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</tr>
<tr>
<td>April 22</td>
<td>Friday Latest Date for First Semester Freshmen to Withdraw with W Grade</td>
</tr>
<tr>
<td>April 27</td>
<td>Wednesday Final Examinations Begin Other dates April 28 29 30 May 2 3 (H F S M T)</td>
</tr>
<tr>
<td>May 3</td>
<td>Tuesday Latest Date for Graduate Students to Remove 1982 Fall Semester 1 Grades</td>
</tr>
<tr>
<td>May 3</td>
<td>Tuesday Spring Semester Ends Latest Date for May Graduating Students to complete Degrees</td>
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<tr>
<td>May 6</td>
<td>Friday University Convocation and Honors Day</td>
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<tr>
<td>May 6</td>
<td>Friday Graduation Mass</td>
</tr>
<tr>
<td>May 7</td>
<td>Saturday Commencement Exercises</td>
</tr>
<tr>
<td>May 7</td>
<td>Saturday Holiday Ascension Day</td>
</tr>
<tr>
<td>May 12</td>
<td>Thursday Latest Date for Fall Semester Pre-Registration with Pay-By-Mail Option</td>
</tr>
<tr>
<td>July 13</td>
<td>Wednesday Latest Date for Fall Semester Pre-Registration without Pay-By-Mail Option</td>
</tr>
<tr>
<td>August 12</td>
<td>Friday Latest Date for Fall Semester Pre-Registration without Pay-By-Mail Option</td>
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</table>
### FALL SEMESTER—1983

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>July 15</td>
<td>Friday Pharmacy Externship Begins</td>
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<tr>
<td>August 24</td>
<td>Wednesday Latest Date for Fall Semester Pre-Registration with Pay-By-Mail Option</td>
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<tr>
<td>August 25</td>
<td>Thursday Latest Date for Fall Semester Pre-Registration with Pay-By-Mail Option</td>
</tr>
<tr>
<td>August 26</td>
<td>Friday Final Registration</td>
</tr>
<tr>
<td>August 27</td>
<td>Saturday Final Registration</td>
</tr>
<tr>
<td>August 27</td>
<td>Saturday Latest Date to Register without Late Fee</td>
</tr>
<tr>
<td>August 28</td>
<td>Saturday Latest Date to Cancel Fall 83 Registration without Penalty</td>
</tr>
<tr>
<td>August 29</td>
<td>Monday Fall Semester Begins</td>
</tr>
<tr>
<td>September 5</td>
<td>Monday Holiday Labor Day</td>
</tr>
<tr>
<td>September 6</td>
<td>Tuesday Latest Date to Register and for Change of Schedule</td>
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</table>

### SPRING SEMESTER—1984

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>November 30</td>
<td>Thursday Latest Date for Spring Semester Pre-Registration with Pay-By-Mail Option</td>
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<tr>
<td>January 5</td>
<td>Thursday Final Registration</td>
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<tr>
<td>January 6</td>
<td>Friday Final Registration</td>
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<tr>
<td>January 7</td>
<td>Saturday Final Registration</td>
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<tr>
<td>January 7</td>
<td>Saturday Latest Date to Register without Late Fee</td>
</tr>
<tr>
<td>January 9</td>
<td>Monday Spring Semester Begins</td>
</tr>
<tr>
<td>January 14</td>
<td>Saturday Spring Semester Begins</td>
</tr>
<tr>
<td>January 20</td>
<td>Friday Latest Date to Register and for Change of Schedule</td>
</tr>
<tr>
<td>January 21</td>
<td>Saturday Latest Date for May 84 Graduates to Apply for Graduation</td>
</tr>
<tr>
<td>January 27</td>
<td>Friday Latest Date for 80% Tuition Remission for TOTAL WITHDRAWAL from the University</td>
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<td>Saturday Latest Date for 40% Tuition Remission for TOTAL WITHDRAWAL from the University</td>
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<td>February 4</td>
<td>Saturday Latest Date for 20% Tuition Remission for TOTAL WITHDRAWAL from the University</td>
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<td>February 13</td>
<td>Monday Reading Day</td>
</tr>
<tr>
<td>March 2</td>
<td>Friday Due Date for Instructors to Submit I Grade Removal Grades for the Fall 83 Semester</td>
</tr>
<tr>
<td>March 9</td>
<td>Friday Latest Date for Reporting Mid-Term Grades</td>
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<tr>
<td>March 16</td>
<td>Friday Latest Date for Undergraduates other than First Semester Freshmen to Withdraw with W Grade</td>
</tr>
<tr>
<td>April 5</td>
<td>Thursday Pre-Registration for 84 Fall Semester Begins Other dates April 5-13 incl (F S M T W H)</td>
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<tr>
<td>April 13</td>
<td>Friday Latest Date for May 84 Graduates to Pay Accounts</td>
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<tr>
<td>April 13</td>
<td>Friday Latest Date for Spring Semester Pre-Registration with Pay-By-Mail Option</td>
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<tr>
<td>April 17</td>
<td>Tuesday Last Class Day before Easter Holidays</td>
</tr>
<tr>
<td>April 25</td>
<td>Wednesday Final Examinations Begin Other dates April 26 27 28 30 May 1 (W H F S M T W)</td>
</tr>
<tr>
<td>April 25</td>
<td>Wednesday Latest Date for Graduate Students to Remove 83 Fall Semester 1 Grades</td>
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<tr>
<td>May 1</td>
<td>Tuesday Spring Semester Ends Latest Date for May 84 Graduating Students to complete Degrees</td>
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<tr>
<td>May 4</td>
<td>Friday University Convocation and Honors Day</td>
</tr>
<tr>
<td>May 4</td>
<td>Friday Graduation Mass '</td>
</tr>
<tr>
<td>May 5</td>
<td>Saturday Commencement Exercises</td>
</tr>
<tr>
<td>May 31</td>
<td>Thursday Holiday Ascension Day</td>
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<tr>
<td>July 13</td>
<td>Friday Latest Date for Fall Semester Pre-Registration with Pay-By-Mail Option</td>
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### FALL SEMESTER—1984

<table>
<thead>
<tr>
<th>Date</th>
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<tbody>
<tr>
<td>July 13</td>
<td>Friday</td>
<td>Latest date for pre-registration with pay-by-mail option</td>
</tr>
<tr>
<td>August 22</td>
<td>Wednesday</td>
<td>Final Registration</td>
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<tr>
<td>August 23</td>
<td>Thursday</td>
<td>Final Registration</td>
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<tr>
<td>August 24</td>
<td>Friday</td>
<td>Final Registration</td>
</tr>
<tr>
<td>August 25</td>
<td>Saturday</td>
<td>Latest date to cancel registration without penalty</td>
</tr>
<tr>
<td>August 25</td>
<td>Saturday</td>
<td>Latest date to register without late fee</td>
</tr>
<tr>
<td>August 27</td>
<td>Monday</td>
<td>Holiday Labor Day</td>
</tr>
<tr>
<td>September 3</td>
<td>Monday</td>
<td>Thesis outline and schedule comprehensive</td>
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<tr>
<td>September 4</td>
<td>Tuesday</td>
<td>Latest date to register</td>
</tr>
<tr>
<td>September 8</td>
<td>Saturday</td>
<td>Latest date for change of class schedule</td>
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<tr>
<td>September 15</td>
<td>Saturday</td>
<td>Latest date to declare pass/fail</td>
</tr>
<tr>
<td>September 21</td>
<td>Friday</td>
<td>Holiday labor day</td>
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<tr>
<td>September 22</td>
<td>Saturday</td>
<td>Latest date for 20% tuition remission for total withdrawal from the university</td>
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<tr>
<td>October 10</td>
<td>Wednesday</td>
<td>Reading Day</td>
</tr>
<tr>
<td>October 19</td>
<td>Friday</td>
<td>Latest date for undergraduates to remove temporary I grades from spring semester and summer session I grades not removed by this date to convert to F</td>
</tr>
<tr>
<td>October 19</td>
<td>Friday</td>
<td>Latest date for submit mid-term grades</td>
</tr>
<tr>
<td>October 22</td>
<td>Monday</td>
<td>Latest date for december prospective graduates to submit thesis outline and schedule comprehensives</td>
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<tr>
<td>October 26</td>
<td>Friday</td>
<td>Due date for instructors to submit undergraduate I grade removal grades</td>
</tr>
<tr>
<td>October 26</td>
<td>Friday</td>
<td>Latest date for undergraduates other than first semester freshmen to withdraw with W grade</td>
</tr>
<tr>
<td>November 1</td>
<td>Thursday</td>
<td>Holiday all saints day</td>
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<tr>
<td>November 13</td>
<td>Tuesday</td>
<td>Spring semester pre-registration begins</td>
</tr>
<tr>
<td>November 24</td>
<td>Monday-Saturday</td>
<td>Holiday thanksgiving recess</td>
</tr>
<tr>
<td>November 29</td>
<td>Thursday</td>
<td>Pre-registration for spring semester ends latest date for pre-registration with pay-by-mail option</td>
</tr>
<tr>
<td>December 7</td>
<td>Friday</td>
<td>Latest date for december prospective graduates to submit approved theses to school office and take comprehensives</td>
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<tr>
<td>December 8</td>
<td>Saturday</td>
<td>Holiday immaculate conception</td>
</tr>
<tr>
<td>December 11</td>
<td>Tuesday</td>
<td>Reading day</td>
</tr>
<tr>
<td>December 14</td>
<td>Friday</td>
<td>Reading Day</td>
</tr>
<tr>
<td>December 15</td>
<td>Saturday</td>
<td>Latest date for first semester freshmen to withdraw with W grade</td>
</tr>
<tr>
<td>December 17-22</td>
<td>Monday-Saturday</td>
<td>Final examinations</td>
</tr>
<tr>
<td>December 22</td>
<td>Saturday</td>
<td>Semester ends latest date for graduating students to complete degrees</td>
</tr>
<tr>
<td>December 22</td>
<td>Saturday</td>
<td>Latest date for graduate students to remove temporary I grades from preceding spring and summer</td>
</tr>
<tr>
<td>December 24</td>
<td>Monday</td>
<td>Holiday Christmas recess renee</td>
</tr>
</tbody>
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### SPRING SEMESTER—1985

<table>
<thead>
<tr>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>November 29</td>
<td>Thursday</td>
<td>Latest date for pre-registration with pay-by-mail option</td>
</tr>
<tr>
<td>January 10</td>
<td>Thursday</td>
<td>Final registration</td>
</tr>
<tr>
<td>January 11</td>
<td>Friday</td>
<td>Final registration</td>
</tr>
<tr>
<td>January 12</td>
<td>Saturday</td>
<td>Latest date to cancel registration without penalty</td>
</tr>
<tr>
<td>January 12</td>
<td>Saturday</td>
<td>Latest date to register without late fee</td>
</tr>
<tr>
<td>January 14</td>
<td>Monday</td>
<td>Semester begins</td>
</tr>
<tr>
<td>January 19</td>
<td>Saturday</td>
<td>Latest date to register</td>
</tr>
<tr>
<td>January 19</td>
<td>Saturday</td>
<td>Latest date for change of class schedule</td>
</tr>
<tr>
<td>January 19</td>
<td>Saturday</td>
<td>Latest date to declare pass/fail</td>
</tr>
<tr>
<td>January 19</td>
<td>Saturday</td>
<td>No refund after this date for credits dropped</td>
</tr>
<tr>
<td>Pharmacy V externship begins</td>
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<td></td>
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<tr>
<td>Pharmacy V externship ends</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>Saturday</td>
<td>Latest date for 80% tuition remission for total withdrawal from the university</td>
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<td>October 10</td>
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</tr>
<tr>
<td>March 1</td>
<td>Friday</td>
<td>Latest date for fall semester pre-registration begins</td>
</tr>
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<td>March 8</td>
<td>Friday</td>
<td>Latest date for may prospective graduates to submit approved theses to school office and take comprehensives</td>
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<tr>
<td>March 8</td>
<td>Friday</td>
<td>Fall semester pre-registration begins</td>
</tr>
<tr>
<td>March 25</td>
<td>Monday</td>
<td>Holiday Easter recess</td>
</tr>
<tr>
<td>March 27</td>
<td>Wednesday</td>
<td>Latest date for may prospective graduates to submit approved theses to school office and take comprehensives</td>
</tr>
<tr>
<td>April 1 thru 6</td>
<td>Monday thru Sat</td>
<td>Holiday assencion day</td>
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<tr>
<td>April 8</td>
<td>Monday</td>
<td>Latest date for may prospective graduates to submit approved theses to school office and take comprehensives</td>
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<td>April 11</td>
<td>Thursday</td>
<td>Latest date for spring semester ends latest date for pre-registration with pay-by-mail option</td>
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<tr>
<td>May 7</td>
<td>Tuesday</td>
<td>Final examinations</td>
</tr>
<tr>
<td>May 7</td>
<td>Tuesday</td>
<td>Semester ends latest date for graduating students to complete degrees</td>
</tr>
<tr>
<td>May 7</td>
<td>Tuesday</td>
<td>Latest date for graduate students to remove temporary I grades of the preceding fall</td>
</tr>
<tr>
<td>May 10</td>
<td>Friday</td>
<td>University Convocation and honors day</td>
</tr>
<tr>
<td>May 10</td>
<td>Friday</td>
<td>Graduation Mass</td>
</tr>
<tr>
<td>May 11</td>
<td>Saturday</td>
<td>Commencement</td>
</tr>
<tr>
<td>May 16</td>
<td>Thursday</td>
<td>Holiday Ascension Day</td>
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<tr>
<td>May 27</td>
<td>Monday</td>
<td>Holiday Memorial Day</td>
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<tr>
<td>July 4</td>
<td>Thursday</td>
<td>Holiday Independence Day</td>
</tr>
<tr>
<td>August 15</td>
<td>Thursday</td>
<td>Holiday assumption</td>
</tr>
</tbody>
</table>
### All Degrees and Programs Offered in the University

**SCHOOL**
- Bachelor's Degree
- Master's Degree
- Doctorate

**Graduate School of Education**
- Early Childhood Education
- Elementary Education
- Secondary Education
- Special Education
- Interdisciplinary

**School of Business and Administration**
- Accounting
- Management
- Economics
- Finance
- Pre-Law

**School of Fine Arts**
- Bachelor of Music
  - Education
  - Voice

**School of Music**
- Bachelor of Science in Music
  - Medical Technology
  - Pharmacy
  - Radiological Health

**School of Liberal Arts and Sciences**
- Biology
- Chemistry
- Environmental Science
- Geology
- Government
- History
- Philosophy
- Psychology

**School of Pharmacy**
- Bachelor of Science in Pharmacy

**School of Health Sciences**
- Bachelor of Science in Health Sciences
  - Hospital Pharmacy

### HISTORY

Duquesne University first opened its doors as the Pittsburgh Catholic College of the Holy Ghost in October 1878 with an enrollment of 40 students and a faculty of seven. The school grew rapidly in its first years until it moved from its original location on Wylie Avenue in the city's Uptown section to its present site, a scenic 39-acre hilltop area called The Bluff which overlooks downtown Pittsburgh. By 1911 the school had achieved university status at which time the name Duquesne University of the Holy Ghost was adopted in honor of the 18th century governor general of French Canada the Marquis de Duquesne who first brought Catholic services to Pittsburgh while it was under French dominion. Duquesne's great period of student growth after World War II along with the necessity of refurbishing a make-shift physical plant led the university to begin an ambitious program of planned physical expansion and modernization in 1950. Now in the enviable position of having completed most of its physical development needs for the foreseeable future the University is a modern attractive highly functional educational facility which has more than tripled from its early 12.5 acres to its present self-enclosed 39-acre campus site.

Today Duquesne University is not only one of the leading private institutions in Pennsylvania but also is one of several major private Catholic urban universities in the United States. The University has over 6,000 students enrolled in its eight schools: College of Liberal Arts and Sciences (1878), Graduate School of Liberal Arts and Sciences (1911) and the Schools of Law (1911), Business and Administration (1913), Pharmacy (1925), Music (1926), Education (1929) and Nursing (1937). Duquesne offers a wide variety of programs and curricula from which students may select freely in accordance with their interests and capabilities. Duquesne University is one of several major private Catholic urban universities in the United States. The University has over 6,000 students enrolled in its eight schools: College of Liberal Arts and Sciences (1878), Graduate School of Liberal Arts and Sciences (1911) and the Schools of Law (1911), Business and Administration (1913), Pharmacy (1925), Music (1926), Education (1929) and Nursing (1937). Duquesne's eight schools offer degree programs.

### PHILOSOPHY AND OBJECTIVES

While Duquesne University can look with pride at the remarkable transformation of the campus effected by its physical development and expansion program it has never lost sight of its primary role as an educational institution and its responsibilities to the students who form the Duquesne family. A Catholic institution operated by the Congregation of the Holy Ghost, Duquesne is open to students of all religions and creeds. A community committed to the ideal of producing young men and women whose minds seek intellectual freedom and truth, the University seeks to impart to its students the ability to judge and make decisions independently to interrelate disciplines and experience and to balance memory reason and imagination. In essence the Duquesne student is ideally an individual with a fully integrated personality and a sensitivity and responsiveness to human. The educational objectives of the University include the development of a sound philosophy of life through an integration of spiritual, physical, intellectual, moral, social, and aesthetic goals and values, and the fostering of a spirit of inquiry and scholarship necessary for continuing intellectual and professional growth the formation of a well-balanced, self-assured personality and the imparting of an attitude of commitment to self-evaluation and self-improvement both as an individual and a contributing member of the community of man.

Duquesne offers a wide variety of programs and curricula from which students may select freely in accordance with their interests and capabilities. Duquesne University is one of several major private Catholic urban universities in the United States. The University has over 6,000 students enrolled in its eight schools: College of Liberal Arts and Sciences (1878), Graduate School of Liberal Arts and Sciences (1911) and the Schools of Law (1911), Business and Administration (1913), Pharmacy (1925), Music (1926), Education (1929) and Nursing (1937). Duquesne's eight schools offer degree programs.

### POLICY STATEMENT ON INTERNATIONAL EDUCATION

The mission of Duquesne University's founders, the Holy Ghost Congregation, has always included service to peoples outside of the United States. Duquesne University also is committed to providing an educational environment which recognizes cultural and national pluralism. Duquesne welcomes qualified students from throughout the world and encourages its students and faculty to take advantage of opportunities to study and teach abroad. The University believes that the sharing of the multiple traditions and mores of societies is an invariable element in the educational process. In a world that is growing ever smaller it is imperative that Duquesne reach out to peoples of different cultures to afford them the opportunity to acquire educational experiences not otherwise available to them. Interaction among international and American faculty and students will enrich all and enhance their ability to be better citizens of our shared world.

Duquesne University asserts its commitment to develop and maintain programs and curricula which promote and express respect for persons of diverse cultures and backgrounds and which provide educational bridges linking the peoples of the world.

### THE UNIVERSITY SETTING

Located adjacent to downtown Pittsburgh Duquesne University's modern hilltop campus is readily accessible to the business entertainment and shopping centers of the city. While still offering students the privacy and peace of its own self-enclosed 39-acre site. Long noted as one of the world's greatest steel-producing centers Pittsburgh combines the features of urban living with many of the charms and personal...
characteristics of a much smaller town. The third largest corporate headquarters in the U.S. behind New York and Chicago. Pittsburgh was also the first recent survey of urban life. To be the fourth most desirable metropolitan area for overall quality of life in the U.S. Although most visitors and new residents who come to the city are conditionally by the cold Smog like image. They soon learn that the Pittsburgh which emerced from the previously abandoned Valencia redevelopment program is not only a city of clean air and streets safe neighborhoods and a bustling economy but that downtown more than any other metropolitan area in the eastern end of the city is a major entertainment and nightlife area. The administration building is dedicated in 1884. Recently renovated it houses the University's Office of Admissions and Business Offices. Testing Bureau Career Planning and Placement Office Learning and Counseling Center Financial Aid Office and Division of University Relations. Administering the building is the University Chapel which offers daily Mass and the Campus Theatre.

Assumption Hall, the oldest residence hall on campus, was dedicated in 1956. A four-story structure, it houses the School of Education Curriculum Library Reading Clinic Guidance and Counseling Clinic and the Institute of Educational Research.

College Hall and library, a six-story classroom and office building dedicated in 1870, is the seat of the College of Liberal Arts and Sciences and the Graduate School of Liberal Arts and Sciences. Housing 10 of its individual departments and faculties, the School of Nursing, and dedicated on the second floor, the Admin building, the College Hall also features a journalism laboratory, simulation room, a journalism laboratory, seminar rooms, graphic arts classroom and a little theatre performance room. The women's recreation center included a gym and a small studio area is located on the ground floor.

The Duquesne Towers, a 17-story air-conditioned double-tower residence for 2,400 men and women, featuring separate housing wings was dedicated in 1970. The facility features a full-size indoor swimming pool with a sun deck, offices of the Residence Life Division, the Campus Health Services area, a main student lounge and small ballroom, each floor, phone line in each room, and a resident dining hall with a 2,500-student capacity.

The Duquesne Union, a modern architectural facility with an innovative concrete and glass design is the center of campus activities and student life. Dedicated in 1967, it houses the offices of the Student Life, the Athletic Department, and various student organizations and interest groups. Facilities include three separate dining areas, a ballroom and student lounge, the campus bookstore, the campus information center and a recreation center which features eight bowling lanes, pocket billiards table tennis, a small gymnasium, and an indoor jogging track. The student activities program offers an array of extracurricular activities.

The G & G Building in addition to housing various administrative offices of the University is the site of a library on some undergraduate classes. Also houses the University's Vocational Office.

The Gymnasium is used as a practice facility by various collegiate teams. The building, which houses the University's intramural sports program, features a modern, fully equipped weight training facility, the Dukes Court Weight Room, which is open to the student body, and the student affairs programs. The University's intramural sports program, the Ed C. McCloskey Field, is dedicated in the mid-1970s is the center for outdoor intramural activity. Other athletic facilities include three self-enclosed tennis courts and two outdoor basketball courts, one of which is converted for street hockey in the winter months.

The Edward J. Hanley Hall of Law, dedicated in 1982, resulted from the renovation and expansion of the old University Library building. The new facility houses faculty offices and administrative offices for law students. The administration building, the library building, the school of law, and the law school, are the University's intramural sports program. The gym features a modern, fully equipped weight training facility, the Dukes Court Weight Room, which is open to the student body, and the student affairs programs. The University's intramural sports program, the Ed C. McCloskey Field, is dedicated in the mid-1970s is the center for outdoor intramural activity. Other athletic facilities include three self-enclosed tennis courts and two outdoor basketball courts, one of which is converted for street hockey in the winter months.

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School of Pharmacy
Accreditation
American Council on Pharmaceutical Education
Pennsylvania State Board of Pharmacy
Membership
American Association of Colleges of Pharmacy

EVENING STUDY
The School of Business and Administration and the College of Liberal Arts and Sciences offer evening classes for full-time and part-time students each semester and during the Summer Session. These are for persons whose employment does not permit them to attend as regular day students.

Through careful planning and consultation with academic advisors, the bachelor's degree program may be completed by evening study in some major areas offered by these two schools. Other undergraduate programs also schedule occasional evening courses but it is not possible to complete their degree requirements through evening attendance alone.

Prospective evening undergraduate students should consult with the office of the Dean of the school in which they are interested for information about the opportunity for evening study on a continuing basis.

SUMMER SESSIONS
Many undergraduate and graduate courses are offered each summer in most areas. They are open to qualified Duquesne students and to those from other colleges and universities. The sessions of varying length begin in May and run through mid-August. Short term offerings of one and two week duration usually at the graduate level are scheduled before and after the regular session.

SYSTEMS CENTER/COMPUTER RESOURCES
The Systems Center is a service department of the University which reports to the Vice President for Business and Administration. The Systems Center has a UNIVAC 1100/60 computer with 2 megabytes of main memory and 900 megabytes of disk storage. Time-sharing terminals are available at several locations on campus for student use. The facilities are open to all students and faculty members. The primary academic users are the School of Business and Administration; computer science majors and the math and physics departments.

The Systems Center also provides all the data processing services for the administrative offices of the University. Some of these services are reporting admissions and the financial recordkeeping requirements for the University. Students who work at the Center become involved in all aspects of its operation. These include systems design, programming, and actual computer operations.

Part II:
Programs and Courses

College of Liberal Arts and Sciences

HISTORY
In 1878 the Fathers of the Congregation of the Holy Ghost and the Immaculate Heart of Mary established a College of Arts and Letters which was incorporated in 1882 as Pittsburgh Catholic College of the Holy Ghost with authority to grant degrees in the arts and sciences. In 1911 the College and Universitv Council of the Commonwealth of Pennsylvania extended the charter to university status and approved the amendment in favor of the corporate title Duquesne University.

PHILOSOPHY AND OBJECTIVES
Duquesne University believes that education is concerned with the human person as a whole—mind and soul. It believes that each individual has the obligation to self-society and God to develop potential to the fullest. In this commitment, the College of Liberal Arts and Sciences sets its objectives and forms its curricula.

The objectives of the College are:
1. To provide a solid foundation for lifelong learning.
2. To develop an awareness of the methodologies and epistemologies of the major areas of knowledge so that evaluations and judgments may be valid.
3. To assist in both the growth of self-knowledge and the development of a philosophy of life.
4. To assist the individual to understand his relation to God and to nature.
5. To perfect that skill in the use of standard English necessary to clear coherent expression of one's thoughts, hopes, and ideals.
6. To cultivate a background for the learned professions and for scholarly pursuits.

CURRICULAR REQUIREMENTS

English Composition
Proficiency at the 102 level
Modern or Classical Language
Proficiency at the 202 or 212 level
Natural Sciences (Biology Chemistry Earth Sciences Computer Science Physics Mathematics)
Nine Credits

One two-semester sequential course must be completed.

SOCIAL SCIENCES

Political Science
Nine credits
Psychology
Sociology

At least two disciplines must be represented.

History
Nine credits

Literature

At least two disciplines must be represented.
Special Programs

**CONCENTRATED STUDIES PROGRAM**

Concentrated studies is a special developmental experience program designed to help students improve their basic skills and realize their full potential for college work. Students in the program take a prescribed block of college level courses during their freshman year and thereafter complete their education at Duquesne in the traditional manner.

Courses offered in the program:

- **001** BASIC LANGUAGE SKILLS
  - 4 credits each semester
- **002** BASIC CONCEPTS OF PSYCHOLOGY
  - 4 credits
- **003** FOUNDATIONS OF LANGUAGE LATIN
  - 4 credits each semester
- **007** PHYSICAL GEOLOGY
  - 4 credits
- **008** STUDY SKILLS
  - 1 credit

**OPERATIVE EDUCATION**

The University sponsors a Cooperative Education Program. Its purpose is two-fold: (1) to provide students with opportunities in which they can apply classroom learning to practical work and business settings while learning and gaining the types of experience unavailable in any classroom and (2) to offer employers a source of talented students who can serve in pre-professional capacities as full- or part-time employees and who will be prime candidates for full-time employment after graduation.

The program is open to any upper class students who have a minimum 2.5 quality point average. The full-time co-op student is limited to a four or six month work period (or tour) during which he would be a 40 hour a week paid employee of the cooperating employer. The work tour can be repeated with the same or a different cooperating employer upon the student's completion of a full semester of academic after the first work tour.

The part-time co-op (or parallel co-op) student is in effect a part-time employee while carrying a full academic load at the University. Parallel co-ops can be certified in semester after semester. Students in either program register for a credit course: Cooperative Work Experience. College of Arts and Sciences which carries one to nine credits. Full-time co-op students also have the option of registering for one or more academic courses during their co-op work tour.

For additional information, contact the College Cooperative Education Advisor or the Director Career Planning and Placement.

**PROGRAM IN WORLD LITERATURE**

The Departments of Classics, English and Modern Languages jointly offer a World Literature program—both with major and minor sequence. The program is designed to give the student an awareness of the historical and cultural framework in which Classical English and Modern Literatures have evolved their influence upon each other and an in-depth study of selected major literary works in these areas.

**COURSE OFFERINGS**

- **Major:** 24 credits (6 in the core and the remaining 18 credits distributed equally among Classics, English, and Modern Languages)
- **Minor:** 15 credits (6 in the core and the remaining 9 credits distributed equally among Classics, English, and Modern Languages)

**Core Course:** Readings in World Literature I and II (English)

**DEPARTMENTAL COURSE OFFERINGS**

- **Classics:** Any of the current offerings in Classical Literature either in translation or in the original language at the 200 level or above
- **Modern Languages:** Any of the current course offerings in Literature at the 300-400 level as approved by the department chairman

**Modern Languages:** Any of the current offerings in Modern Languages either in translation or in the original language, above the 302 level

**BACHELOR OF ARTS—LIBERAL ARTS AND GENERAL SCIENCES**

This program is designed for those students who prefer not to choose a formal major or minor offered in a traditional discipline. All requirements other than the major and minor must be completed. Students must select a major area of concentration: Humanities, Social Sciences, Natural Sciences. A concentration requires a minimum of 30 credit hours and a maximum of 39 hours. Courses must be chosen from courses 200 and above.

**PRE-LAW**

Students who intend to prepare for a career in law may select any subject area for the undergraduate major. They will be expected to meet degree requirements in the major department as well as graduation requirements of the law school of their choice.

**PRE-PROFESSIONAL HEALTH EDUCATION**

Students who intend to prepare for a career in nursing dentistry veterinary medicine or related fields may major in the subject area of their choice and should select a major as soon as possible. They must meet degree requirements of the major department as well as admission requirements of the professional school of their choice. A faculty committee on Pre-Medical Education assists the medically-oriented student.

**INTER-SCHOOL MINORS**

Inter-school minors are available in Business and Administration Education, Music and Pharmacy. For complete details, students should consult the Director of Academic Advising.

**BACHELOR'S/PROFESSIONAL SCHOOL**

A student who has completed all requirements and a total of 90 credits with a 3.5 average may apply for the bachelor/master's program. After successful completion of the master's program, the student will receive the bachelor's degree.

**BACHELOR'S/PROFESSIONAL SCHOOL**

A student who has completed 90 credits with a 3.5 overall average and satisfied all undergraduate curriculum requirements may apply for the bachelor's degree after the successful completion of the first year of professional work in an accredited medical or law school.

**LIBERAL ARTS ENGINEERING**

Students who intend to prepare for a career in engineering may enter a 3-2 binary program that Duquesne University maintains with Case Western Reserve University in Cleveland, Ohio. Students are expected to meet the curricular requirements of the College of Liberal Arts and Sciences except for the completion of a major program. Under the guidance of a liaison officer, they will normally complete the program at Duquesne in three years then enter an engineering program at Case.

Upon completion of the program, students will be awarded the B.S. Degree from Duquesne and the B.S. Degree from the School of Engineering at Case.

For complete details, consult with the Liaison Officer for the Binary Program in Engineering in the Mathematics Department.

**SECOND BACHELOR'S DEGREE**

A student who has received a bachelor's degree from another school may become eligible for a second bachelor's degree by earning an additional 30 semester hours in residence in the College of Liberal Arts and Sciences and by meeting all departmental and general education requirements not already satisfied. The additional 30 credits must be completed at the University and may not be taken through cross-registration.

**THREE-YEAR BACHELOR'S**

For information contact the Office of Admissions or the Dean of the College.

**CLEP AND ADVANCED PLACEMENT**

See page 132

**ACADEMIC REGULATIONS**

Electives

A maximum of 12 non-A & S credits may be applied to the BA/BS degree with the exception of certain approved inter-school minors which may extend this number to 15 or 18 credits.

**ACADEMIC LOAD**

Students may normally carry five courses in one semester. A schedule of more than five courses or 17 credits must be approved by the Dean. In the summer sessions, students normally carry one credit a week i.e., six credits in the six-week session. A 12-credit schedule in a regular semester is considered full-time. Students on academic probation may not take more than 15 credits.

**EFFECTIVE CATALOG**

Degree requirements are those stipulated in the catalog of the year in which a student matriculates. The student is responsible for knowing the requirements for the degree. Requirements may be changed without notice or obligation. This catalog has been prepared on the best information available as of July 1982.

**INTER-SCHOOL MINORS**

Inter-school minors are available in Business and Administration Education, Music and Pharmacy. For complete details, students should consult the Director of Academic Advising.

**MAJORS**

The College of Arts and Sciences offers the following majors:

- Art History
- Biochemistry
- Biology
- Chemistry
- Classics
- Classical Civilization
- Computer Science
- Criminal Justice
- Economics
- English
- French
- German
- Gerontology
- History
- Journalism
- Liberal Arts
- Engineering

**MINORS**

The College of Arts and Sciences offers the following minors:

- Mathematics
- Medical Media
- Communications
- Philosophy
- Physics
- Political Science
- Psychology
- Social Communication
- Social Services/Human Services
- Sociology
- Spanish
- Speech Pathology
- Audiology
- Theatre/Media
- Theology
- World Literature
Course Descriptions

ART DIVISION

Director Mrs Patricia S Ingram

Survey and period courses in the history of western art are offered by the Art Division of the Classics Department to introduce the concepts of art history to those who wish to extend their visual perimeters and to understand the role of the visual arts in Western culture. Qualified students are advised to take collateral courses in classics, history, philosophy, and psychology and additional upper division art history courses offered at member colleges of the Pittsburgh Council on Higher Education in addition to personal enrichment and heightened awareness of man’s will to create visual forms. The study of art history can lead to careers in teaching, publishing, museology, historic preservation, and urban redevelopment.

REQUIREMENTS FOR THE MAJOR

The major consists of 111 credits of History of Art plus 15 credits in upper division art courses and two upper division collateral courses selected from 250 Classical Tradition in America (Classics) 419 Renaissance Literature and the Arts (English) 406 Aesthetics (Philosophy) and 313 Archaeology and the Bible (Theology). Recommended elective 123 Classical Mythology.

REQUIREMENTS FOR THE MINOR

The minor consists of 12 credits of upper division courses. The prerequisites are six credits of introductory and survey courses at the 100 level or an equivalent.

101 Understanding Art 3 cr
A study of the techniques and styles of architecture, sculpture, painting, and the graphic arts in Western society with an emphasis on increasing the student’s comprehension of our visually oriented culture. Suggested preliminary for all upper division art history courses.

102 Introduction to Modern Art 3 cr
An attempt to render accessible to the spectator the realities formulated by the artists of the last two decades. Formal analysis of the art object and examination of the motivation forces which shaped its creation lead to an overall view of the structural framework of twentieth century painting and sculpture.

111 History of Art Ancient to Medieval World 3 cr
A chronologically oriented detailed presentation of the history of Western art. This survey deals with Near Eastern, Greek, Roman, Early Christian, and Medieval art. Can be elected to fulfill the history/literature requirement.

112 History of Art Renaissance to Modern World 3 cr
A continuation of 111 Surveys Renaissance. Baroque and Modern art in Western Europe. Can be elected to fulfill the history/literature requirement.

123 Classical Mythology 3 cr
A presentation of the major myths of Greece and Rome with special attention to contemporary interpretations of myth and the influence of myth on art and literature. (Offered by the Classics Department).

206 Greek Art 3 cr
A study of the architecture, sculpture, and painting of the Greek world from Minoan to Hellenistic times. The student is introduced to the extensive vocabulary of Greek art which has been a continuing formative force in Western art.

207 Roman Art 3 cr
An introduction to Roman innovations in architecture, sculpture, and painting. The background of Roman art in Etruscan, Greek, and Egyptian civilizations is investigated and the impact of Roman art in forming Christian Art. Renaissance Art and Neo-Classicism is analyzed. (Offered in alternate years).

208 French Art 3 cr
A survey which discusses ideas, schools, and styles in the history of French art from the Roman occupation to the present. Highlights are Medieval Renaissance, Rococo, and Modern art. (Offered in alternate years).

210 American Art 3 cr
An overview of American architecture, painting, sculpture, and decorative arts intended to acquaint the student with the major trends and contributions of American art from colonial to modern times. (Offered in alternate years).

260 The Classical Tradition in America 3 cr
A study of the influences of Greco-Roman civilization on American cultural life.

312 Late Medieval Art 3 cr
Western European Art from the 12th to the 14th century. Focus is upon the development of stone vaulting systems, monumental architectural sculpture, stained glass, fresco, and panel painting and illuminated manuscripts in England, France, Italy, and Germany. (Offered in alternate years).

321 15th Century Renaissance Art 3 cr
An investigation of the Renaissance spirit of the century. Concentration is upon comparison of Northern and Southern attitudes of man, nature and social structure and to materials techniques, pictorial representation and iconography. (Offered in alternate years).

331 Art of the 19th Century 3 cr
A survey of the visual arts in the 19th century. The visual arts not only reflect the dramatic changes in the arts - use of form, color, line, texture, and light but also emphasize the changing political, religious, and social values in society.

332 Art of the 20th Century 3 cr
A chronological study of 20th century painting and sculpture which looks beyond visual perception and tries to find the essence and meaning of reality in forming Christian Art, Renaissance Art and Neo-Classicism is analyzed. (Offered in alternate years).

From cubism to conceptual art from Picasso to Pollock and Pop. This course offers a thorough exploration of the visual arts of the 20th century.

370 371 372 373 374 375 376 Special Studies in Art History 3 cr
An occasional course in this series is offered when special interests of students and faculty can be served. Courses offered include The Image of Women in Art, Picasso Impressionism, Egyptian Art.

431 Selected Readings Variable Topics 3 cr
In-depth research using the resources of Pittsburgh area libraries and of source material relevant to the history of Western art. Prerequisite: Permission of instructor.

441 American Painting and Sculpture 3 cr
An examination of the forms created by American painters and sculptors from the early 17th through the late 20th century. A special class is offered annually. The emphasis is on understanding of American concept of reality during these years, particularly in the 20th century.

442 American Architecture 3 cr
Construction styles, building types and concepts of city planning in American architecture from the 17th century to the present. Field trips to important monuments in the Pittsburgh area including Falling Water are scheduled.

443 American Decorative Arts 3 cr
Decorative arts from the Pilgrims to the Bauhaus examined in context. Historical formal, technical, and cultural. Field trips to Carnegie Institute and other locations can be scheduled. (Offered in alternate years).

477 Introduction to Museum Studies 3 cr
An overview of the various functions of art and associated museums in American society. Prerequisite: Permission of Department.

478 Internship 3 cr
Practical experience in art related areas introduces the student to the many opportunities in the art field. Prerequisite: Permission of Department.

DEPARTMENT OF BIOLOGICAL SCIENCES

Chairman Howard G. Ehrlich Ph.D.

Biological science is the study of the existence of living organisms and their environment. It is a fundamental element in the advancement of modern medicine and technology. The department offers courses in the major areas of biology: anatomy, physiology, microbiology, and genetics. The department also offers courses in biochemistry, nutrition, and biotechnology.

Biochemistry: The study of the chemical processes that occur in living organisms.

Cell Biology: The study of the structure and function of cells.

Developmental Biology: The study of the development of organisms from fertilization to maturity.

Ecology: The study of the interactions between organisms and their environment.

Genetics: The study of heredity and variation in organisms.

Microbiology: The study of microorganisms and their role in disease and health.

Neuroscience: The study of the nervous system and its role in behavior and function.

Plant Biology: The study of the structure and function of plants.

Zoology: The study of animals and their role in the environment.

The department offers courses in introductory biology, cell biology, genetics, microbiology, and ecology. The department also offers courses in advanced topics such as immunology, biochemistry, and biotechnology.
REQUIREMENTS FOR THE MAJOR

A minimum of 31 semester hours is needed. Majors are required to take General Biology 111 112 and to select other courses so that a balance is achieved with experience in biology, inheritance structure and function at the molecular, cellular and organismal levels. Within that context students may follow their pre-approved courses during their senior year and apply them toward their undergraduate degrees.

Extracurricular requirements: Calculus I and II, General Chemistry I and II, Organic Chemistry I and II, 222 General or Analytical Physics.

Students also should consider extracurricular electives in chemistry, mathematics, and computer science. A minimum of 12 credits in Biology must be taken at Duquesne University for the major.

REQUIREMENTS FOR THE MINOR

The department offers two minor programs.

1. Professional Minor which consists of 111 112 and a minimum of 12 credits selected from the department's minor courses numbered 200 or above. Individual course prerequisites must be met.

2. Academic Minor which consists of 107 108 or 111 112 and a minimum of 12 credits selected from the department's courses numbered 200-395. Courses which are open to either non-majors may be selected. Individual course prerequisites must be met.

If a student wishes to apply for the Principles of Biology and 111 112—General Biology, the credits for the 107 108 will not apply to the total number required for the degree. These courses are not interchangeable.

NON-MAJOR COURSES

107 108 Principles of Biology 3 cr each

Study of the living world of which man is an integral part. It includes considerations of organization activity growth reproduction inheritance environmental influences and other interrelationships. This course is designed to provide the non-scientist with the biological information and principles necessary to assume an enlightened role in our increasingly complex society. Not for Biology Major credit. 107 is prerequisite to 108.

201 Biology of Microbes 3 cr

Examination of microbes as to what they are, how they grow, and how they may be controlled. Their relationship to other living things are why and how some of them cause disease. Not for Biology Major credit. Lecture.

202 Biology of Microbes Laboratory 1 cr

Illustrates methods of observation growth and identification of microbes as well as methods of controlling these organisms using sterilization techniques, disinfectants and antibiotics. Not for Biology Major credit. Prerequisites Biology 201 or concurrent registration. Laboratory.

206 Environmental Biology 3 cr

This course deals with the biological background for understanding environmental problems and concern with ecosystems, population and land use and pollution as well as legal aspects of the amelioration of environmental abuses. Not for Biology Major credit. Lecture.

207 Anatomy and Physiology 3 cr

Studies designed to provide students with a background in the areas of human body structure and the mechanisms underlying normal body functions. Prerequisites some previous exposure to introductory biology and chemistry is desirable. Not for Biology Major credit. Lecture.

208 Anatomy and Physiology Laboratory 1 cr

Laboratory includes examination of the micro and gross anatomy of the body physiological experiments and exposure to certain basic clinically important measurements and techniques. Prerequisites 207 Anatomy and Physiology (or concurrent registration). Not for Biology Major credit. Laboratory.

220 Sex and Sexuality 3 cr

Consideration of sex and reproduction as universal biological functions with special emphasis on physiological and psychological basis of human sexuality. The course also aims to examine sexual functioning, sexual behavior and sex therapy. Not for Biology Major credit. Lecture.

226 Genetics 4 cr

See description under Major Courses.

230 Stress and Adaptation 3 cr

See description under Major Courses.

MAJOR COURSES

Except for 398 and 399, all courses for majors also are open to non-majors providing that individual course prerequisites are satisfied.

111 112 General Biology 4 cr each

Introduction to the scientific study of life at the molecular cellular and organismal level. It involves consideration of relevant structure function development reproduction inheritance evolution and ecology. This course provides the basic information and concept necessary for understanding living systems their activity and interrelationships. 111 is prerequisite to 112. Lecture and laboratory.

203 Microbiology A 4 cr

Introduction to microorganisms. Their morphology, metabolism, ecology and cultural characteristics with emphasis on their interaction with other organisms including man. Principles of medical and health related aspects of microbiology, chemotherapy, industrial agricultural and marine microbiology are presented. Prerequisites Biology 111 112 and organic chemistry (or concurrent registration). Lecture and laboratory.

204 Microbiology-B 4 cr

Introduction to viruses and immunity with emphasis on host-parasite interactions and patterns of infectious diseases in populations. Prerequisites Biology 111 112 and organic chemistry (or concurrent registration). 203 is not prerequisite to 204.

226 Genetics 4 cr

A study of the mechanisms of inheritance and the resulting effects on individuals and populations including their implications in the life of man. Principles and details of genetics and applications are illustrated with specific examples drawn from the wide range of species from microorganisms to man. Prerequisites 107 108 or 111 112 Lecture and laboratory.

230 Stress and Adaptation 3 cr

A study of the biological effects of acute and chronic stress stimuli of various origins and the neuroendocrine population associated with adaptation to stress. Prerequisites 107 108 or 111 112 Lecture and laboratory.

232 Vertebrate Microstructure 4 cr

A comparative study of the gross structure of vertebrates and the relationship of that structure to function and evolution. Prerequisites 111 112 and 112 Lecture and laboratory.

238 Vertebrate Microstructure 4 cr

A study of tissue and organ structure and the relationship of that structure to function. Prerequisites 111 112 and 232 or permission of the instructor. Lecture and laboratory.

244 Animal Development 4 cr

A comparative study of the morphological and physiological aspects of animal development emphasizing current experimental approaches. Prerequisites 111 112 Lecture and laboratory.

250 Plant Development 4 cr

Examines the unique features of representative types of plants. As revealed by interrelationships of form function and morphology. Prerequisites 111 112. Lecture and laboratory.

306 Plant Physiology 4 cr

Varied studies of growth requirements and regulatory mechanisms of important plant types with emphasis upon environmental control. Prerequisites 111 112 and 250. Lecture and laboratory.

312 Animal Physiology 4 cr

Examination of the physiological mechanisms of body function in animals including consideration of the basic components of biological control systems and the manner in which various organ systems contribute to the maintenance of physiological homeostasis. Prerequisites Biology 111 112 Lecture and laboratory.

318 Physiology of Reproduction 4 cr

The course includes the anatomy, histology, physiology and genetics of vertebrate reproduction. The main emphasis is on the physiology of puberty, estrous and menstrual cycle, conception, pregnancy and parturition. The physiological basis of fertility and infertility also are included. Prerequisites 111 112 and 232 or 244 Lecture and laboratory.

334 Regulatory Physiology 4 cr

A study of physiological and environmental regulations with emphasis on neuroendocrine integration and adaptation. Prerequisites 111 112 and 312 444 Lecture and laboratory.

336 Human Parasitology 3 cr

Principles of parasitology, epidemiology and life cycles of human parasitic protozoans and helminths. Special emphasis on disease useful in allied health fields. Prerequisites introductory biology and a course in animal physiology or permission of the instructor. Lecture and laboratory.

395 Special Topics 1-3 cr

Treatment of topics of current or special interest in biology. Lecture laboratory or combination.

398 399 Undergraduate Research 2 or 4 cr

Opportunity for selected students to work in the laboratory on research problems under the direction of a faculty member. Prerequisite is not prerequisite to 399. Maximum of four credits. Registration by permission of instructor. Laboratory.

411 Ecology 4 cr

The goal is to provide an overall grasp of the principles and procedures underlying ecological thought. Past, present and future aspects of environmental studies are considered from the ecosystem viewpoint. Interrelationships of living things with each other as well as the non-living components emphasized is the need for inter-disciplinary studies and quantitative data. Both terrestrial and aquatic habitats are used to illustrate concepts such as growth, niche, succession and competition. Applicability to current human problems is discussed such as waste disposal, pollution, food fuel, agriculture and urbanization. Prerequisites 111 112 Lecture and laboratory.

441 Cell Physiology 4 cr

A study of regard to means of obtaining energy including respiration, fermentation and photosynthesis. Work done by the cell including biosynthesis, active transport and cell movement, cell growth, differentiation and relationships of cell structure to these processes. Prerequisites 111 112 and 399 Organic chemistry Lecture and laboratory.

448 Diagnostic Microbiology 3 cr

A course to acquaint the student with the methods employed on clinical samples by clinical laboratories.
in the isolation and identification of microbial agents which cause human disease. Cultural as well as serological techniques are included. Emphasis is on the interpretation and significance of laboratory findings in the diagnosis of microbial disease, with special reference to medical microbiology and allied fields. Prerequisite: introductory biology and a course in microbiology, or permission of the instructor. Lecture and laboratory.

Descriptions of the Following Courses are Provided in the Graduate School Catalog

501 Research Skills 3 cr
503 Cell and Electron Microscopy 3 cr
505 Molecular Genetics 3 cr
507 Laboratory Techniques 3 cr
511 Comparative Vertebrate Physiology 3 cr
512 Mammalian Physiology 3 cr
513 General Endocrinology 3 cr
516 Animal Behavior 3 cr
517 Animal Behavior Laboratory 1 cr
520 Experimental Embryology 3 cr
524 Immunology 3 cr
526 Pathogenic Microbiology 3 cr
531 Biochemistry 3 cr
535 Microbiology Seminar 1 cr
573 Behavioral Ecology 3 cr
577 Evolutionary Ecology 3 cr
580 Urban Ecology 3 cr

DEPARTMENT OF CHEMISTRY
Chairman Andrew J. Glaids, III Ph.D.
The Chemistry program is designed to provide the student with a fundamental background in chemistry and an understanding of the relationship of chemistry to the other sciences and disciplines. Elective courses and the opportunity to do undergraduate research allow the chemistry major to develop interests in a specialized area of chemistry such as analytical, inorganic, physical, or biochemistry.

Because of the fundamental nature of chemistry as a science, numerous opportunities for advanced study as well as employment are open to chemistry and biochemistry majors. A large percentage of students elect to continue their study in graduate programs in chemistry and related fields. Chemists and biochemists provide a core of personnel in pure and applied research technical sales, technical libraries, management positions in the chemical industry, education, the environmental sciences, and the health professions, such as medicine, dentistry, and veterinary medicine. The major in biochemistry centers around the core of basic chemistry courses while also providing advanced courses in biochemistry and electives in biology.

REQUIREMENTS FOR THE CHEMISTRY AND BIOCHEMISTRY MAJORS

Thirty-two semester hours are required. All students must take 121, 122, 221, 222, 321, 323, 324, and 421 Mathematics 115, 116, Physics 201, 202, or 211, 212, Biology 111, 112, proficiency in German, Russian, French, or Latin at the 202 or 212 level is required.

If a student takes 111, 112, and 121, 122, chemistry courses the credits for the 111, 112 will not apply to the total required for the degree. Courses 101, 102, 205, 206 will not be counted toward a major in Chemistry Major. All students must take 322, 324, 422, and Mathematics 215.

Biochemistry Majors must take 401, 524. In addition, Chemistry 525 and 526 may be taken as electives. Students planning to enter a graduate chemistry department should take 322, 324.

Students who intend to work in industry after graduation are strongly advised to take 548, Industrial Organic Chemistry, and 549, Principles of Polymer Science.

To meet the American Chemical Society's requirements for Professional Certification, the Chemistry Major must elect two additional courses from the following: 401, 523, 524, 537, 538, 545, 546, 547, 548, 572, Mathematics 216 or 208, Biology 505, Pharmacy Sciences 539, and Physics 306. One of these must be a laboratory course. This laboratory requirement can also be fulfilled with 490. The Biochemistry Major must take 322, 324, and 422 for certification. Course disciplines of the 500 level courses can be found in the Graduate School catalog.

REQUIREMENTS FOR THE MINORS

A minor in Chemistry consists of 12 credit hours beyond 121, 122. A minor in Biochemistry consists of 12 credits beyond 121, 122. Normally 205, 206, or 221, 222 along with 401 will constitute the Biochemistry minor.

101 102 Chemistry and Society 3 cr each
111 112 Principles of Chemistry 4 cr each

These courses are designed to provide a basic understanding of the fundamental concepts in chemistry and the chemical processes that are relevant to the physical and biological sciences. The courses are intended for students majoring in non-chemistry fields and do not require any previous chemistry background.

111 112 Principles of Chemistry 4 cr each
The course is divided into two segments, a lecture and a laboratory component. The lecture covers the fundamental principles of chemistry, while the laboratory component provides hands-on experience in chemical processes and techniques.

121 122 General Chemistry

The course is divided into three segments: physical chemistry, the laws of chemical behavior; inorganic analysis, the properties of inorganic compounds; and the practical applications of organic compounds in the synthesis of polymers, carbohydrates, and other compounds. The course introduces the student to the basic concepts of chemistry and their applications in various fields.

501 Research Skills

This course provides students with an opportunity to engage in research projects under the supervision of faculty members. Students will learn research techniques, data analysis, and scientific writing, which are essential skills in any scientific field.

503 Cell and Electron Microscopy

This course covers the structure and function of cells, as well as the techniques used to observe them at the cellular and subcellular levels. Students will learn to use microscopes and other tools to study cellular processes.

505 Molecular Genetics

This course covers the principles of molecular genetics, including the structure and function of DNA, RNA, and proteins. Students will learn about genetic variation and its implications for human health.

507 Laboratory Techniques

This course provides students with the practical skills needed to perform laboratory experiments. Students will learn about laboratory safety, experimental design, and data analysis.

511 Comparative Vertebrate Physiology

This course covers the physiological systems of different vertebrate species, including the circulatory, respiratory, nervous, and immune systems. Students will learn about the physiological mechanisms that allow these organisms to function in different environments.

512 Mammalian Physiology

This course covers the physiological systems of mammals, including the circulatory, respiratory, nervous, and immune systems. Students will learn about the physiological mechanisms that allow these organisms to function in different environments.

513 General Endocrinology

This course covers the endocrine system, including the hormones and their actions. Students will learn about the physiological mechanisms that allow these hormones to regulate various functions in the body.

516 Animal Behavior

This course covers the principles of animal behavior, including the types of behaviors observed in different species and the factors that influence them. Students will learn about the physiological mechanisms that allow these behaviors to occur.

517 Animal Behavior Laboratory

This course provides students with the opportunity to observe and study animal behavior in a controlled environment. Students will learn about the physiological mechanisms that allow these behaviors to occur.

520 Experimental Embryology

This course covers the principles of embryology, including the development of the nervous system and the immune system. Students will learn about the physiological mechanisms that allow these systems to develop appropriately.

524 Immunology

This course covers the principles of immunology, including the mechanisms of immune response and the factors that influence it. Students will learn about the physiological mechanisms that allow these responses to occur.

526 Pathogenic Microbiology

This course covers the principles of microorganisms that cause disease, including bacteria, viruses, and fungi. Students will learn about the physiological mechanisms that allow these organisms to infect and cause disease.

531 Biochemistry

This course covers the principles of biochemistry, including the chemistry of macromolecules, metabolic pathways, and enzyme kinetics. Students will learn about the physiological mechanisms that allow these processes to occur.

535 Microbiology Seminar

This course provides students with an opportunity to engage in discussions of current research in microbiology. Students will learn about the physiological mechanisms that allow these processes to occur.

573 Behavioral Ecology

This course covers the principles of behavioral ecology, including the factors that influence animal behavior and the ecological consequences of these behaviors. Students will learn about the physiological mechanisms that allow these behaviors to occur.

577 Evolutionary Ecology

This course covers the principles of evolutionary ecology, including the mechanisms of evolution and the ecological consequences of these processes. Students will learn about the physiological mechanisms that allow these processes to occur.

580 Urban Ecology

This course covers the principles of urban ecology, including the factors that influence ecological processes in urban environments. Students will learn about the physiological mechanisms that allow these processes to occur.

401 Introduction to Biochemistry

This course provides an introduction to the field of biochemistry, including the structure and function of biological macromolecules. Students will learn about the physiological mechanisms that allow these processes to occur.

402 Advanced Biochemistry

This course provides a more advanced introduction to the field of biochemistry, including the structure and function of biological macromolecules. Students will learn about the physiological mechanisms that allow these processes to occur.

403 Biochemistry Laboratory

This course provides students with the opportunity to perform laboratory experiments in biochemistry. Students will learn about the physiological mechanisms that allow these processes to occur.

404 Biochemistry and Molecular Biology

This course covers the principles of biochemistry and molecular biology, including the structure and function of biological macromolecules. Students will learn about the physiological mechanisms that allow these processes to occur.

405 Biochemistry and Genomics

This course covers the principles of biochemistry and genomics, including the structure and function of biological macromolecules. Students will learn about the physiological mechanisms that allow these processes to occur.

406 Biochemistry and Systems Biology

This course covers the principles of biochemistry and systems biology, including the structure and function of biological macromolecules. Students will learn about the physiological mechanisms that allow these processes to occur.

407 Biochemistry and Biotechnology

This course covers the principles of biochemistry and biotechnology, including the structure and function of biological macromolecules. Students will learn about the physiological mechanisms that allow these processes to occur.

408 Biochemistry and Drug Design

This course covers the principles of biochemistry and drug design, including the structure and function of biological macromolecules. Students will learn about the physiological mechanisms that allow these processes to occur.

409 Biochemistry and Environmental Science

This course covers the principles of biochemistry and environmental science, including the structure and function of biological macromolecules. Students will learn about the physiological mechanisms that allow these processes to occur.
3) The Classical Languages major requires at least twenty-four credits in Latin and Greek (with a minimum of twelve credits in each) in addition to six credits of ancient history or ancient literature courses in English. The Survey of Sanskrit Literature (211-212) may be substituted for the twelve credits of either Latin or Greek.

4) The Classical Civilization major is an individually designed program of twenty-four credits of ancient literature, history, art, and archeology. Students majoring in Classical Civilization create programs with the close advice and the approval of the Classics Department to fit their backgrounds, interests, and career objectives. Majors should formulate programs with balanced history and literature components. They are strongly encouraged to fulfill the College language requirement in either Latin or Greek. All courses in Greek or Latin at the 200 level or above apply to the Classical Civilization major.

REQUIREMENTS FOR THE MINOR

The Department offers a minor in Latin (a minimum of 12 credits above the 100 level) and a minor in Greek (a minimum of 12 credits above the 100 level) and a minor in Classical Civilization with concentrations in Greek Civilization, Roman Civilization, Ancient History, and Ancient Art and Literature (12 credits above the 100 level) with approval of the Department and advisors.

101 102 Elementary Classical Latin 4 cr each
Study of the fundamentals of Latin grammar and syntax combined with occasional exercises in translation from Roman authors.

103 104 Elementary Classical Greek 4 cr each
Study of the fundamentals of Greek grammar and syntax combined with frequent exercises on translation from Greek authors.

105 106 Basic Sanskrit 3 cr each
A study of the fundamentals of Sanskrit grammar and syntax combined with exercises in translation. Some previous foreign language experience is desirable.

107 108 Elementary Ecclesiastical Latin 3 cr each
Study of the fundamentals of Latin grammar and syntax as represented in Scripture and Church Fathers.

201 202 Intermediate Classical Latin 3 cr each
Survey of major Latin authors.

203 204 Intermediate Classical Greek 3 cr each
Survey of major Greek authors.

205 206 Intermediate Ecclesiastical Latin 3 cr each
Selections from Biblical and Christian Latin literature.

207, 208 Biblical and Patristic Greek 3 cr each
Selections from Biblical and Christian Greek literature.

211 212 Survey of Sanskrit Literature 3 cr each
Selected readings from major Sanskrit texts including the Mahabharata, the Upanishads, Kathasaritsagara, Mahabharakamastu, and Mahabharata.

The following will be taught as Latin or Greek courses, or for those students who are qualified as combination Latin and Greek courses.

Each course will cover an individual author or group of authors or a genre. Each course may be repeated as long as a different author or work is read.

301 Pre-Fifth Century 3 cr
The Iliad, Odyssey, Homeric Hymns, Hesiod, Pindar, and Greek lyric poetry.

302 Fifth Century 3 cr
Herodotus, Thucydides, Aeschylus, Sophocles, Euripides, Aristophanes.

303 Fourth Century 3 cr
Greek orators, Plato, Aristotle, Xenophon, Menander.

304 Alexandrian Period 3 cr
Apollonius Rhodius, Theocritus, Callimachus, and the lesser Alexandrian authors.

305 Roman Republic 3 cr
Plato, Terence, Cicero, Lucretius, Catullus, Caesar, and Sallust.

306 Augustan Literature 3 cr
Virgil, Horace, Ovid, Propertius, and Tibullus.

307 Imperial Literature 3 cr
Seneca, Lucan, Petronius, Martial, Tacitus, Juvenal, Phiny, the Younger, Suetonius, Apuleius, and Lucan.

308 Post Classical Literature 3 cr
Post-classical, medieval, renaissance, and neo-Latin authors.

309 Studies in Genre 3 cr
Selected genres of Greek and/or Latin literature.

400 Independent Readings and Research 3 cr each

CLASSICS COURSES IN ENGLISH (NO GREK OR LATIN REQUIRED)

121 General Etymology 3 cr
A study of Greek and Latin words to facilitate the comprehension of modern English as it is written by our acknowledged modern masters.

122 Etymology of Scientific Terms 3 cr
Introduction to Greek and Latin elements of scientific terminology.

123 Classical Mythology 3 cr
A presentation of the major myths of Greece and Rome with special attention to contemporary interpretations of myth and the influence of myth on art and literature.

124 World Mythology 3 cr

230 Ancient Theatre 3 cr
An introduction to the origins and development of ancient tragedy and comedy. Readings from the works of Aeschylus, Sophocles, Euripides, Aristophanes, Menander, Plautus, Terence, and Seneca.

231 Ancient Epic 3 cr
A survey of epic literature with particular attention to the techniques of oral and literary composition. Readings from the works of Homer, Apollonius of Rhodes, Vergil, and Lucretius.

232 Ancient Novel and Romance 3 cr
A survey of Greek and Roman prose fiction with special emphasis on the nature and development of narrative techniques. Readings from Homer, Herodotus, Xenophon, Apollonius of Rhodes, The Greek Romances, Lucian, Petronius, and Apuleius.

233 Ancient Satire 3 cr
Investigation of the satirical element in classical literature with special reference to the writings of Lucian, Lucretius, Horace, Persius, Martial, and Juvenal.

240 Greek Religion 3 cr
An examination of the continuity of Greek religious experience from pre-dynastic times to the present. Special attention will be given to the interconnection of ancient Greek religious ritual, moral experience, and religious thought.

241 Roman Religion 3 cr
A study of Roman religious beliefs and practices with attention to the development of hero cults, oriental mystery religions, and philosophical sects as alternatives to traditional religion.

242 Ancient Law 3 cr
An historical survey, including the contributions of the Babylonians and the Greeks, of Roman Law between c. 500 B.C. and A.D. 500.

244 History of Ancient Medicine 3 cr
Examination of the most significant medical theories and practices in the period from the Egyptian temple physicians to the doctors of the Roman Empire. Special attention will be given to Hippocrates and Galen.

245 Greek History 3 cr
An examination of the development of Greek history and culture from earliest times up to the death of Alexander of Macedon.

246 Hellenistic History 3 cr
A survey of Mediterranean history from the death of Alexander until the accession of Octavian and the establishment of the Roman principate.

247 History of the Roman Principate 3 cr
Study of the consolidation of the Roman imperial structure from Augustus to the death of Commodus.

248 History of the Late Roman Empire 3 cr
Examination of Roman history from the ascension of Severus to the death of Julian.

249 Egyptian Civilization 3 cr
A survey of Egyptian history and culture from the pre-dynastic period to the establishment of the Roman rule in Egypt. Special attention will be given to the artistic literary and religious achievements of Egypt.

250 Classical Archaeology 3 cr
A study of the archaeological discovery of classical civilization from the Greek Bronze Age through the Roman Empire. An introduction to the techniques of archaeological investigation.

260 The Classical Tradition in America 3 cr
A study of the influences of Greek-Roman civilization on American cultural life.

261 Contemporary Literature and Classics 3 cr
An investigation of the influence of ancient myth on 20th century French, German, Italian, English, and American literature.

300 Seminar 1 cr each
Topics variable.

301 Greek Art 3 cr
A study of the architecture, sculpture, vase painting, and minor arts of the Greek world from Minoan to Hellenistic times. The student is introduced to the extensive vocabulary of Greek art which has been a continuing formative force in Western art. (Offered in alternate years).

302 Roman Art 3 cr
An introduction to Roman innovations in architecture, sculpture, and painting. The background of Roman art in Etruscan and Greek and Egyptian civilizations is investigated and the impact of Roman art in forming Christian Art. Renaissance Art and Neo-Classicism is analyzed. (Offered in alternate years).

305 History of Medicine 3 cr
A survey exploring the development of medicine in the western world in terms of medicine as an art and as a science. The latter part of the course will focus on the social and institutional aspects in the development of American medicine.

COLLEGE ADMINISTRATION

This program is designed to introduce liberal arts students to the fundamentals of college and university management. The program includes two essential features: first, it provides theoretical background and a framework of general understanding of college management; second, it provides field experience or internship in the areas of greatest interest to the participating students. The minor program will consist of 15 credit hours in coursework and 3 in internship.
202 College Personnel Administration 3 cr
An overview of the process for administering a college personnel program including personnel management, fringe benefits, labor relations and affirmative action. This course will be roughly divided into four segments dealing with the above basic components of a comprehensive personnel program as they are administered in a college or university.

204 Student Services Administration 3 cr
This course explores the process of human development and the dynamics of organizational structure and administration of such services as Residence Life, Counseling, Judicial Systems, College Skills Health Services, Orientation, Union Activities, and Organizations. Parallel to personal development, students will be given the opportunity to become involved in the dynamics of organizational structure and administration. Within this framework they will learn social organization and structure systems analysis, group dynamics and leadership theory and effectiveness. The application of these leadership skills may be attained through practical experiences in independent studies and classroom discussion.

206 Auxiliary Enterprises Administration 3 cr
A study of the administration and operation of auxiliary enterprises which focuses upon these questions: What are auxiliary enterprises?

DIVISION OF COMPUTER SCIENCE
The curriculum in Computer Science is designed to allow maximum flexibility in direction. There are three areas of concentration—scientific, business, and computer systems engineering.

REQUIREMENTS FOR THE MAJOR
A minimum of 30 semester hours is required for a major in Computer Science, including 301, 302, and 202 with the remaining courses selected from those numbered 300 and above. Extra departmental requirements include English 385, Professional and Technical Writing, Math 115, and Computer Science Division for extradepartmental requirements in particular area of concentration.

REQUIREMENTS FOR THE MINOR
A minimum of 18 semester hours is required for the minor in Computer Science, including 301, 302, and 202 with the remaining courses selected from those numbered 300 and above.

100 Elements of Computer Science 3 cr
A computer appreciation course covering a survey of computer organization, computer languages, and the history of computers. Not counted toward computer science major or minor.

101 Introduction to Computer Science/Basic 3 cr
An introductory course for those who have had no prior computer science courses or those seeking a general introduction to computers. Machine language assembly language and Basic are among the topics covered. Not counted toward the computer science major or minor.

102 COBOL 3 cr
Structured programming principles and techniques are introduced using the COBOL language. Topics discussed are top-down techniques, program and project documentation, file structure, and the organization of programming languages.

111 FORTRAN 3 cr
Elements of FORTRAN skills to construct algorithms for efficient solution of computational problems are presented. This course is required of those interested in taking additional computer science courses.

112 Advanced Programming 3 cr
Advanced programming techniques using FORTRAN 77 and an introduction to Pascal. This course develops the student’s skills in the use of procedure-oriented languages.

201 Machine Language Programming 3 cr
A survey of various machine configurations. Topics include number systems, machine language programming, assemblers and macro-assemblers, and high-level languages.

202 Data Structures 3 cr
Introduction to the theory of graphs and trees and their realization as computer programs. A thorough study of data structures and algorithms for their manipulation. Prerequisite: 111 Fortran.

301 Computer Logic 3 cr
Basic concepts used in the design and analysis of digital systems. Required course for 302 Prerequisite: 111 Fortran.

302 Computer Organization 3 cr
An introduction to current system structures of control, communications, memories, processors, and I/O devices. Prerequisite: 201 Machine Language Programming.

305 Introduction to File Processing 3 cr
This course is designed to introduce concepts and techniques of structuring data on bulk storage devices to provide experience in the use of bulk storage devices and to provide the foundation for applications of data structures and file processing techniques. Prerequisite: 102 Cobol 202 Data Structures.

306 Introduction to Operating Systems 3 cr
I/O Hardware properties of magnetic tapes, disk drums, magnetic memories, virtual address translation techniques, batch processing, time sharing scheduling, resource allocation are among the topics covered. Prerequisite: Programming 202 Data Structures.

307 Numerical Methods of Linear Systems 3 cr
This course deals with basic algorithms of numerical computation in linear algebra. The use of mathematical subroutine packages is included. This course is identical to Math 107. It may be used to satisfy either a Math or Computer Science requirement but not both: Prerequisites: 111 Fortran, Math 116, and Math 306.

308 Numerical Methods of Classical Analysis 3 cr
Introduces the basic algorithms of numerical computation and their theoretical foundations and practical applications. Programming assignments are made to illustrate the algorithms. Related theory and the pitfalls associated with the method. Identical to Math 308. May be used to satisfy either a Math or Computer Science requirement but not both: Prerequisites: 111 Fortran and Math 215.

309 Computers and Society 3 cr
A course designed to keep the student abreast of the current state of the art of computer science and technology. This course is designed to inform the reader about the role that computers play in society. This seminar format course will discuss recent developments, the uses and misuse of computers in society, and will broaden the student's awareness of ethical issues and the impact of computer systems on society.

311 Data Base Management Systems Design 3 cr
Introduction of data base concepts and approaches to data base management. Topics include choice and design of data structures, design of user-oriented languages for updating and retrieving information. Prerequisites: 302 Data Structure and 305 Intro File Processing.

312 Artificial Intelligence 3 cr

314 Software Design and Development 3 cr
An overview of systems software, examination of design and development of macro assemblers and control programs. Functions: Prerequisites: 302 306.

415 Theory of Programming Languages 3 cr
Comparative study of properties and applications of several higher level programming languages, including Fortran, COBOL, and Basic.

419 Introduction to Micro and Mini Computers 3 cr
An introduction to the design of micro and mini computers. Exploration of assembler and specialized languages for small computers. Prerequisites: 201 Machine Language Programming and 301 Computer Logic.

420 Computer Simulation 3 cr
The fundamentals of simulation via digital and analog computers will be presented. Modern development and solution by numerical and analytical methods will be discussed in depth with emphasis on practical applications. Prerequisite: Fortran 111 and a course in statistics.

421 Applications in Data Processing 3 cr
Data handling in terms of coding preparation, acquisition, summarization, and tabulation and analysis using packaged programs. Prerequisite: Fortran 111.

423 Information Systems 3 cr
Application of information systems to various areas of education, business, medicine, law, and public administration. Any one of the areas will be studied in detail. Prerequisite: 202 Data Structure.

491 499 Selected Topics in Computer Science 1-3 cr
Topics selected in consultation with the advisor and the division.
DEPARTMENT OF ECONOMICS
Chairman Geza Grosschmid J U D

REQUIREMENTS FOR THE MAJOR
Twenty-four semester hours are required for a major. These credits must include 221 222 321 and 322.

Extra-departmental requirements: Mathematics 225 in the Mathematics Department of the College. Students planning to do graduate work in Economics are advised to take calculus.

REQUIREMENTS FOR THE MINOR
Eighteen semester hours are required for a minor in Economics. These credits must include 221 and 222. It is strongly recommended that students having economics as a minor consult with the Economics Department for advisement.

Course Descriptions are provided in the School of Business and Administration Section of this Catalog on Pages 66-67.

DEPARTMENT OF ENGLISH
Chairman Joseph J. Keenan Ph D

The chief purpose of the English program is to develop the student's powers to think critically about his life. To this end, the Department's curriculum unites intensive and critical reading in a broad range of our literary heritage with close attention to the presentation of ideas in writing. Attention is also given to oral expression of ideas by means of dialogue between professor and student. Not only is the degree in English an excellent preparation for law school and for graduate work in English education and library science but it also provides the liberal preparation which is sought by the business world for such areas as personnel advertising and management.

Prerequisites—English Composition 101 (or its equivalent) is a prerequisite for admission to English Composition 102. English Composition 102 (or its equivalent) is a prerequisite for admission to all other courses offered by the department.

The English Department further advises that two 300 level courses should be taken before the student attempts any 300 or 400 level course except for 307 and 308.

REQUIREMENTS FOR THE MAJOR
The major is an individually designed program of 24 hours of English Department courses above the 100 level. Each English major with the close advice and approval of a member of the English faculty designs a program to fit his background, interests, and career objectives.

REQUIREMENTS FOR THE MINOR
A minimum of 12 credit hours beyond the freshman level of which no more than six hours may be taken at the 200 level.

There are five separate emphases from which the student must choose one:
- 2 English Literature 201 202 and six hours in upper division English Literature courses 409 through 469
- 2 American Literature 205 206 and six hours in upper division American Literature courses 471 through 489
- 2 Literature and Film: Introduction to Film (3 hours) and nine hours in courses in literature and film. Examples are Shakespeare on Film and American Short Story into Film
- 2 Writing: 203 and nine hours in 300 level Writing Workshops
- 2 English Honors: Students who, by invitation of the Department Honors Committee, complete English 212 and 213 and two 300 Honors Seminars may count that program as an English Minor.

HONORS PROGRAM
Students who give evidence of outstanding ability in English through their performance in English Composition 101 or by virtue of superior national test scores will be invited to participate in the English Honors program at the discretion of the Department Honors Committee.

These students may apply Honors course credits to either an English major or minor; or may use these credits as electives. Further details concerning the Honors program are available through the department office and will be distributed to all nominees at the time of their recommendation for admission to the program.

201 102 English Composition 3 cr each Practice in effective writing. Review of principles of grammar and rhetoric. Introduction to literary types and forms. 101 is prerequisite to 102.

103 English Composition Honors 3 cr An honors counterpart to 102. Composition and introduction to literary types and forms. Participation by invitation only.

201 202 English Literature Survey 3 cr each Representative masterpieces of English literature in their literary and historical contexts.

203 Advanced Writing 3 cr Designed to build upon writing skills learned in freshman composition centered chiefly on development of style and accuracy. Enrollment with instructor's permission only.

205 American Literature Survey I—Beginning to Civil War 3 cr Representative selections from major American authors treated in both their literary and their historical contexts.

206 American Literature Survey II—After Civil War 3 cr Representative selections from major American authors treated in both their literary and their historical contexts.

207 The Novel 3 cr Introduction both to various types of novels and to the critical analysis of fiction.


209 Drama 3 cr An historical survey of major dramatic forms through a selection of representative works by major playwrights from the classical tradition of Greece and Rome to the Theatre of the Absurd.

210 211 Readings in World Literature I 3 cr each A survey of major literary works of the Western world from Homer to Cervantes (210) and from Moliere to Camus (211) with emphasis on continental traditions. The course explores both the thematic preoccupations of Western writers and the development and evolution of literary forms.

212 213 English Literature Honors 3 cr each Honors counterparts to 201 202. Major British writers from Chaucer to Eliot. Participation by invitation only.

300 Honors Seminar 3 cr Special areas treated in these seminars will vary and will be designated in the schedule of courses each semester. Enrollment in the Honors Seminar is by invitation of the Honors Committee of the Department of English.

307 The English Language 3 cr An introduction to linguistic analysis with primary emphasis on the history of the structure of English from Old to Modern English.

308 Applied Linguistics 3 cr Practical uses of structural linguistics in the teaching of composition and literature.

370 371 372 373 374 375 376 377 378 379 Special Studies in English or World Literature 3 cr each Two or three courses in this sequence are offered every semester by the English Department to meet the current interests of both the students and the faculty. Examples of courses regularly offered are Science Fiction: The English Bible and Literature: Comparative Literature; Modern Comparative Drama; Modern Short Story; Far Eastern Literature: Forms of Fantasy; Introduction to Film; The Literature of Mystery and Detection.

380 381 382 383 384 385 386 387 388 389 Writing Workshops 3 cr each Courses in this sequence are offered each semester in a workshop format designed to develop students' creative and/or technical writing skills. Examples of courses regularly offered are Playwriting: Poetry Workshop; Fiction Workshop; Writing for Business and Industry: Professional and Technical Writing. Admission by instructor's permission only.

The remainder of the English courses are divided into areas of emphasis. During a four-semester period each course from each area will be offered at least once.

Medieval Studies
409 Chaucer 3 cr A study of The Canterbury Tales and minor poems.

410 Medieval Special Topics 3 cr Studies in ideas and the attitudes of the medieval period approached through one of its dominant genres such as the romance, the drama, the lyric, etc., or through some major writers other than Chaucer or through international readings in Old and Middle English. Old Icelandic, Medieval French and German (all read in English translation).

Renaissance Studies
413 Sixteenth Century English Literature 3 cr Survey including non-Shakespearean drama. Sidney, Spenser, Shakespeare. Marlowe and minor figures.

414 Seventeenth Century English Literature 3 cr Survey of drama, prose and poetry to 1660.

415 Milton 3 cr A survey of Milton and his times. A close scrutiny of the minor poems and Paradise Lost and Samson Agonistes.

419 Renaissance Special Topics 3 cr Studies in Renaissance thought and aesthetic of the works of one or more of its great writers. Spenser, Sidney, Donne, Jonson, etc. or through the ideas and attitudes conveyed in one of the dominant genres of the Renaissance: the lyric; the epic; the drama; etc.

Shakespeare Studies
433 Shakespeare I 3 cr Comedies and romances.

434 Shakespeare II 3 cr Tragedies and histories.

439 Shakespeare Special Topics 3 cr Studies in Shakespeare relating his works to those of his contemporaries or concentrating on the problems of Shakespeare biographical aesthetic and critical. Specific works and approaches to be selected by the instructor.

Eighteenth Century Studies
441 English Classicism 3 cr Development of neo-classical literature from the Restoration to the death of Pope. Primary attention given to Dryden, Swift, and Pope.
442 Late Eighteenth Century
English Literature 3 cr
Johnson and his circle, the development of the novel, the aesthetic movement.

449 Eighteenth Century Special
Topics Studies in Eighteenth Century thought and aesthetic in the works of one or more of its great writers. Dryden, Swift, Pope, Johnson Blake, etc. or through the ideas and attitudes conveyed in one of the dominant genres of the Eighteenth Century: the drama, the novel, the essay, etc.

Nineteenth Century Studies
451 English Romantic Literature 3 cr
A study of aesthetic, moral political, and literary aspects of English romanticism, approaches through the writings of Wordsworth, Coleridge, Byron, Shelley, Keats.

452 Victorian Literature 3 cr
A study of the poetry of Tennyson, Browning, Arnold and the prose of Arnold, Carlyle, Ruskin. Attention also given to the poetry of Morris, Rossetti, and Fitzgerald.

459 Nineteenth Century Special
Topics 3 cr
Studies in Nineteenth Century thought and aesthetic in the works of one or more of its great writers, such as Wordsworth, Tennyson, Browning, Dickens, Hardy, or through the ideas and attitudes conveyed in one of the dominant genres of the Nineteenth Century.

Twentieth Century Studies
461 Early Twentieth Century
Literature 3 cr
Selective study of authors representing the major literary types and trends from about 1890 to 1930. Hardy, Moore, Butler, Conrad, Yeats, Hopkins, and Joyce.

DEPARTMENT OF HISTORY
Chairman James C. Lydon, Ph.D.
The Department of History offers a program devoted to the study of mankind in diverse cultural settings through time. A large number of courses are taught by faculty reflecting a variety of philosophical and methodological outlooks. Apart from the fact that the program fully meets the needs of students intending to pursue graduate work in historical studies, the history major will be well prepared for careers in law, business, or government services. Most importantly, the discipline of history provides an excellent synthesis of the liberal arts education since it effectively joins together the humanities and the social sciences.

REQUIREMENTS FOR THE MAJOR
A minimum of 30 credits must be taken including 103-104 Development of the U.S. (six credits) and either 213-214 Western Civilization (six credits) or 311-312 World History and the Historian (six credits). Twelve of the remaining credits must be taken from 200 and 300 level courses and six credits from 400 level courses. A maximum of 12 transfer credits in history can be applied to the major requirements.

REQUIREMENTS FOR THE MINOR
Students who wish to minor in history may consult with the department's undergraduate advisor. The student is required to take 15 hours including 103-104.

462 Contemporary Literature 3 cr

469 Twentieth Century Special
Topics Studies in Twentieth Century thought and aesthetic in the works of one or more of its major writers such as Yeats, Joyce, Eliot, or through the ideas and attitudes conveyed in one of the dominant genres of the Twentieth Century.

American Studies
471 Early American Literature 3 cr
A study of the literature of America's Colonial and Federalist periods emphasizing the political and belles lettres writings of an emerging nation.

472 American Romanticism 3 cr
A study of the Romantic movement in America with emphasis on Emerson, Thoreau, and Poe.

473 American Realism 3 cr
The rise of realistic fiction subsequent to the Civil War through the end of the century with emphasis on Twain, James, and Howells.

474 Modern American Literature 3 cr
A study of American prose and poetry from the end of World War I to the present including Frost, Fitzgerald, Hemingway, Faulkner, Bellow, etc.

480 489 American Literature
Special Topics 3 cr
Studies designed to reflect particular contemporary interest of faculty and students alike. Topics can be drawn from a wide range of areas such as historical background, aesthetic theme and motif from specific studies of major authors or from tracing the development of dominant literary genres.

499 Directed Studies 3 cr

Introductory Surveys
103 Development of the United States to 1877 3 cr
The historical development of American institutions, ideals, and society from earliest times to 1877.

104 Development of the United States since 1877 3 cr
The historical development of American institutions, ideals, and society since 1877.

Area Courses
212 Europe in the Feudal Age 3 cr
The world of the Middle Ages—a survey of medieval man's political, social, and cultural activities.

213, 214 Western Civilization 3 cr each
An introductory survey of the origins and characteristics of European Civilization emphasizing the personalities and events and institutions that have made the West the dominant global power today.

244 History of Ancient Medicine 3 cr
Examination of the most significant medical theories and practices in the period from the Egyptian temple physicians to the doctors of the Roman Empire. Special attention will be given to Hippocrates and Galen.

245 Greek History 3 cr
An examination of the development of Greek history and culture from earliest times up to the death of Alexander of Macedon.

246 Hellenistic History 3 cr
A survey of Mediterranean history from the death of Alexander until the accession of Octavian and the establishment of the Roman principate.

247 History of the Roman Principate 3 cr
Study of the consolidation of the Roman imperial structure from Augustus to the death of Commodus.

248 History of the Late Roman Empire 3 cr
Examination of Roman History from the ascension of Severus to the death of Justinian.

249 Egyptian Civilization 3 cr
A survey of Egyptian history and culture from the pre-dynastic period to the establishment of Roman rule in Egypt. Special attention will be given to the artistic, literary, and religious achievements of Egypt.

254 The History of the Modern Middle East 3 cr
A study of the modern Near East with concentration upon the conflict between imperialism and nationalism, traditionalism and western influences in the area.

255, 256 History of Asia I and II 3 cr each
A survey of Asian civilization from ancient times to the present day. Western colonialism, the rise of the nationalist movement, and the establishment of modern states.

257 258 Russian History 3 cr each
Development of society and state in Russia from their origins to the twentieth century.

299 260 East Central Europe 3 cr each
The medieval and modern history of the small nations situated between Russia and Germany on the east and west and the Baltic and Mediterranean Seas on the north and the south.

266 Modern Britain 3 cr
A study of the first industrial nation with special attention to the achievement of constitutional monarchy, the social and economic problems of industrialization, the nature of British imperialism and the problems faced in the 20th century.

267 Canada 3 cr
An introduction to Canadian history with particular attention to the years from 1763 to the present and to Canadian-American relations and contemporary Canada.

269 270 China 3 cr each
A survey of social economic political and cultural changes before and after the establishment of the People's Republic of China.

271 Japan 3 cr
An analysis of Japan's current cultural and economic development in light of its historical past, the Meiji era and twentieth century expansion.

279 Topical Surveys
305 History of Medicine 3 cr
A survey exploring the development of medicine in the western world in terms of medicine as an art and as a science. The latter part of the course will focus on the social and institutional aspects in the development of American medicine.

307 308 History of Science 3 cr each
A survey exploring the significance of scientific developments within the historical and social context of Western culture.

309 American Science and Technology 3 cr
The development of science and technology in America from colonial times to the twentieth century.

311 312 World History and the Historian 3 cr each
The course traces the main events of world history in relation to the most important theories of world history and in the context of an inquiry into the nature of historical understanding. The first semester treats prehistory, the emergence of civilization and the world views of the major classical civilizations. The second semester is an inquiry into the nature of modernity.

340 History of Western Law 3 cr
Primary emphasis will be placed on the rise of customary law, especially its development in England into common law.

341 History of American Law 3 cr
This course deals with the development of law, legal philosophy and legal institutions in America from the colonial period to the Civil War.

342 History of American Law II 3 cr
This course deals with the development of law, legal
philosophy and legal institutions from the Civil War to the present.

343 Church History I 3 cr
A religious and historical exploration of the growth of Christianity from the first century up to the Reformations of those issues within the Church and the external forces which brought about major conflict and development.

344 Church History II 3 cr
Selected topics in Catholic and Protestant development from 1500 to the present day. Special emphasis on the crises, revolutions, and reforms that were central to this development.

345 American Church History 3 cr
Emphasizes the historical development of major religious traditions in America, both Catholic and Protestant. Special attention will be given to the life of the mind of Christianity in America: the frontier expansion of religion; the often-controversial interaction between the Church and American culture; the place of religion in the creation of the American character; and the unique separation of church and state.

347 War in Modern Society 3 cr
A study and analysis of the phenomenon of war in the Western World from the Age of Napoleon to the present, with special emphasis upon the inter-relations between international conflict and social, political, and technological change.

352 Diplomatic History of United States 3 cr
Emphasis is upon involvement of the United States in both World Wars and its role as an imperial power.

357 History of the American Presidency 3 cr
Primarily an investigation and evaluation—personal, political, contemporary, and historical—of each president with some attention to the growth of the office.

360 Constitutional History of the United States 3 cr
An analysis of the Supreme Court and constitutional development stressing the major controversies in the field.

362 History of the United States Political Parties Since 1868 3 cr
A detailed examination and analysis of the origins, leadership, and operation of the major political parties since 1868.

364 The American Mind 3 cr
The origins, development, and contemporary modes of American thought, including major currents of opinion, diverse movements, and selected scientific, political, religious, social, and artistic topics.

366 The Modern Mind 3 cr
The major ideological tendencies of modern European thought and their connection to society and politics, and to the major philosophical and scientific currents of the nineteenth and twentieth centuries.

Specialized Areas and Topics

458 Civil War and Reconstruction 3 cr
An intensive study of the American experience before and after the War for the Union.

467 Science and Society in the Twentieth Century 3 cr
The economic, social, and cultural consequences of the rise of modern science.

479 Revolutions in the Modern World 3 cr
An analysis of the major political and social revolutions in Europe since 1789, the nature of the revolutionary phenomenon and the inevitable counter-revolutionary trend.

480 European Fascism 3 cr
An intensive study of the major fascist movements and regimes of the twentieth century in light of the political, economic, social, and intellectual trends which produced them.

DEPARTMENT OF JOURNALISM
Chairman Nancy C. Jones Ph.D.

The Department of Journalism encourages the liberal education of a student by emphasizing how a professional education for a career in the mass media relies on the liberal arts tradition. The journalism curriculum concentrates upon the development of communicative skills for creative and responsible positions in such areas as newspapers, broadcasting, public relations, magazines, and specialized publications. A transfer student must take at least 12 credits from the department to graduate as a major.

REQUIREMENTS FOR THE MAJOR

Twenty-seven semester hours are required for a major. Required courses are 167, 267, 268, 367, 369, 372 or 376, and 466 or 468 or 470 or 476.

REQUIREMENTS FOR THE MINOR

Eighteen semester hours credit are required for a minor. Credits must include 167, 267, 268, and nine other journalism credits approved by the head of the Department of Journalism. Minors do not qualify for the Department's Professional Internship program.

167 Introduction to Mass Communications 3 cr
An introduction to the role, principles, and responsibilities of newspapers, broadcasting, magazines, advertising, and public relations. A series of guest speakers from these fields is included. Course open to non-majors. Offered both semesters.

199 Language for Journalists 3 cr
Aimed at improving and polishing language skills of prospective or beginning majors. Emphasis on word usage, grammar, spelling, introduction to style and copy symbols. Open to Freshmen and Sophomores.

267 Basic Reporting and Writing I / 268 Basic Reporting and Writing II 3 cr / 3 cr
Fundamentals of news reporting and writing. Applied practice in laboratory sections. Special events and beats covered outside of class. VTD used. Typing ability required. Prerequisite 267.

268 Basic Reporting and Writing II 3 cr
Advanced writing of the more complex types of news stories. Open to non-majors. Prerequisite 267.

330 Public Relations Principles 3 cr
Study of the principles, history, and practices of public relations in business, education, government, and non-profit institutions. Analysis of PR programs and the responsibilities of those involved. Open to Juniors, Seniors, and non-majors.

331 Public Relations Practices 3 cr
Case studies of public relations programs in industry, education, social welfare and trade associations. The application of techniques through the design and implementation of programs for clients. Open to Juniors and Seniors. Prerequisites 267 and 330 or approval of Department.

367 Radio-Television Principles and Writing 3 cr
A lecture-laboratory course in the study and application of writing principles and practices for radio and television. Laboratory experience in radio and closed-circuit TV studios. Open to non-majors. Prerequisites 267 or approval of Department.

369 Advertising Principles and Writing 3 cr
A lecture-laboratory course in the study and application of writing principles and practices for advertising. Study of various types of advertising. Open to non-majors. Prerequisites 267 or approval of Department.
470 Professional Internship
3 cr
A supervised observation-experience program of study and assignment to a local newspaper including members of the Pennsylvania Newspaper Publishers Association Prerequisites 167 267 268 367 369 375 372 370 405 (Offered both semesters)

476 Professional Internship
Public Relations
3 cr
A supervised observation-experience program of study and assignment to a public relations agency association industrial non-profit or educational group in the Pittsburgh area Prerequisites 167 267 268 330 331 367 369 375 372 or 376 380 (Offered both semesters)

485 Industrial Advertising
3 cr
Deals with the principles and practices of industrial marketing communications Emphasis will be placed on trade-paper ads direct-mail advertising descriptive product folders sales letters and presentations Examination will be made of related crafts such as commercial art typography printing plate-making and media selection Prerequisites 167 267 268 367 369

490 Individual Projects in Mass Communications
1-3 cr
Individual research projects in the mass media Related to a media topic not covered in regular courses Written paper or other appropriate formats Open to Junior and Senior majors only Prerequisite Permission of instructor and department chairman

DEPARTMENT OF MATHEMATICS
Chairman Charles A. Loeh M.A.
The Department of Mathematics offers a sequence of modern courses which will aid students in developing their ability to think scientifically and form independent judgments 2) provide students with a breadth and depth of knowledge concerning not only manipulative skills but also fundamental and essential theory 3) enable students to use their knowledge in the formulation and solution of problems, and 4) give students the necessary basis of foundation for the pursuit of graduate study or productive effort at the bachelor level

REQUIREMENTS FOR THE MAJOR
Bachelor of Arts Degree A minimum of 32 semester hours is required. These must include 115 116 215 216 303 415 416. The remainder must be selected from courses numbered above 300. Exceptionally able seniors are encouraged to seek departmental approval to include 500 level mathematics courses listed in the graduate catalog. Extradepartmental Requirements Computer Science 101 Basic or 111 Fortran

Bachelor of Science Degree A minimum of 32 semester hours is required. These must include 115 116 215 216 303 415 416. The remainder must be selected from courses numbered above 300. Exceptionally able seniors are encouraged to seek departmental approval to include 500 level mathematics courses listed in the graduate catalog. Extradepartmental Requirements 20 hours in science 211 212 General Analytical Physics and Computer Science 101 Basic or 111 Fortran must be taken The remaining courses may be selected from Biology 111 112 and 226 and above Chemistry 121 and above Physics above 212 and additional Computer Science courses

REQUIREMENTS FOR THE MINOR
A minor must include 115 and 116 and 15 additional credits selected from courses numbered above 115 116 must be included For science majors 215 216 315 321 are recommended For economics and social science majors 222 or 308 225 or 301 306 are recommended

101 Elementary Mathematics
3 cr
A remedial course in the fundamentals of algebra including the solution of equations and inequalities Not to be counted towards a major minor or the mathematics/science area requirements

103 104 Finite Mathematics I II
3 cr each
A course for students who need to meet the prerequisites for 115 for those who do not possess the prerequisites for 115 Not counted toward a major or minor

105 College Algebra and Trigonometry
4 cr
A modern course in college algebra and analytic trigonometry for students who do not possess the prerequisites for 115 Not counted toward a major or minor

107 108 Introduction to Modern Mathematics I II
3 cr each
This course is designed for elementary education students in the School of Education Not to be counted toward a major minor or the mathematics/science area requirements

109 College Algebra
3 cr
A traditional course in college algebra for students who are not prepared for 111 Not counted toward a major or minor Credit will not be allowed for both this course and 105

111 Calculus for Non Science Students
3 cr
Differentiation and integration of algebraic logarhythmic and exponential functions maxima and minima area exponential growth Not counted toward a major Credit will not be allowed for both this course and 115
MEDICAL MEDIA COMMUNICATIONS DIVISION

Co-Directors: Frank R. Klaplak M Ed and John Gibbs B S

The major in Medical Media Communications emphasizes the development of professional attitudes and creative technical competencies necessary to produce programs of instruction in the health care industry for professional and para-professional continuing education, staff training, and development, patient information and education, and community relations.

To this end, the Bachelor of Arts Degree in Medical Media Communications offers course work in professional development, technical specialization, and methodology as well as a liberal arts education and an extensive internship at Mercy Hospital’s Division of Medical Media Communications.

REQUIREMENTS FOR THE MAJOR

A minimum of thirty-six credits is required. The major may concentrate on either Design or Production. All majors must complete 101 Introduction to Instructional Media, 103 Introduction to Video Production, 378 Photography, 406 Advanced Video Production Techniques, 407 Medical Photography, and 408 Internship. The Design concentration should include 301 Scriptwriting for Media Production, 304 Development of the Health Care Program, 404 Management of a Media Facility. The Production concentration should include 201 Cinematography, 203 Audio TV Mechanics and Lighting, 206 Graphics, 402 The Director, and 404 Advanced Video Production Techniques.

It should be noted that the minor in the Medical Media program contains no specifically medical courses. The minor comprises only media production courses.

101 Introduction to Instructional Media 3 cr
Introduction course to familiarize student with equipment, instructional technology, and process of selection, utilization, and evaluation of media resources.

103 Introduction to Video Production Techniques 3 cr
Concepts and applications of television production in a work setting environment with emphasis on studio considerations. Lighting, camera operation film and tape, VTR, and special effects.

106 Creative Media 3 cr
Investigation into aesthetics of visual communication. Incorporation of the theories of visual thinking and psychology of media in the development of visual messages. Motivation, attention organization, cueing, reinforcement, and response are characterized.

201 Cinematography 3 cr
Students learn basic skills and techniques in motion pictures production through lectures, demonstrations, field trips, and hands-on experience.

203 Audio TV Mechanics and Lighting 3 cr
Investigation into the types of record equipment, microphones, impedances, public address systems, mixing sound and music for multimedia productions. Hands-on experience in the mechanics of TV equipment. Trouble-shooting and the operation of waveform monitors, and vectoroscopes. Extended exploration into creative and practical aspects of lighting.

204 Interpersonal Communications 3 cr
Designed to investigate the various aspects of interpersonal communications. Primary consideration will be given to face-to-face interaction in a variety of situations.

206 Graphics 3 cr
Provides basic experience in planning and producing graphic materials for television display, and lecture, includes exposure in layout, lettering, and color.

301 Scriptwriting for Media Production 3 cr
Technical of preparing storyboards and scripts for various media formats. Includes research of material development of shooting script. Analysis of professional scripts and programs.

304 Development of Health Care Programs 3 cr
A look at the instructional design of health care programs and the approach to instructional decision making purpose, content, method, audience.

378 Photography 3 cr
A lecture/laboratory course in the preparation and use of photography. Fundamentals of camera work developing, printing, print evaluation.

402 The Director—The Producer 3 cr
A look at the role of the Director as the catalyst in media production and the producer as the coordinator of production decisions and contributors to the art.

404 Management of a Media Facility 3 cr
Considers the problems of setting up, designing, and managing an integrated program including production, utilization, and operation budget. Emphasis on the standardization of services.

406 Advanced Video Production Techniques 3 cr
Continued exploration into the key elements of good studio and location video production. Emphasis on the set design, special effects, electronic editing, and camera work. Ties together all the elements. Prerequisite: Introduction to Video Production. Permission of instructor required.

407 Medical Photography 3 cr
Clinical approach to the documentation of patient specimens and surgical procedures using a variety of media formats. Emphasis is on lighting and positioniing of subject. Personal attitudes toward instrumentation decoration and safety are discussed. Equipment and terminology explored. Must be taken during semester before internship. Prerequisite: Photograph. Permission of Instructor required.

408 Internship 3 cr
Intensive application of experiences gained in the field. Seniors only. Prerequisite: Medical Photography. Advanced TV Production.
DEPARTMENT OF MODERN LANGUAGES AND LITERATURES

Chairman Francesca Coleccia Ph.D.

The Department of Modern Languages offers courses in French, German, Italian, Russian, Spanish, and Swahili. On the elementary and intermediate level in French, German, and Spanish, the student may choose from two tracks of language courses both of which satisfy college degree requirements. One of these emphasizes reading and the other reading, writing, speaking, and aural comprehension. In conversation and composition courses, the student's fluency in the active use of the language is strengthened. Subsequent courses stress primarily literary studies in which the student is systematically introduced to a survey of the literature and is given a working acquaintance with the culture of the groups whose language he is studying. Choice of courses dealing with specific works authors and auxiliary subjects is also presented.

The student possessing a knowledge of foreign languages will find career opportunities in a number of fields such as education, government, employment, foreign service, social work, industry, and tourism.

REQUIREMENTS FOR THE MAJOR

The Department offers major programs in French, German, and Spanish. In addition it offers minor programs in these languages as well as non-major courses in Swahili. The major program in Modern Languages and Literatures consists of a minimum of 24 semester hours at the 300 level and above. Required courses are:

French 301 302 462 463 Majors will discuss their courses with their advisors.

German 301 302 460 461 Majors will discuss their courses with their advisors.

Spanish 301 302 401 402 453 454 Majors will discuss their courses with their advisors.

Elementary and intermediate courses must be taken in sequence. It is recommended that students take advanced courses out of progression. Credit toward the major or minor will not be given for 201 202 211 212 or 239 240 which are intermediate level courses. 302 is the recommended prerequisite to all courses numbered 312 and above.

It is recommended that majors in the Department include a course in the art of the country of whose language they specialize as well as one course in literature in translation in the literature of a country other than that of their major.

A maximum of 12 transfer credits will be accepted toward the major.

-Junior Year Abroad: Majors are strongly encouraged but not obliged to participate in programs approved in advance of the Department. Further information may be obtained at the Department office.

REQUIREMENTS FOR THE MINOR

The minor program consists of a minimum of 12 semester hours at the 300 level and above.

490 Independent Field Study (All Languages) Var cr

The student will participate under the supervision and guidance of the instructor in selected tours to various foreign countries to undertake independent study on selected and approved projects involving the exploration and study of history, life, work arts, and culture. Prerequisite: Prior permission of the instructor and Department Chairman.

French

101 102 Elementary French 3 cr each

Fundamentals of oral and written French. Three hours lecture and one hour laboratory each week.

111 112 Elementary French for Reading 3 cr each

The course will stress basic grammar and structure for reading comprehension.

115 116 French for Musicians 3 cr each

Specially designed for majors in music to provide them with those skills in French to meet their professional requisites. Registration limited to students in the School of Music. This course does not allow for continuation at the 200 level or higher.

120 Intensive French 6 cr

Fundamentals of oral and written French. Utilizes a different approach allowing the student to complete one year's work in one semester. Six lecture hours and one-hour laboratory each week.

201 202 Intermediate French 3 cr each

An intensified review and continuation of 101 102. Prerequisite 102 or equivalent.

211 212 Intermediate French for Reading 3 cr each

Prerequisite: 102 or 112.

220 Intensive French 6 cr

Review and continuation of 120. Utilizes techniques allowing the student to complete one-year's work in one semester. Prerequisite: 120 102 or equivalent.

239 240 Readings in Modern French Authors 3 cr each

Selections from modern works of literature. Do not carry credit toward a major or minor. Prerequisite: 202 or equivalent.

301 302 French Conversation and Composition 3 cr each

302 or its equivalent is the recommended prerequisite to all courses above 302. Prerequisite: 202 or equivalent.

320 345 Pro-Seminar in French Literature and Culture 3 cr each

All courses numbered 320 through 345 are pro-seminars in literature and culture. The following courses represent current pro-seminar offerings. They will be offered on a rotated basis and/or as circumstances warrant from semester to semester. All pro-seminars carry three credits a semester. Recommended prerequisite: French 302 or its equivalent.

320 Stylistics

321 Phonetics

322 Theatre De L Avant-Garde

323 Maupassant

324 Balzac

325 Realism and Naturalism

326 The Literature of the Existentialist Movement

327 The Symbolist Movement in French Poetry

328 French Poetry Middle Ages to 19th Century

339 17th Century French Literature

330 French Prose Fiction 19th Century

331 18th Century French Literature

460 475 Seminar in French Literature

All courses numbered 460 through 475 are seminars in literature designed to offer the advanced undergraduate student the opportunity to study various aspects of literature in greater depth. The following courses represent current seminar offerings: They will be offered on a rotated basis and/or as circumstances warrant from semester to semester. All seminars carry three credits a semester. French 462 and 463 are recommended prerequisites for these courses.

460 History and Culture of France since the Revolution

461 History of the French Language

462 Chanson de Roland through 17th Century

463 18th Century to Modern Period

French 462 and 463 are recommended prerequisites for these courses.

464 17th Century French Theatre

465 18th Century French Theatre

466 19th Century French Poetry

467 19th Century French Novel

468 19th Century French Theatre

469 20th-Century French Poetry

470 20th-Century French Novel

471 20th-Century French Theatre

472 Sartre and Camus

473 Le Nouveau Roman

474 Le Nouveau Theatre

480 Directed Readings Var cr

Readings of literary texts under close faculty supervision for majors only and only with permission of the Department. Variable credit.

German

101 102 Elementary German 3 cr each

Fundamentals of oral and written German. Three hours lecture and one hour laboratory each week.

111 112 Elementary German for Reading 3 cr each

The course will stress basic grammar and structure.

115 116 German for Musicians 3 cr each

Specially designed for majors in music to provide them with those skills in German to meet their professional requisites. Registration limited to students in the School of Music. This course does not allow for continuation at the 200 level or higher.

201 202 Intermediate German 3 cr each

An intensified review and continuation of 101 102. Prerequisite: 102 or equivalent.

211 212 Intermediate German for Reading 3 cr each

Prerequisite: 102 or 112.

239 240 Readings in Modern German Authors 3 cr each

Selections from modern works of literature. Do not carry credit toward a major or minor. Prerequisite: 202 or equivalent.

251 Commercial German 3 cr

Prerequisite: 201 or equivalent.

252 Readings in Scientific German 3 cr each

Prerequisite: 102 or equivalent.

301 302 German Composition and Conversation 3 cr each

302 or its equivalent is the recommended prerequisite to all courses above 302. Prerequisite: 202 or equivalent.

320 345 Pro-Seminar in German Literature and Culture 3 cr each

All courses numbered 320 through 345 are pro-seminars in literature and culture. The following courses represent current pro-seminar offerings. They will be offered on a rotated basis and/or as circumstances warrant from semester to semester. All pro-seminars carry three credits a semester. Recommended prerequisite: German 302 or equivalent.

320 History of German Culture from the Franks to Hitler

321 History of German Culture from Hitler to the Present

324 Popular Tradition in German Literature The Fairy Tale The Heroic Tale
325 Popular Tradition in German Literature Legend Animal Fable
326 Women Figures in German Literature from Goethe to Boll
327 German Women Authors and Critics
328 Introduction to German Drama
329 Introduction to German Poetry
330 Modern German Prose
331 Modern German Theatre
340 475 Seminar in German Literature 3 cr each
All courses numbered 460 through 475 are seminars in literature designed to offer the advanced undergraduate student the opportunity to study various aspects of literature in greater depth.
The following courses represent current seminar offerings. They will be offered on a rotating basis and/or as circumstances warrant from semester to semester. All seminars carry three credits a semester. Recommended prerequisite: German 302.
460 German Literature to Lessing
461 Lessing His Life and Works
462 Advanced German Stylistics
464 German Romantic Literature
465 Modern German Narrative
Hesse Mann Kafka
466 Tolerance in 18th Century German Literature Lessing Schiller
467 The Age of Goethe
468 Goethe’s Faust
469 Concept of Love in the German Medieval Epic and Lyric
470 Literature of Enlightenment
471 Sturm und Drang
480 Directed Readings Var cr Reading of literary texts under close faculty supervision for majors only and only with permission of the Department. Variable credit.

Italian
101 102 Elementary Italian 3 cr each
Fundamentals of oral and written Italian. Three lecture hours and one hour laboratory each week.
115 116 Italian for Musicians 3 cr each
Specially designed for majors in music to provide them with those skills in Italian to meet their professional requisites. Registration limited to students in the School of Music. This course does not allow for continuation at the 200 level or higher.
201 202 Intermediate Italian 3 cr each
An intensified review and continuation of 101 102. Prerequisite 102 or equivalent.
301 302 Italian Conversation and Composition 3 cr each
Prerequisite 202 or equivalent.
314 315 Individual Study Var Cr
Prerequisite 202 or equivalent.
320 345 Pro Seminar in Italian Literature and Culture 3 cr each
All courses numbered 320 through 345 are pro-seminars in literature and culture. The following courses represent current pro-seminar offerings. They will be offered on a rotating basis and/or as circumstances warrant from semester to semester. All pro-seminars carry three credits a semester.
321 Modern Italian Novel (Levi Buzzati, Cassola, Moravia)
322 Commercial Italian
323 Pirandello Svevo Pavese
324 Introduction to Italian Poetry (Leopardi Carducci Pascoli D Annunzio)
325 Introduction to Italian Poetry (Ungaretti Saba Montale, Quasimodo)

Russian
101 102 Elementary Russian 3 cr each
Fundamentals of oral and written Russian. Three hours lecture one hour laboratory each week.
201 202 Intermediate Russian 3 cr each
An intensified review and continuation of 101 102. Prerequisite 102 or equivalent.
301 302 Russian Conversation and Composition 3 cr each
Prerequisite 202 or equivalent.
314 315 Individual Study Var Cr
Prerequisite 202 or equivalent.
320 345 Pro Seminar in Russian Literature and Culture 3 cr each
All courses numbered 320 through 345 are pro-seminars in literature and culture. The following courses represent current pro-seminar offerings. They will be offered on a rotating basis and/or as circumstances warrant from semester to semester. All pro-seminars carry three credits a semester.
322 Commercial Russian
323 Russian Folklore
324 Contemporary Russian Literature

Spanish
101 102 Elementary Spanish 3 cr each
Fundamentals of oral and written Spanish. Three lecture hours one hour laboratory each week.
111 112 Elementary Spanish for Reading 3 cr each
The course will stress basic grammar and structure for reading comprehension.
120 Intensive Spanish 6 cr Fundamentals of oral and written Spanish. Utilizes a different approach allowing the student to complete one year’s work in one semester. Six lecture hours and one-hour laboratory each week.
201 202 Intermediate Spanish 3 cr each
An intensified continuation of 101 and 102. Prerequisite 102 or equivalent.
211 212 Intermediate Spanish for Reading 3 cr each
Prerequisite 102 or 112.
220 Intensive Spanish 6 cr Review and continuation of 120. Utilizes techniques allowing the student to complete one year’s work in one semester. Prerequisite 120 102 or equivalent.
239 Readings in Modern Spanish Authors
Selection from modern works of literature. Does not carry credit toward major or minor. Prerequisite 202 or equivalent.
240 Readings in Modern Spanish American Authors
Selection from modern works of literature. Does not carry credit toward major or minor. Prerequisite 202 or equivalent.
301 302 Spanish Conversation and Composition 3 cr each
Prerequisite 202 or equivalent.
320 345 Pro Seminar in Spanish Literature and Culture 3 cr each
All courses numbered 320 through 345 are pro-seminars in literature and culture. The following courses represent current pro-seminar offerings. They will be offered on a rotating basis and/or as circumstances warrant from semester to semester. All pro-seminars carry three credits a semester.
322 Commercial Russian
323 Spanish-American Novel
324 Contemporary Spanish-American Novel

DEPARTMENT OF PHILOSOPHY
Chairman John Sallis, Ph.D.
The program offered by the Department of Philosophy is designed to be a basic part of the student’s liberal education. It is intended to introduce students to philosophical thinking past and present to provide a discipline for asking the basic questions of life and to help students begin relating their other academic subjects to one another and to human experience. The Department, made up of professors who have different philosophical interests, attempts to develop the capacity for independent thinking on all issues.
REQUIREMENTS FOR THE MAJOR

The Department requires majors to take nine philosophy courses above the 100 level. These nine courses must be selected from the Historical Sequence and two from the sequence of Advanced Courses.

REQUIREMENTS FOR THE MINOR

Five courses are required for a minor one from the Introductory Courses (101 to 107), two from the Basic Courses (200 to 217) and two from the Historical Sequence and Advanced Courses (300 and 400 levels).

Introductory Courses

104 Introduction to Philosophy 3 cr
A first-hand study of selected philosophical texts from both traditional and existential perspectives with the aim of introducing students to the nature of philosophical thinking, and to the variety of philosophical issues area methods and theories.

105 Ethics 3 cr
An introduction to ethical theories of past and present time. Contemporary moral issues will be considered in the light of these theories.

106 Introductory Logic 3 cr
Analysis of the requirements for valid reasoning. Logical fallacies: types of definitions and important informal arguments of arguments in ordinary discourse will be studied in addition to the formal logic of inferences involving simple and compound statements.

107 Medical Ethics 3 cr
Ethical questions that arise in medical care and research will be examined. Topics might include experimentation on animals and man allocation of scarce medical resources euthanasia: the privileged relationship of doctors and patient etc.

108 Business Ethics 3 cr
The course is designed primarily for business majors who begin with a discussion of some general ethical issues and in particular the problem of a just distribution of wealth. These discussions are applied to concrete current business problems.

Basic Courses

200 Introduction to Phenomenology 3 cr
The basic approach to philosophical issues developed by Husserl: the founder of Phenomenology will be explored. The types of signs meaning the possibility of philosophy as rigorous science etc. are considered.

202 Philosophy of Being 3 cr
Two approaches of philosophers such as Aristotle: Aquinas: Kant: Hegel and Heidegger: God: world: and man: Being: essence: and existence: Time and history: Being and the possibility of metaphysics in contemporary thought.

203 Philosophy of Religion 3 cr
Introduction to the nature of religious experience. Traditions such as religious: symbolical: belief: and unbelief: the existence of evil and free will will be considered. Assigned readings include both traditional and contemporary writers.

204 Literature and Philosophy 3 cr
Studies philosophical themes as they emerge within great works of literature. Works will be selected from such authors as Sophocles: Dante: Shakespeare: Goethe: and Dostoyevski.

205 Existential Phenomenology 3 cr
Examination of the methods and style of thought which characterize existential phenomenology. Lectures and discussion on texts by major thinkers such as Being and Time by Heidegger: Phenomenology of Perception by Merleau-Ponty: and Being and Nothingness by Sartre.

206 Social Philosophy 3 cr

210 Philosophy of Feminism 3 cr
A philosophical study of the second sex emphasizing feminism as a method which attempts to be free from prejudice includes a discussion of some contemporary ethical and legal issues concerning the equality of women.

211 Marxism 3 cr
A study of the political philosophy of Karl Marx as one of the major directions in social thought Engels: Lenin and contemporary Marxism.

212 Political Philosophy 3 cr
Fundamental political questions will be explored. For example: Utopian state freedom: justice: the origins of political society: war and empire and revolution may be considered. Possible authors read Plato: Aristotle: Aquinas: Macchiaveli: Hobbes: Locke: Rousseau and Hegel.

213 Philosophy and American Political Thought 3 cr
A study of the philosophy of liberal democracy using such writings as those of the founding fathers: their predecessors and followers: Locke: Montesquieu: Paine: Jefferson: Madison: Hamilton: Lincoln: etc.

214 Philosophy of Sex 3 cr
The course provides an introduction to some of the basic themes and texts both traditional and contemporary related to the philosophical study of sex. The course will cover an introduction to metaphysics: metaphysical: thinking: definition: of knowledge: analogy: of being: the principles: structure: and causes of being: the concept: of the transcendental and the problem of evil.

Historical Sequence

300 Ancient Philosophy 3 cr

301 Medieval Philosophy 3 cr
A philosophical study of medieval texts in English translation selected as representatives of the broad range of conversations and approaches and theories which characterize the major Christian: Jewish: and Islamic: philosophical: thought: of: the: period.

302 Early Modern Philosophy 3 cr
Explores the development of modern thinking in the 17th century and proceeds to the time of the French Revolution. Course work consists in an analysis of several important texts chosen from such philosophers as Montaigne: Descartes: Pascal: Hobbes: Spinoza: Leibniz: Locke: Hume: Kant.

304 Later Modern Philosophy 3 cr
This course examines the period of modern philosophy initiated by Kant. It deals primarily with the crucial thinkers of the 19th century including Hegel: Feuerbach: Kierkegaard: Marx: Mill: and Nietzsche.

305 Contemporary Philosophy 3 cr
A study of contemporary philosophy from 1900 to the present: covering the methods and history of selected 20th century movements.

322 American Philosophy 3 cr

323 Oriental Philosophy 3 cr
Introduction to Oriental thought through a study of its major ideas. Such traditions as Confucianism: Taoism: Buddhism: Hinduism will be discussed.

325 Concentrated Philosophical Readings 3 cr
This course is an in-depth study of one or several philosophers such as Plato: Aristotle: Aquinas: Occam: Descartes: Kant: Wittgenstein: Strawson: Heidegger etc. Varying in subject matter from time to time.

Advanced Courses

312 Philosophical Anthropology 3 cr
The course examines several philosophical conceptions of man under the guiding question: What is man? Man's place in the world: his relationship to society: the impact of science and the historical consciousness. The course should be of interest to social science majors in addition to philosophy majors and minors.

313 Philosophy of the Human Sciences 3 cr
The relations of the human sciences with other sciences such as philosophy: psychology: mathematics: and biology: and the importance of the social: science and: history of science.

314 Philosophy of Natural Sciences 3 cr
A study of the philosophical implications of the methodology and conceptual framework of modern science. Contrast between traditional and contemporary physics regarding such questions as the nature of matter: space-time: and: the: rise: of: the: universe.

401 402 Thomism 3 cr each
Courses dealing with the texts of St. Thomas Aquinas. The first semester (401) covers his metaphysics and the second semester (402) deals with his philosophy of the human sciences. Important works of the texts of Aquinas (Martain: Galson: and the school of Marachel and Rahner).

403 Philosophy of God 3 cr

404 Philosophy and Science 3 cr
The course is designed primarily for business majors who begin with a discussion of some general ethical issues and in particular the problem of a just distribution of wealth. These discussions are applied to concrete current business problems.
DEPARTMENT OF PHYSICS

The program in the Department of Physics is primarily aimed at providing today’s students with a fundamental background in traditional Physics as well as the interrelationships with other sciences and disciplines. The Department is also aware that in today’s changing world, there must be a suitably flexible program which will best fit the graduate for the challenges faced by many professions which are based on the science of Physics. There is always the hope that the student will continue professional growth in Physics but it is also realized that there are many expanding fields to professional growth. This Department program therefore is structured to provide the essential background for success in graduate studies in the many current fields which seek Physics graduates as well as equipping the student to successfully compete for the available positions in research institutions, government agencies or private corporations. Department policy calls for individual attention to student needs.

REQUIREMENTS FOR THE MAJOR

A minimum of 32 semester hours is required for a major. These credits must include 211 212 301 329 330 361 372 402 429 430 473 474 (483 484 or 485 may be substituted for 474 with departmental approval)

Extra/Departmental Requirements: Chemistry 121 122 or Biology 111 112 Mathematics 115 116 215 216 308

Computer Science 111 and two years of a modern language

A student may take 207-208 Physics in the Modern World and either 201 202-General Physics or 211 212-General Analytical Physics; the credits for the 207 208 will not apply to the total number required for the degree. Credit will not be given for both 201 202 and 211 212.

REQUIREMENTS FOR THE PHYSICS MINOR

The minor consists of eight hours in the General Analytical Physics (211 212) and 12 credits of upper division physics on the 300 and above level. The department will structure the minor program from the course offerings to fit as nearly as possible the needs and desires of the individual student.

REQUIREMENTS FOR THE EARTH SCIENCE MINOR

The minor consists of a prerequisite sequence of 101 and 102 which must be taken as the first courses and 12 credits chosen from 203 204 205 206 303 304 305 307 as available to the curriculum. Not all courses are taught each semester and some are on alternate years. Earth Science 101 is prerequisite to all courses unless waived by the instructor.

201 202 General Physics 4 cr each

Designed to give the student a basic knowledge and understanding of mechanics, properties of matter, heat, wave motion, sound, magnetism, electricity, light, and modern physics through the use of modern day examples and applications. At the completion of this course, the student should have attained a working knowledge of physics; its techniques and reasoning so that the knowledge of physics gained may be applied to future work in the sciences or other fields of endeavor. Prerequisite: Mathematics 103 104 or the equivalent. Students who have completed Mathematics 116 and pre-engineering physics should take 211 212 Lecture four hours Laboratory two hours

207 208 Physics and the Modern World 3 cr each

A course especially for the nonscientist. Designed to give the student some basic for understanding the physics of the twentieth century and the physicist's approach to the study of nature. The physics of everyday life is used as a basis and classroom demonstrations are generally employed to help the student grasp concepts by showing concrete examples. No mathematics beyond basic high school algebra required

211 212 General Analytical Physics 4 cr each

This is a calculus based general introduction to the basic physical theories and concepts. An attempt is made to develop the student's science or engineering student the quantitative approach of the physicist to the physical universe. Some of the topics which may be included are vectors, Newton's laws of motion, the motion of a particle in space, momentum, energy, rigid body motion, fluid, gravity, wave motion, the first and second laws of thermodynamics, electricity and magnetism and optics. Co-requisite for 211 212 Lecture three hours Laboratory two hours

301 Thermodynamics 3 cr

This is an intermediate level course covering the fundamental principles of thermodynamics: kinetic theory and statistical mechanics. The following is a partial list of topics generally included: temperature, thermodynamic systems, work, heat, the first and second laws of thermodynamics, ideal gases, entropy, Maxwell's equation, the kinetic theory of ideal gas, and the basic concept of statistical mechanics. Prerequisites: Mathematics 212

306 Applied Electronics Laboratory 2 cr

This course seeks to combine a treatment of the principles of modern electronics instrumentation with practical laboratory experience. Topics which will be included will be passive and active electronic components, electronic measuring instruments, power supplies, amplification, feedback and control, computer interfacing, operational amplifiers, digital and analog devices. Emphasis will be on proper use of instrumentation rather than on advanced principles of design. Prerequisite: Permission of instructor.

329 Advanced Laboratory I 1 cr

This course is designed to acquaint the student with the basic principles of modern electronics to the extent that the student will have a sufficient background to design and use simple electronic circuits in future research. A set of experiments is performed and analyzed by the student. Subjects covered are the use of research grade electronic instruments, transistors and bipolar transistor circuit design parameters, printed circuit design layout and construction. Prerequisite 212 or 202 and consent of instructor.

330 Advanced Laboratory II 1 cr

A continuation of Advanced Laboratory I which includes the following basic and advanced operational amplifier circuitry, digital integrated circuits Gates, Boolean Algebra I C timer circuitry, digital flip-flops and counter circuitry, A/D, D/A conversion circuitry, digital meter design and construction. Prerequisite 329 and consent of instructor.

361 Mechanics 4 cr

An intermediate course in the application of Newtonian Mechanics to simple systems. A short introduction to vector calculus precedes the main discussion. The topics normally covered are dynamics of a mass point, systems of particles, generalized coordinates and Lagrange's Equations. Other topics which may be included are normal modes, rigid bodies and two bodies with a central force and waves on a string. Prerequisites: Mathematics 215

372 Electromagnetics 4 cr

An intermediate course for the science and engineering students. The topics will usually be discussed electrostatics, energy relations in electrostatic fields, dielectric currents and their interaction, magnetic properties of matter, AC circuits, Maxwell's equations, reflection and refraction of electromagnetic waves and dipole plane sheet radiation. Prerequisites: Mathematics 215

402 Optics 3 cr

This course introduces the student to the principles of geometrical and physical optics. Topics may include reflection, refraction, diffraction, polarization.

405 Acoustics 3 cr

A course which presents the physical principles underlying the production and propagation of sound. Examples and explanations are based primarily on musical sound. No mathematical preparation beyond high school algebra is necessary.

430 Advanced Research 2 cr

This is a one year course in which the student selects a research project, develops it, and prepares a report on the results. The student is also advised to present the results of his work at a department seminar or an appropriate scientific meeting if deemed advisable. A research topic is selected from those suggested by the members of the Physics Department or other science faculty members. Work is carried out in close coordination with the selected advisor although all work must be the student's own. No grade is given at the end of the first semester, but a final grade is assigned at the completion of the project in the Spring Semester.

473 Atomic Physics 3 cr

This course provides an introduction to special relativity and quantum theory with applications drawn mainly from modern theories of the atom. Topics usually included are quantum theory of heat radiation, the uncertainty principle, quantum theory of the hydrogen atom, many-electron atoms, atomic spectroscopy. Prerequisites: 212 and consent of instructor.

474 Quantum Mechanics 3 cr

A basic introduction to the mathematics of quantum phenomena. Some of the topics covered are: Schroedinger's equation, quantum mechanics of the hydrogen atom, many-electron atoms, atomic spectroscopy, conservation theorem, spin angular momentum and perturbation theory. The course will emphasize application to simple systems. Prerequisites: 212.

483 485 486 Special Topics 1 cr each

Designed to allow the Physics major flexibility in
scheduling this course may include the following

483 Nuclear Physics 3 cr 484 Introductory Solid State Physics 3 cr
Experimental and theoretical aspects of the atomic nucleus will be discussed. The topics presented may include two-nucleus systems, radioactivity and modes of decay, radiometric dating, interaction of radiation with matter, nuclear structures and radiations, and nuclear fission. Prerequisites: 212 or 202 and consent of the instructor.

485 Relativistic Mechanics 3 cr This course is an introduction to the Special and General Theories of Relativity. A list of topics which may be discussed are absolute space, Einstein's Kinematics, Einstein's Optics, spacetime and four-vectors, relativistic particle mechanics. Prerequisites: 212 Mathematics 215

486 Shop Techniques 1 cr A basic introduction to machine shop practices necessary to experimentalists in all fields. Some of the areas covered are shop equipment and its use, materials, soldering and welding techniques, mechanical drawing and schematics, electronics construction techniques and practical application.

487 Problems in Physics 1-4 cr Special topics and problems in physics and related subjects suitable for independent work.

488 Advanced Problems in Physics 1-4 cr Problems of a more sophisticated nature

Earth Science

101 Physical Geology 3 cr (Prerequisite to all Earth Science courses) 124 This is an introduction to the geological processes and materials which will concentrate on the makeup of our planet and the methods involved. Study will also include physical features and the processes of the earth as presently understood which have created those features. Geological relation to environment is also examined.

102 Historical Geology 3 cr A study of the earth's history which relates tectonic movements of the crust, the building processes and life history with their interrelations will be discussed. Evolution of local features will be discussed also with the relationship to plate tectonics.

103 Physical Geology Laboratory 1 cr An introduction to the identification of rocks and minerals by composition and appearance and the interpretation of topographic maps. The use of maps to identify the cause of drainage and some effects of water and erosion will be experienced. Mapping tools will be introduced as well as some field equipment

104 Historical Geology Laboratory 1 cr An accompaniment for ES 102 providing an introduction to sedimentation and the use of fossil identification. Columnar sections, aerial geologic maps, and aerial photos will be used.

203 Astronomy 3 cr Introduction to the study of astronomy and the basics of celestial observation. Study will include telescopic types and the known universe as identified from present study. Course will include arrangements with the Buhl Planetarium and Allegheny Observatory. Star types and distances will also be examined.

204 Meteorology 3 cr Elementary study of meteorology and weather systems in the local area as well as the world patterns. Observation and prediction will be practiced when possible. Local and U.S. Weather Bureau services will be used and analyzed when possible.

205 Planetary Geology 3 cr A systematic study of the geology of other planets and satellites in the solar system. Methods of study used to obtain information on these bodies will be examined along with the latest available information from scientific probes.

206 Geophysics 3 cr An introduction to geophysics and its methods and use. Necessary to experimentalists in all fields. Some of the areas covered are shop equipment and its use, materials, soldering and welding techniques, mechanical drawing and schematics, electronics construction techniques and practical application.

303 Oceanography 3 cr An introduction to the marine environment including the geology and ecology. Attention is paid to the importance of dangers to the ecosystem. Characteristics of oceanic waters and circulation patterns will be discussed. Summer courses may be combined with one of several university offerings.

304 Environmental Earth Science 3 cr An examination of the problems of ecology and the impact of modern living on the systems of the earth. Which are necessary for plant and animal life. The individual effects of both natural and man-made pollution and their relation to the dimensions of the possible cures. An advance over 101 with an effort to have the student gain a balanced non-hysterical appreciation of cause, effect and search for solution.

305 Physiography of the United States 3 cr Introduction to the subject to the various topographic and physiographic differences in the contiguous states as well as Alaska and Hawaii. This course is designed to allow the student to become familiar with the terrain resources economics and individual problems of the various regions of our country. An approach to demonstrate the fact that no generalization may be made to fit all areas at once but different problems are associated with each resource and each region.

DEPARTMENT OF POLITICAL SCIENCE

Chairman: William E. Markus

Political science studies the political ideas, institutions, behavior, values, and goals of human collective life. The department stresses an understanding of political life as a necessary complement to the study of human existence. Through an awareness of the similarities and differences among political structures and political parties, students learn about the ways in which the political process operates in different societies. An awareness of deeper and more fundamental considerations. Students in the Department of Political Science are introduced to both the normative and empirical methods of analyzing political life. Political science majors are prepared for careers in government and administration, teaching, private enterprise, and for further study in graduate and law school programs.

REQUIREMENTS FOR THE MAJOR

Twenty-four semester hours are required for the major in political science in addition to 101 these credits must include 208 331 309 and 405 or 406. A student transferring to Duquesne from another College or University may receive a maximum of 12 transfer credits applied to their major requirement.

REQUIREMENTS FOR THE MINOR

General Minor This minor is designed to provide the students with a comprehensive view of the entire discipline and is recommended for those students who may later contemplate graduate study or think that they might eventually like to change from a minor to a major in Political Science. It consists of a minimum of 12 credits beyond the freshman course. The 12 credits encompass the following required courses: 208 233 309 and 405 or 406.

Concentrated Minor The following minors, concentrated in a particular area, are also available:

1. American Government 233 and a minimum of nine credits from among 241 242 243 247 276 301 323 324 404, and 414
2. Comparative Government 208 and a minimum of nine credits from among 315 318 321 408 412 413, and 450
3. International Relations 309 and a minimum of nine credits from among 312 318 320 402 404 409, and 490

Selective Minor The Department of Political Science will also devise a minor from its course offerings to fulfill the particular needs and desires of a student in any major area of concentration. Such a minor must be structured in consultation with an assigned Political Science Department faculty advisor and the Department Chairman. A maximum of six transfer credits can be applied to the minor requirement:

101 Introduction to Political Science is prerequisite to all courses.

101 Introduction to Political Science 3 cr An investigation of the major conceptual foundations of the study of political society.

208 Comparative Political Systems 3 cr A systematic, multifocused analysis of selected political systems.

233 American National Government 3 cr The institutional structure and policy-making processes of national government are examined as reflections of the assumptions of liberal democracy and of the American social and economic systems. In addition to the three branches of government, political parties, interest groups and elections are considered.

235 The Mass Media and Politics 3 cr A study of the mass media and its nature, role, and impact on U.S. politics. The emphasis will be on the mass media as instruments of political communication and opinion leadership.

240 American Political Parties 3 cr An intensive study of the roles of interest groups and political parties in the decision-making processes of the American system of government with attention devoted to the internal dynamics of these institutions.

241 The American Presidency 3 cr A study of the role of the President at the center of the decision-making processes in the American political system.

242 The American Congress 3 cr An investigation of the operation of the Congress of the United States within the American system of government.

243 Politics and Society 3 cr A study of political culture, political socialization, political participation, political elites and social structure.

276 Voting and Election Behavior 3 cr An examination of the determinants of opinions and political beliefs, political participation and voting behavior, the significance of democratic government, findings, and research in these areas.

301 State and Local Government 3 cr A study of the position of the state and local governments in the Federal Union.

309 International Relations 3 cr A study of the major factors involved in international politics.
relations including such concepts as sovereignty nationalism balance of power international law and organization

312 International Law and Organization 3 cr A survey of the historic development and present role played by international law in the world community and the formation and operation of such organizations as the United Nations and its specialized agencies

315 Politics of Third World Countries 3 cr A topical study of the politics of the emerging nations including nationalism political integration political parties and the role of the military and elite

318 Nationalism 3 cr A study of the dynamics of nationalism with emphasis on the role of nationalism in current world political problems includes the development of nationalism in Europe

320 United States Foreign Policy 3 cr A study of American foreign policy since the Second World War with emphasis on the central present issues and the domestic sources of foreign policy

321 Government and Politics of Eastern Europe 3 cr An analysis of political developments in the Communist regimes of Eastern Europe with special emphasis on relations between the USSR and Eastern Europe in the post-Stalinist era

323 Constitutional Law 3 cr A detailed examination of Supreme Court cases concerning the nature of American federalism Congressional and Presidential power commerce clause state powers judicial review due process clauses and apportionment. Students are introduced to court and appeals procedures the reading and briefing of court decisions and the nature of the court review process

324 Civil Liberties 3 cr A detailed analysis of Supreme Court decisions bearing upon Bill of Rights guarantees with specific reference to the freedoms of speech press assembly the dimensions of search and seizure right to legal counsel equal protection and due process rights voting rights and the adjudication of the fourteenth amendment application of rights to state action

327 Research Methods in Political Science 3 cr A study of the techniques of scientific inquiry into political phenomena including research methods data collection analysis and interpretation

402 Soviet Foreign Policy 3 cr An analytical study of the development of Soviet foreign relations since 1917 with special emphasis upon the post-Stalinist era

404 Simulation in International Politics 3 cr Students spend the semester simulating an international conflict situation. They act as foreign policy decision-makers applying the principles concepts and instruments of international politics. For majors only

405 406 Western Political Thought 3 cr each A study of political ideas as distinct from and yet related to political institutions that constitute our western political heritage. 405 considers theorists from the classical period to the early 16th Century 406 considers theorists from the late 16th Century to the late 19th Century

407 American Political Thought 3 cr An analysis of the issues which have played a fundamental role in American Politics from colonial church-state problems to modern liberalism and conservatism

408 Theory of Comparative Government 3 cr An examination of the basic theories and concepts in contemporary approaches to comparative political systems

409 Theory of International Relations 3 cr A study of various theoretical approaches to an understanding of international relations including political realism systems analysis decision-making and equilibrium analysis

412 Government and Politics of Germany 3 cr A comparative analysis of the contemporary political systems of West and East Germany

413 Government and Politics of the USSR 3 cr An intensive analysis of the origin and evolution of the Soviet political system with particular emphasis upon the developments of the post-Stalinist era

414 Public Policy 3 cr A study of the elements operations and investigation of the way governmental units decide upon programs and policy objectives

420 Contemporary Political Theory 3 cr A study of central topics in political thought from Marx to the present time

430 Internship in Practical Politics 3 cr A work and observation experience in government and political offices at the city county state and national levels in the Pittsburgh area Permission of department required

436 Honors Colloquium in Political Science 3 cr A detailed analysis of a selected topic

450 Workshop International Studies 3 cr An intensive one-week interdisciplinary summer school course. This course presents political foreign policy culture religion and social problems of Third World Countries. Several outside speakers augment Duquesne faculty

DEPARTMENT OF PSYCHOLOGY
Chairman Rev. David L. Smith C.S.Sp. Ph.D.
The undergraduate program of the Department of Psychology is designed 1) to introduce and familiarize students with the fundamental content issues and interests of various areas of psychology and critically evaluate and restructure these in the context of psychology as a human science 2) to foster intellectual and personal freedom and critical thinking as essential to the humanizing process 3) to prepare the professionally oriented student for advanced study 4) to provide a foundation for careers involving human services. To these ends the department offers a wide variety of courses covering psychology concerned as a human science a natural science and within a historical perspective Further study in graduate school prepares students for careers in mental health professions social work politics and within a historical perspective Further study in graduate school prepares students for careers in mental health hospitals schools mental health and social welfare agencies business and industry In our rapidly changing society the demand for professionally trained psychologists is increasing.

While the department believes that human scientific psychology is the most viable and encompassing approach to the study of man it also realizes its responsibility to expose its students to other psychological approaches Hence every major who plans to enter graduate school in psychology is strongly encouraged to take advantage of the offerings in sister universities through the procedure of cross-registration

REQUIREMENTS FOR THE MAJOR
The major program consists of 103-Introduction to Psychology plus a minimum of 24 semester hours These credits must include 220 and 223. Majors desiring to pursue graduate study in psychology are strongly advised to take six additional credits through cross-registration at other universities. Learning Theory Experimental Perception Memory etc. and Statistics (225 Fundamentals of Statistics offered by the Mathematics department may be considered part of the mathematics/science requirement Finally it is recommended that majors enroll in a hospital or community practicum for credit and/or do volunteer work in a neighborhood clinic. Three credits earned in a practicum count toward the 24 required credits an additional three credits in practice may be earned above and beyond the required minimum of 24 Information about such opportunities can be obtained from the department academic advisor

The psychology department has set up a dual advisement system departmental academic advisor and the faculty academic advisor. Prospective majors should consult the departmental academic advisor concerning the special procedure followed for the declaration of the major

A minimum of 15 credits in psychology exclusive of practicum must be taken at Duquesne University for the major

REQUIREMENTS FOR THE MINOR
Requirements for a minor are 103 and 223 and any three of the following 225 or 226 328 340 352 361 390 400 level courses may be taken for the minor with permission of the department head A minimum of nine credits in psychology must be taken at Duquesne University for the minor

COUNSELING SERVICES
Personal counseling services are available to all students at the Center for Training and Research in Phenomenological Psychology located at the Chapel end of Centennial Walk

103 Introduction to Psychology 3 cr (Prerequisite to all courses) Introduction to fundamental concepts and methods of psychology examined from both traditional and phenomenological perspectives. Prerequisite for all other departmental courses

220 Systematic Psychology 3 cr For majors only. Traditional approaches (behavioristic physiological psychoanalytic) to sensation perception learning and motivation Required for majors

223 Introduction to Existential Phenomenological Psychology 3 cr Introduction to a human-science alternative to psychology as a natural science. Prerequisite for 356 and 410 required for majors and minors

225 Developmental Psychology I (Infancy and Childhood) 3 cr Growth and development of the child with emphasis on personality development

226 Developmental Psychology II (Adolescence and Maturation) 3 cr Development from adolescence through adult stages to coping with death

230 Psychology of Community Experience 3 cr Experience of community phenomena eg individuals versus group priorities intimacy vs privacy

280 History of Psychology 3 cr Overview of figures and issues in the history of psychology from precursors to present

328 Psychology of Personality 3 cr Critical examination of major theories of personality

340 Social Psychology 3 cr Foundations of social processes attitudes values and roles public opinion propaganda and communication personal participation in society

352 Abnormal Psychology 3 cr Examination of theories and data on disordered human existence
Theoretical and empirical explorations of aesthetic centers Majors only permission of Department An applied psychology setting provides oppor un-
primary sources Prerequisite 280

dialogue with contemporary themes Reading of
collectively Designed to be personally relevant to
the life of the student Open to juniors and seniors only

Psychology of Aesthetic Experience 3 cr
Theoretical and empirical explorations of aesthetic experience

History of Psychology II 3 cr
Intensive study of selected historical figures in dialogue with contemporary themes Reading of primary sour As the requisite 280

Applied Psychology Practicum 3 cr
An applied psychology setting provides opportunity for working directly with professionals Settings have included psychiatric hospitals and community centers Majors only permission of Department Head Repeatable once

Individual and His World 3 cr
Examination of individual's relation to society from a developmental and cross-cultural perspective

Principles of Psychoanalytic Thought 3 cr
Examination of the times and contributions of Freud and selected other major psychoanalytic theorists Permission of department head for non-majors

Psychology of Language and Expression 3 cr
Communication as a live embodied relation of person to world and others Emphasis on phenomenological perspectives Permission of department head for non-majors

Advanced Existential-Phenomenological Psychology 3 cr
Detailed investigation of selected works in existential-phenomenological philosophy and psychology Prerequisite 223 Permission of department head for non-majors

Gestalt Psychology 3 cr
Contributions of Gestalt psychology (especially the works of Koffka Kohler and Goldstein) to traditional and human-sciences psychology Permission of department head for non-majors

Contemporary Issues in Clinical Psychology 3 cr
A human-sciences examination of the approach' methods data and current issues of clinical psychology Permission of department head for non-majors

Independent Studies 3 cr
A tutorial course for an exceptional student who wishes to pursue a particular study with a faculty member For majors only usually those intending graduate study advanced coursework completed Permission of faculty member and department head required

Special Topic 1-4 cr
A visiting professor presents his/her specialty or a regular faculty member presents highly specialized studies or an experimental course Repeatable Prerequisites vary with the instructor Permission of department head for non-majors

DEPARTMENT OF SOCIOLOGY
Chairman Chester A Jurcza Ph D

Social Services/Human Services The principle that is the basis for this program is that classroom learning provides the foundation out of which effective social/human services may be built Preparation for professional training and skill development is the emphasis

Recommended courses 101 103 212 213 214 314 450 451

REQUIREMENTS FOR THE MAJOR
A minimum of 24 semester hours not including 101 is required for a major in Sociology these courses must include 201 and 304 In consultation with the undergraduate academic advisor the major may select a concentration in general Sociology Criminal Justice Gerontology or Social Services/Human Services The suggested course numbers for these concentrated areas are listed above with the corresponding titles and descriptions in the following section

REQUIREMENTS FOR THE MINOR
A minimum of 12 semester hours not including 101 is required for a minor 450 451 488 and 492 are reserved for majors only Minors may select a concentration in one of four areas above in consultation with the department advisor

Sociology 101 is a prerequisite to all courses except 102 103 Criminal Justice and 103 Social Work All 300 and 400 courses are for juniors and seniors only

Sociology

Survey of Sociology 3 cr
A broad survey of the social and cultural aspects of environment

Survey of Anthropology 3 cr
Introduction to the field of anthropology both physical and cultural

Sociological Theories 3 cr
A study of selected European and American theorists For sociology majors and minors only

Sociology of Society Problems 3 cr
Study of society-structure(crime) applicable to contemporary social issues

Exploration of socialization the person's interaction with structure and culture small groups and collective behavior

Socialization of the Child and Adolescent 3 cr
Discussion of the child and adolescent socialization process in American society

Computer Uses in the Social Sciences 3 cr
An introduction into computer related skills with a focus of data management usage of canned programs and the unix/vax computer system

Methods in Sociology 3 cr
Discussion and application of techniques and research procedures used in sociological research

Ethnic Groups 3 cr
Comprehensive survey of races performed and problems facing by ethnic groups

Women in Society 3 cr
The role of women in culture and the study of women's movements for liberation

Sociology of Sports 3 cr
Study of the institutions of sports and their relation to American culture and other institutions

313 Sociology of Sexual Behavior 3 cr
Discussion of sociological studies of sexual behavior

315 Social Development-Infancy to Death 3 cr
Study of the socializing process from the infant state to the dying state

323 Medical Sociology 3 cr
Study of the impact of values and related structures on health maintenance personnel and institutions discussion of the social system of health organizations

325 Family Systems 3 cr
Comparative study of the family the interaction of the family with other community institutions

341 Sociological Measurement 3 cr
Discussion of techniques and problems in sociological measurement

488 Field Research 3 cr
Sociological research emphasizing the survey technique

492 Selected Readings 1-3 cr
For sociology majors only

Criminal Justice

103 Introduction to Criminal Justice 3 cr
An introduction to the criminal justice process including police courts correctional facilities and community based corrections

213 Delinquency and Society 3 cr
A study of the phenomenon theories and causation of juvenile delinquency

302 Evaluative Research in Criminal Justice 3 cr
Study of techniques for research and evaluation of criminal justice programs

310 Juvenile Law 3 cr
A study of the legal system that relates to the identification processing and rehabilitation of the juvenile offender

335 Criminology 3 cr
A study of sociological explanations of criminality correlates causation and criminogenic conditions
and the theatre performance skills with media theory and skills. This concentration prepares the student for the fields of applied communication, theatre, radio, television, and public relations. Along with classroom theory and practice, students will have an opportunity to obtain practical experience onstage and backstage in Red Masque's productions and by participating in on-and-off-the-air work at WDUQ (90.5) Duquesne's twenty-five thousand watt National Public Radio affiliate.

Courses in Radio and TV announcing and TV production afford the student the opportunity to work in a fully equipped TV studio. Recommended courses: 140, 141, 190, 204, 251, 263, 264, 280, 351, 370, 380, 390, 400, 450, 460, 470, 490.

Speech Pathology/Audiology. The profession of Speech Pathology/Audiology is concerned with impairments in the processes of communication, speech, language, and hearing. Upon completion of graduate education, a speech pathologist or audiologist may provide clinical services or work in basic and applied research. He or she may be employed in schools, hospitals, laboratories, community service centers, or colleges and universities. Speech pathology and audiology is a rapidly growing field and the demand for trained personnel far exceeds the supply.

This area of concentration at Duquesne is a preprofessional program designed to prepare the student for graduate study in speech pathology and audiology. The student concentrating in Speech Pathology/Audiology may be eligible to register for Speech 342, 422 with a 3.00 GPA in his/her major completion of all required courses and the permission of the department chairman.


Prospective Speech Pathology majors should declare the major before they begin their junior year.

REQUIREMENTS FOR THE MAJOR

A minimum of 30 semester hours is required for a major in Speech Communication and Theatre. Majors will be required to enroll in three of the following courses: 101, 102, 140, 190, 204. Speech Communication/Audiology concentrations will be required to enroll in Speech 120, 140, 204, 220.

A maximum of 12 transfer credits in speech can be applied to the major requirements.

REQUIREMENTS FOR THE MINOR

The minor consists of 18 credits: six credits in required introductory courses and 12 additional credits. There are four emphases that the student may follow:

1. Social Communication 101, 102 plus 12 credits in any of the following: 204, 206, 208, 302, 304, 311, 402, 411.
2. Theatre/Media 140, 190 plus 12 credits in any of the following: 141, 251, 263, 264, 280, 351, 370, 380, 385, 390, 451, 460, 470, 490.
3. Speech Pathology/Audiology 120, 220 plus 12 additional credits. Courses 320, 426 are required. The remaining six credits may be taken in any of the following: 221, 420, 425.
4. General Speech Communication and Theatre 190 and other courses 101 or 102 with 12 additional credits in any of the following: 302, 304, 311, 402 plus six credits in any of these: 140, 251, 263, 264, 280, 351, 370, 380, 385, 390, 451, 460, 490.

Suggested activities for majors and minors in Speech Communication and Theatre include the Red Masque Dramatic Organization WDUQ Radio and Television the Debate Team, the Dale student newspaper, United Nations Organization, and Suggested courses for fulfilling Communication Area requirements for non-Speech majors: 101, 102, 140, 190.

400 Independent Study (All areas of concentration) 1-3 cr.

The student will work on a selected project under the super vision and guidance of a faculty member. Prereq uisite: Permission of the instructor and Department Chairperson. May be taken twice.

Social Communication 101 Process of Communication 3 cr.

Examine how man, a being who must believe communicates his beliefs and how he utilizes certain kinds of beliefs which are very fundamental through the ages to assist or exploit his fellow man.

102 Techniques of Oral Communication 3 cr.

Develops those communicative skills necessary to critically analyze verbal discourse and to perform effect ively in public speaking situations which confront the educated person.

404 Interpersonal Communication 3 cr.

Designed to investigate the various aspects of interpersonal communication. Primary consideration will be given face-to-face human interaction in a variety of situations.

406 Discussion and Group Process 3 cr.

Develops those communicative skills essential for functioning effectively in the small-group situation.

408 Nonverbal Communication 3 cr.

Nonverbal messages are those messages transmitted without the aid of language or in conjunction with language. They carry much information about the emotional state of the sender. Some components of nonverbal communication to be covered are body movement, physical attributes, physical alterations, dress, space, time, touch, objects, the eyes, and the human voice.
302 Organizational Communication 3 cr
Stresses the acquisition and application of skills that will bring success in an organizational setting. Prerequisite 204 or 206

304 Persuasion 3 cr
A study and application of principles and practices that influence people's beliefs and actions. Prerequisite Either 101 or 102 or permission of the instructor

311 Process of Communication II 3 cr
Develops more completely and philosophically the rhetorical perspective established in Process of Communication I by applying that particular perspective to contemporary systems of belief. Prerequisite 101 or permission of the instructor recommended 304

402 Argumentation and Debate 3 cr
A course in applying the principles and methods of critical deliberation to a significant contemporary social issue. Emphasis will be on advocating, defending, and refuting a proposition of policy. Prerequisite 102 or permission of the instructor

411 Communication and Imagination 3 cr
Examines how the triumph of beliefs dominated by imagination over beliefs dominated by science has changed our understanding of communication

412 Speech Practicum 3 cr
An internship in communication industry or appropriate organizational setting. Prerequisite Permission of department chairman required

Speech Pathology/Audiology

120 Development of Language 3 cr
Focus will be on the acquisition of sound meaning and grammar systems from infancy through childhood with emphasis on the comparative analysis of theories of communication development. Prerequisite: Permission of instructor. Physical, neurological, psychological, and social bases of language will be discussed. Sociolinguistic differences will be discussed with reference to Black language and regional variations

121 Sign Language (Manual Communication) 2 cr
Sign language systems used by and with the deaf and hearing impaired will be presented in an overall introductory methods course. Participants will be able to demonstrate ability to fingerspell and use basic signs in simple phrases and sentences. Aspects of current trends in Deaf Awareness will be included

140 Phonetics 3 cr
An approach to the English language based upon the fundamentals of vocal and articulatory speech sounds as systematized by the International Phonetic Association

204 Interpersonal Communication 3 cr
Designed to investigate the various aspects of interpersonal communication. Primary consideration will be given face-to-face human interactions in a variety of situations

220 Introduction to Problems in Speech 3 cr
A survey of various speech disorders their causes recognition and possible therapy

221 Anatomy and Physiology 3 cr
This course will study the basic neurological, skeletal, and muscular structures involved in the speech and hearing process. Prerequisite 220 or permission of the instructor

320 Clinical Techniques in Speech Pathology 3 cr
This course will focus upon the clinical management of speech and hearing problems. Past and current therapeutic approaches and techniques will be presented in relation to disorders of speech and hearing. Different organizational procedures and practices will also be included. Prerequisite 220 or permission of the instructor

322 Speech Pathology/Audiology Externship 3 cr
Provides opportunities for observation of various aspects of clinical work. Direct field trips are included. Prerequisite Permission of department chairman required Open to juniors and seniors

420 Speech Problems of the Exceptional Child 3 cr
This course will investigate the speech and language development speech problems and speech remediation of the mentally retarded brain injured aphasic learning disabled and cerebral palsied child. The role of other professionals in addition to that of the speech pathologist in speech remediation will be explored. Prerequisite 220 or permission of the instructor

422 Speech Pathology/Audiology Clinical Practicum 3 cr
Provides an opportunity for active participation with professionals in their work in varied settings for Speech Pathology/Audiology concentration majors only. Written permission of department chairman required

425 Aural Rehabilitation 3 cr
The human communication systems are presented including acoustic and visual components. Communication problems of the hearing impaired are discussed with regard to amplification, residual hearing, visual perception and manual communication. Programs of rehabilitation for individuals with mild to profound hearing impairments are reviewed. Prerequisite 220 or permission of instructor

426 Hearing and Audiology 3 cr
This course will consider the nature of sound the process of hearing and hearing impairment. The different types causes and the measurement of hearing impairment will be discussed Exposure to audiometric testing will also be available. Prerequisite 220 or permission of the instructor

Theatre/Media

140 Phonetics 3 cr
An approach to the English language based upon the fundamentals of vocal and articulatory speech sounds as systematized by the International Phonetic Association

141 Voice and Diction for the Media 3 cr
Designed to meet the needs of those who will be required to use voice and diction as professional tools in the training and pursuit of media careers, i.e., Radio/Television Theatre and Medical Media. Not limited to Media Majors

190 Introduction to Theatre Arts 3 cr
A survey of theatre as an art form, focusing on the selective integration of a number of skills and disciplines to be brought about the aesthetic of the theatrical moment. Beginning with lectures on the roles of the director, actor, and various craftsman the course will work up to a sampling of the various modes and forms of drama in terms of exigencies or production

204 Interpersonal Communication 3 cr
Designed to investigate the various aspects of interpersonal communication. Primary consideration will be given face-to-face human interaction in a variety of situations

251 Radio Advertising 3 cr
Application of the principles of good speech to the announcing of news, sports, weather and commercials and to the art of interviewing

263 Stagecraft 3 cr
Stagecraft is a detailed examination and application of the methods and materials in the area of set construction, scene painting, and property construction to increase the awareness of accepted building design and safety practices in technical theatre. Prerequisite 190 or permission of the instructor

264 Scene Design 3 cr
Scene Design is a study of the preparation and presentation of set design. The study will include rendering techniques, scale models, drafting techniques, designing in a budget, the use of lighting and designing for different types of performance spaces

280 Acting I 3 cr
A study of the basic principles, theories, and techniques of acting, including various problems confronted by the actor in the creation and interpretation of a role

281 Television Announcing 3 cr
Continuation of Radio Announcing but with the added skills necessary to TV. Prerequisite 251

370 Oral Communication of Literature 3 cr
An approach to literature in terms of its oral traditions with special emphasis on techniques preparatory to the act of oral presentation

380 Acting II Styles 3 cr
An advanced course dealing with the principles and techniques of various acting styles with major concentration on the oral communication of a dramatic role. Prerequisite 280 or permission of the instructor

385 Stage Directing 3 cr
Studies principles, theories, and practices involved in the staging of a play for performance emphasizing problems of staging and interpretation confronting the director. Prerequisite 190

390 Development of the Theatre I 3 cr
A study of the origin and development of theatre and drama from pre-Crean civilization to the seventeenth century investigated in light of the particular world view which it expresses

391 Development of the Theatre II 3 cr
A study of the development of theatre and drama from the seventeenth century to the early twentieth century investigated in light of the particular world view which it expresses

451 Producing and Directing the Television Drama 3 cr
The essentials of developing dramatic productions for television, scripted commercials, serious and comic performances acted and taped. Prerequisite 190 plus permission of the instructor

460 Theatre Practicum 1-3 cr
Students involved in the production of plays may receive credit for practical work on and off stage work at the various off-campus sites. Included is theatre management. Prerequisite Permission of instructor and department chairman is required

470 Advanced Oral Communication of Literature 3 cr
A continuation of 370 with special emphasis on techniques for the oral presentation of specific literary genres. Prerequisite 370

490 American Theatre and Drama 3 cr
Survey of the major American theatrical movements and dramatic literature from the Colonial period to the present with emphasis on the twentieth century. Playwrights designers and theatrical companies are studied as reflections of American culture

DEPARTMENT OF THEOLOGY
Chairman Rev. Francis X. Malinowski C S S P. Ph.D
Duquesne's Department of Theology affirms that the academic study of religious experience is essential to a complete education. The Department fulfills its role in theological studies by the pursuit of the following aims: 1) It emphasizes Catholic Theology in dialogue with other Christian traditions, non-Christian traditions, and Judaism as the key element in Duquesne's commitment to Catholic education on the university level. 2) It...
acknowledges the fact of the universal search for religious meaning and experience and seeks not only to offer the possibility of a study of the varying approaches to religious witnesses in history but also to place Catholic Theology in communion with that quest. It aspires to a fruitful encounter with other university disciplines since the department is convinced that theology's concerns are related to all vital human issues. Accordingly, the Department has organized its courses into three divisions: Biblical Studies, Christian Studies, and Selected Religious Studies.

REQUIREMENTS FOR THE MAJOR
The major program consists of a minimum of 27 credits beyond the 100 level. These must include 201, 213, 214, 220, 270, 498; the remaining credits will be chosen in consultation with the student's advisor.

REQUIREMENTS FOR THE MINOR
A minor consists of four courses beyond the 100 level. The department has also prepared suggested sequences which may be helpful to a student wishing to concentrate in a certain area of theology e.g., Biblical Studies, Roman Catholic Theology, World Religions, Religion, and Culture. Christianity in History etc. These sequences are available in the department upon request.

COURSE INFORMATION
The numbering of the course indicates the level of approach.

100 These courses are of the basic survey type; wherein emphasis is on breadth rather than on depth, and serve as background for other courses.

200-300 These courses treat of subject matter in a specific area of theology and in greater depth than in the 100 category.

400 Selected topics are dealt with at a more advanced level; independent research is required.

BIBLICAL STUDIES

114 Interpretation of the Bible 3 cr
A presentation of tools necessary to understand the Old and New Testament as ancient literary works, affording a unified view of historical events as well as the prominent religious experiences reflected in these events, emphasis on practical interpretation of biblical passages.

213 Introduction to the Old Testament 3 cr
A presentation of the Old Testament writings in their dynamic context of culture, politics, and geography, as well as an introduction to their literary modes, theologies, and themes including practical approaches to interpreting key passages of the Old Testament.

214 Introduction to the New Testament 3 cr

313 Archaeology and the Bible 3 cr
An illumination through archaeology of the historical setting and the cultural background. The events described in the Bible are a general introduction to the techniques of archaeological investigation and study of the principal archaeological sites in Palestine.

315 The Wisdom Literature in Israel 3 cr
An exploration of the wise sayings and stories of Israelite culture and how they offer guidance today in ethical and social questions.

316 The Apostle Paul 3 cr
An exposition of Pauline Literature emphasizing the person of Paul and his impact on the early Church.

321 Jesus in the Gospels 3 cr
A portrait of the person of Jesus Christ based on a study of the 4 gospels with ample usage of recent scholarship.

325 History of Christian Worship 3 cr
An analysis of the major steps in the development of the Eucharist, esp. in the western tradition. The impact of the Reformation on the meaning and form of Christian worship. A discussion of some symbols and devotions in Roman and Protestant Christianity.

260 Origins of Protestantism 3 cr
An introduction to the thought of the principal reformers. Luther, Calvin, Zwingle, and Wesley. A study of speculative and practical forces operative in the fifteen-sixteenth centuries which gave rise to the reforming movement. The formulation of Protestant Orthodoxy.

271 Eastern Christian Theology 3 cr
A study of the main theological developments in the Eastern Church from the Patristic age on through the medieval times until the modern day. The shaping of its distinctive spirit and mentality as these are interpreted in the Eastern Churches.

274 Church History I 3 cr
A religious and historical exploration of the growth of Christianity from the first century up to the Reformation. Discussion of those issues within the Church and the external forces which brought about major conflict and development.

275 Church History II 3 cr
Selected topics in Catholic and Protestant development from 1500 to the present. Special emphasis on the crises, revolutions, and reforms that were central to this development.

345 Women in Christianity 3 cr
Survey of the Old and New Testament views of women and a history of the status of women in the Roman Catholic and major Protestant traditions and emphasis on the contemporary role and spirituality of women in Christianity.

346 Dying Death in Culture and Theology 3 cr
A study of the process of dying as a physical, psychological, and spiritual happening in human life. The nature of grief in human and cultural expression in patient and family. The theological meaning of death and mourning.

351 Sexuality Sex and Morality 3 cr
An analysis of the nature of sex and sexuality according to the sources and developments of Christian thought. The integration of these concepts into a contemporary moral and ethical system.

352 Value of Human Life and Current Ethical Problems 3 cr
A discussion of the fundamental moral principles involved in making any of the life decisions: the problem of the definition of life, a survey of the varied moral approaches to the issues of war and peace, capital punishment, abortion, birth control; euthanasia; genetic engineering, and the new embryology.

370 Early Christian Thought 3 cr
A study of the early Christian thinkers with emphasis on the Apostolic Fathers, the Panegyric of Origen, Athanasius, the Cappadocian Fathers, Tertullian, and Augustine as they interpret Christian revelation and lay ground for the systematic development of Catholic theology.

451 War and Peace in Christian Perspective 3 cr
An analysis of Christian teaching of the moral permissibility of using violence and participation in war from biblical times to the present and an evaluation of the varieties of pacifism, non-violent resistance, and just war theories.

470 Christian Mysticism 3 cr
A study of the manifold Christian experience of mysticism i.e., experiential contact with God as seen in famous exemplars of mystical experience e.g., Jesus Christ, Paul Ignatius of Antioch, Augustine, John Ruysbroeck, Catherine of Siena, Theresa of Avila, John of the Cross, Venerable Liberman.

ROMAN CATHOLIC THEOLOGY

106 Rational Foundations of the Catholic Faith 3 cr
An investigation of the reasonableness of the Catholic Faith beginning with an inquiry into the existence of God and the possibility of His intervention in human affairs. Study of the Gospels as reliable documents of Christ's claim to be God. His life, works and especially His resurrection of His founding of Church and its identity today.

201 Introduction to Theology and Theological Method 3 cr
An inquiry into and an analysis of the resources of theology. Faith revelation inspiration and Church teaching. A presentation of the various approaches to theological study and the schools of theological thought in Christianity.

202 Catholicism 3 cr
An explanation of the major beliefs and practices of Roman Catholicism including the nature and work of the God-Man as well as the role of Mary, study of the nature of the Church and its authority concerning the norms of morality, the Commandments, the sacraments, and the spirit of Catholicism.

220 The Mystery of Christ 3 cr
A study of the person and meaning of Christ in historical and contemporary perspective. A discussion of the bond between God and humanity and the new era in the spirituality of humanity inaugurated by the Incarnation and the Passion-Death-Resurrection event.

230 The Church 3 cr
A study of the Christian community of believers in its ongoings, some of its major historical and doctrinal emphases and its contemporary understanding of itself as the Church as a Mystery Body of People as God's sacrament.

242 Contemporary Theological Issues 3 cr
An examination of theological developments in an era of renewal reevaluation and cooperation e.g.
belief and unbelief. Christian and secular humanism the future with reference to hope, heaven, hell, afterlife and resurrection sin in a secular age suffering and evil.

250 Moral Perspectives in Human Development 3 cr
A Catholic perspective of the basic issues involved in the formulation of moral values within the developing person and of the sources upon which moral systems are based. A discussion of the absolute vs the relative, traditional morality vs. the new morality, an application of these principles to modern problems.

256 God and His Meaning 3 cr
A theological understanding of the problem of God, a consideration of the responses of various religions and philosophies to this problem, the origins and development of the theology of God in the Judeo-Christian tradition with special focus on Catholic development.

301 Marriage 3 cr
A personally-oriented and practical treatment of the marital union as seen in its Christian theological psychological and sexual aspects. A discussion of Christian marriage as a bond of love, as a sacrament and as a way of human fulfillment.

331 The Church in the Modern World 3 cr
An analysis of the Church's role in human development today and in offering solutions to present problems of humanity in light of Vatican II's Pastoral Constitution on the Church in the Modern World and other related documents.

335 Theology of the Sacraments 3 cr
A practical treatment of the seven sacraments in relation to their significance for the Christian's daily spiritual growth and fulfillment. Consideration of human needs for ritual and symbol, discussion of recent revisions and developments in sacramental theology.

442 Theological Anthropology 3 cr
A study of humanity in its unique dignity as image of God and as responsible for the development of the universe. Human experience of self and alienation, and of liberation of divine grace given through union with the Risen Christ.

475 Theology and Catechesis 3 cr
An examination of the principal theological and pedagogical themes of modern religious education and the role of catechesis in the ministry of the Church, a presentation of the historical background of the contemporary catechetical renewal.

491 Experience in the Teaching of Religion 6 cr
One semester of supervised experience in teaching religion in a high school environment in conjunction with a cooperating high school teacher and University Department coordinator. This course is open only to majors in Theology upon approval of the Chairperson of the Department.

498 Seminar in Theology 3 cr
A critical analysis of selected topics in theology or of selected works by outstanding theologians open only to juniors and seniors with a major or minor in theology.

SELECTED RELIGIOUS STUDIES

180 Religious Experience 3 cr
An examination of the dimensions of mankind's religious experience e.g., mystical, ritual, mythical, ethical and scriptural. An analysis of the likeness and differences of how the Divine is sensed and responded to in varied geographical cultural and chronological contexts.

240 The Religious Experience of Black Americans 3 cr
An examination of the dimensions of the religious experience of Black Americans e.g., its history, its relationship to African origins, to slavery, to racism to Christianity and to Christian denominations. An analysis of special elements in that experience e.g., Black Churches, preaching, music and the American Way of Life.

245 Religion and Culture 3 cr
An examination of how religion influences the cultural experience of work, leisure, art, love.

280 World Religions 3 cr
A survey of the history, beliefs, practices, and contemporary influence of the major religions of the world, including Hinduism, Buddhism, Confucianism, Taoism, Shintoism, African traditions, Judaism, Christianity, and Islam. A discussion of a basic methodology for understanding religions.

283-284 Jewish Thought and Religion 3 cr each
A survey of the history, beliefs, practices, and contemporary influence of the major religions of the world, including Judaism, Christianity, and Islam. A discussion of a basic methodology for understanding religions.

288 289 Islamic Thought and Religion 3 cr each
A survey of the history, beliefs, practices, and contemporary influence of the major religions of the world, including Judaism, Christianity, and Islam. A discussion of a basic methodology for understanding religions.

343 Religious Impact of Secular Thinkers 3 cr
A study of the effect that modern secular thinkers (e.g., Marcuse, McLuhan, Hefner, Toffler, Kohlberg, Skinner) have had on the religious consciousness and behavior of the present age. A discussion of certain areas of culture most affected by this secular impact.

372 Religious Themes in Literature and Film 3 cr
An exploration of religious experience and religious concepts as expressed in significant works in film and literature including themes concerning the human person's relationship to self, others, and to God.

373 Varieties of Religions in America 3 cr
An examination of the religions and denominations in America with an emphasis on some uniquely American religious phenomena e.g., religious liberty, civil religion, revivalism, etc.

381 Islam 3 cr
An analysis of Islam as a religious and cultural entity. Mohammed and the Arab setting history, beliefs, practices, and divisions within Islam the Koran and Hadiths the contemporary Muslim world.

483 Religions of Asia 3 cr
An analysis of significant religious groups in Asia such as Hinduism, Buddhism, Confucianism, Taoism, Shintoism, African traditions, Judaism, Christianity, and Islam. A study of the origin, development, beliefs, practices, and interrelationships among the religious and Asian culture.

492 Independent Study in Theology 1-3 cr
A critical analysis by an individual student of selected topics in the areas of biblical studies, Christian philosophy, or religion and civilization. Prerequisite: permission of the Chairperson of the Department or of some outstanding authors and their works under the direction of a faculty member.
School of Business and Administration

HISTORY

The School of Business and Administration was established in 1913 as the School of Accounts and Finance. The rapid growth of the School necessitated a constant broadening of the curriculum until it covered all business subjects of fundamental importance. In 1931, it was designated the School of Business Administration and with this change, the School changed its name to indicate its present status as a business center for the community and as a focal point for educational and professional activities.

PHILOSOPHY AND OBJECTIVES

In accord with the educational philosophy and objectives of the University, the School of Business and Administration aims to assist students in their development of the natural and supernatural virtues. The general aim is to prepare students through the media of instruction and related collegiate activity for success in the fields of learning-method and learning-impulse that will enable them to progress rapidly.

DEGREE

The School of Business and Administration grants the degree of Bachelor of Science in Business Administration. This degree may be awarded to students who satisfy the entrance requirements and complete successfully the School's degree program.

BUREAU OF RESEARCH AND COMMUNITY SERVICES

Activity complementing direct instruction takes place in the curricular units group under the Bureau of Research and Community Services. All function to provide students and faculty with an opportunity for professional development as well as to provide services to the University and the community at large.

Bureau of Research

The Research Bureau carries out an independent research program and cooperates with divisions of the School in facilitating the research of individual faculty members.

Through the University Press, the Bureau issues monographs and other publications. From time to time contract research is undertaken for business community and governmental agencies. The Bureau is a member of the Association for University Business and Economic Research and maintains an interchange of publications with similar organizations in other universities throughout the country.

Center for Administration of Legal Systems

The Center serves as the focal point for research activity in the administration of law. It is also the coordinating agency for the education and training programs of a non-credit nature for persons currently employed within the legal system. Such programs are tailored to meet the needs of specific groups and agencies. The objectives include time and length of all programs cooperatively determined with the agency involved. The Center calls upon professional trained practitioners from the local community as well as full-time faculty to instruct in these programs.

Center for Economic Education

The Center is charged with the responsibility of initiating and promoting economic education in the community at large. More specifically, it develops and coordinates economic education within the Western Pennsylvania and Tri-State area where the primary thrust of the Center focuses on upgrading economic literacy and teaching competency in the school systems of the area.

Center for International Management

The objective of the Center is to develop a better understanding of the American involvement in international affairs and business. The management broadens through teaching and research. It is achieved by an interdisciplinary approach.

The Center's current research focus are:

1. Trade expansion between the USA and Eastern Europe
2. Management in foreign nations
3. Problems in international business
4. International economic development with a stress on interaction among developing countries and on the relationship of developed and less developed countries
5. International political and legal issues

The Center has no teaching program of its own. Most of its staff are faculty members from various schools and departments of the University or visiting foreign professors.

Center for Management Development

The Division conducts management training programs for industry ranging from the foreman level up through executive personnel. Touching every phase of management to make the individual a better rounded person in meeting the current demands of business.

Also administered are non-credit programs which consist of courses in business and administration or special areas. These courses are offered for the continuing education of adults in the community.

STUDENT ORGANIZATIONS

These organizations limited to students in the School of Business and Administration exist for the promotion of the scholarly and professional interests of members.

1. American Marketing Association

   The student chapter affords membership to students whose major interests include salesmanship, marketing, advertising, transportation, or foreign trade. A selected group of seniors is permitted under faculty supervision to participate in the meetings of the Sales Executives Club of Pittsburgh and the senior chapter of the A M A.

2. Delta Sigma Pi

   A national professional business fraternity is represented by Delta Sigma Pi.

DIVISIONS AND PROGRAMS

The School of Business and Administration is comprised of three Divisions: Quantitative Science, Behavioral Science, and Economic Science.

Students entering the School of Business and Administration are expected to inform their advisors about their career objectives and their academic areas of concentration and to consult with them when choosing junior and senior courses indicated in any of the three Divisions. Their proposed curriculum choices must of course include the University requirements and Business and Administration Core requirements as indicated in the illustrations set forth in this catalog. Consistent with their stated career objectives and the concurrence of their advisors, students select areas of concentration which may fall within their academic aims of discovery and dissemination of knowledge.

Courses Credit Courses Credit

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<td>101 English Comp</td>
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<td>102 English Comp</td>
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<td>109 College Algebra</td>
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<td>111 Calculus</td>
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<td>141 Economic Geo</td>
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<td>142 Economic Dev</td>
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<td>General elective</td>
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<td>181 Computer Science</td>
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*Course may be taken in either semester.
DIVISION OF QUANTITATIVE SCIENCE ACCOUNTING CURRICULUM

CPA Requirements

Students who desire to become certified public accountants in Pennsylvania and who have been graduated from a four-year program in a college approved by the State Board of Education may sit for the CPA examination. The degree program of the University is so approved.

Graduates may sit for the CPA examination in other states among which are New York and New Jersey.

211 212 Introductory Accounting 3 cr each
An introduction to the language of accounting, basic accounting concepts and brief exposure to recording financial information. An extensive study is made of accounting information for management decisions.

311 312 Intermediate Accounting 3 cr each
This course is primarily concerned with investigation and analysis of the accounting problems and practices of the corporation with detailed study of the component elements of the balance sheet and income statement. Basic topics are accepted and alternative methods in the accounting cycle. Financial statements form content and use accounting problems of the corporation. Detailed analysis of the balance sheet accounts determination of net income statement of source and uses of working capital.

331 332 Managerial Accounting 3 cr each
A study of the techniques involved in the gathering, recording and interpretation of accounting and statistical data used in the solution of internal problems of management. Some of the topics covered are construction analysis and interpretation of reports establishment of operating and financial standards measurement of managerial performance use of budgets in managerial control use of cost data and interpretation of cost reports use of quantitative data in the formulation of policies consideration of various aspects of Federal State and local taxes and their effect on managerial decisions.

314 Advanced Accounting 3 cr
This course applies fundamental theory to a number of important activities in business. Activities studied are partnerships special sales procedures consolidations and fiduciaries.

315 Cost Accounting 3 cr
Basic cost accounting procedures are discussed from the following view points: cost concept, cost determination, cost control, cost analysis. Topics treated include cost terminology, planning and control techniques and development and application of overhead rates. Cost behavior patterns are studied in conjunction with development and application of overhead rates. Standard costing, job order costing, process costing, joint products and by-product costing are treated in detail. Methods of judging managerial efficiency, inventory control and management control systems are also stressed.

411 Auditing 3 cr
Standards and procedures employed by auditors in the examination of financial statements for the purpose of rendering an opinion are studied and evaluated. Emphasis is placed on theory and procedures in auditing. However, case problems are used to demonstrate the application of the principles studied.

412 Introductory Income Tax Accounting 3 cr
This course is a study of basic tax and procedure affecting primarily individuals and to a lesser extent partnerships and corporations. Principal topics include tax returns, exemptions, income deductions and exchange of assets and credits. Emphasis is placed on problems to demonstrate the application of the principles studied and use of official forms for demonstration purposes.

413 Business Information Systems 3 cr
A course designed to introduce students to management information systems and the transformation of information systems to meet specific types of informational requirements. Topics include database concepts, file storage consideration, development methodology, design implementation and management considerations of business data systems. The course presumes a familiarity with basic computer programming and accounting.

FINANCE CURRICULUM

Students who desire to function in finance, whether in the world of private business, government bodies or in the area of securities, are encouraged to select from the several groups of courses that placed emphasis on specific material leading to that end. The professional designation of Chartered Financial Analyst (CFA) is used by those in the securities industry. The designation in the life insurance area for professional personnel is (CLU) or Chartered Life Underwriter.

331 Business Finance 3 cr
This and the other courses are to be used in the study of internal and external sources of funds with the tools of financial management in order to maximize the wealth of the business entity. A primary emphasis is given to private business entities. Many of the tools and techniques used in the demonstrations are those of large business concerns. Entities of all sizes are covered. Special attention is given to the decision-making process as applied to the finance function of the business. Secondary emphasis is given to the securities markets, financial projections, organizational form mergers and consolidations and reorganization. Prerequisites: Accounting 211 212 or the equivalent.

332 Money and Banking 3 cr
To develop knowledge of the role of financial institutions in our society as they perform the function of either the creation of the medium of exchange or of taking existing funds from sources of excess to sources of supply. Further to develop an understanding of the construction of the portfolios of the institutions in order to understand why each employs their available funds as they do. Knowledge about interest rate movements and their effects on business and the development of financial instruments used within the banking system. Also through the media of a research paper the student has the opportunity to develop a major area in detail. Emphasis is primarily on the role money and banking take in relationship to business entities.

333 Financial Management 3 cr
The course is designed to provide a theoretical or conceptual framework that a financial manager can use to reach decisions. Material is presented with the purpose of involving the student in the fundamental decisions and components of the financial manager as he faces choices between risk and return. Reading material case material and a research project are tools to be used.

334 Risk Management 3 cr
A study of the broad spectrum of risk exposures in business enterprise. Special attention to the need for identifying these in terms of nature and magnitude. Emphasis is on techniques available to aid the decision-maker in making decisions under constraints of uncertainty. Methods of alleviation avoidance and insurance are studied. Attention is given not only to the traditional forms of insurable hazards but also to implicit risks such as those of loss in market value of assets capital budgeting decisions, new product financing techniques, mergers and other areas where risk is present in the decision process.

336 Security Analysis 3 cr
An intensive study of the analytic techniques applicable to the selection of the various stocks in the various securities markets. Special attention is given to the markets in which stocks are traded and the types of information that are useful and necessary to the decision-making process of the investor as the attempt is made to measure the value of a particular security. Several methods are introduced in seeking their proper applicability and weighing the risk.

337 Investment Analysis 3 cr
It is the aim of this course to present material that will be useful to the student in developing an...
understanding of the various types of investments which may be available for a portfolio investment. Discussion of the various risks that a portfolio be subject to and further the importance of the various risks to the various types of portfolio holders is undertaken. The basic elements of portfolio theory are presented. Various quantitative and descriptive approaches that are used in portfolio development are examined. Techniques for measuring the effectiveness of the portfolio are illustrated. Prerequisites: 331 336 or permission of the instructor without 336.

432 Credit Management 3 cr
This course will be taught in such a manner so as to give the student the understanding of the function of credit management. In order that the student be afforded a maximum opportunity to grasp such information as presented in the literature and in the classroom cases problems and field experience may be assigned. Through these vehicles the student will have the opportunity to integrate the knowledge gained from text material and other financial sources with that of other disciplines to arrive at a logical sound credit decision. Prerequisite 331.

433 Financial Markets 3 cr
An extensive and intensive study of the markets in which the financing of needs takes place. Study is made of the markets for borrowing and lending of capital both short-term and long-term. Financial institutional structures are given emphasis as they act and interact, serving as sources of intermediaries and users of funds. Research by the student is required to afford the student the opportunity to concentrate on an intensive effort upon an individual topic. Prerequisite 331.

434 Life Insurance 3 cr
A study of the risks of death and long term as "they occur in personal and business situations." Analyses are made of various forms of life insurance and annuity contracts and their uses with emphasis upon their functions as instruments of estate creation and administration. Uses of insurance in connection with partners and joint men and in connection with bank loans are explored. Attention is also given to accident and health coverages, group plans, pensions and regulation of the industry. Prerequisite 331

435 Property and Liability Insurance 3 cr
A study of business and personal applications of casualties, fire and liability coverages. Prerequisites: 215 216

437 Fundamentals of Real Estate 3 cr
A study of the problems involved in financing residential, commercial and industrial real estate from the points of view of both owner and lender. Methods of financing covered include use of individual and business equity loans secured by mortgages, land contracts, sale- and-lease-back arrangements and cooperatives. Prerequisites: 215 216.

439 Seminar in Finance 3 cr
Concentration upon selected contemporary topics of special interest to persons entering professions in finance or resident faculty. Offered on occasion and open only to senior students.

QUANTITATIVE METHODS CURRICULUM
Students in the undergraduate School of Business and Administration complete a basic sequence in Quantitative Methods. This sequence is concerned with the application of mathematics, statistics, and electronic data processing to the analysis of business and economic problems. The objective of the program is to increase the student's knowledge and understanding of the uses of mathematics, statistics, and computers as aids in problem-solving. The basic sequence is comprised of these courses: 181 281 282 and 381. Prior to entry into the sequence, Mathematics 109 and/or 111 in the College may be required of those students failing to satisfy entry requirements with respect to competence in algebra and calculus.

In addition to the basic sequence, a number of electives are offered for students wishing to include quantitative management science techniques in their areas of concentration.

181 Introduction to Computers 3 cr
An introduction to the basic concepts of computer programming in algebraic and representational languages. The course introduces the algorithmic approach to problem-solving and continues through the development of flowcharts and programs using the FORTRAN language. Brief treatment is also given to other business-related languages. Prerequisite: Mathematics 109 in the College or equivalent.

281 282 Probability and Statistics 3 cr each
This sequence includes the basic ideas of descriptive statistics, probability, and statistics. The topics covered are frequency distributions, measures of central tendency, measures of dispersion, set and set operations, elementary probability theory, probability distributions, sampling distributions, statistical estimation, testing of hypotheses, time series analysis, simple linear regression and correlation. Prerequisites: 181 and Mathematics 111 in the College or equivalent.

381 Introduction to Decision Sciences 3 cr
The focus of this course is to develop a scientific method of problem solving to business problems. The course includes various models and the methods of applying them to business situations. Models covered include linear programming, simulation, queueing, and inventory optimization. Prerequisites: Completion of the basic core coursework in the School of Business and Administration.

DIVISION OF BEHAVIORAL SCIENCE PROGRAM GUIDE
The present combination of required courses and free electives gives the student a solid foundation in business and at the same time allows him to follow his inclination in a special field of endeavor. At the same time the greater the freedom of choice the greater the need for helping the student to select courses in a meaningful way.

Students should be aware that they can use this freedom either
1 To broaden their cultural background by expanding in many different fields of knowledge or
2 To establish with the help of their advisor a background of specialized knowledge in the field in which they have their strongest interest

Several Study Programs—combining a concentration in Business (24 credits) with a judicious choice of electives from the College of Letters credits—are given as illustrations of the flexibility and the depth possible under the present program. Presently Study Programs are offered in

Industrial Relations
Law Administration
Production
Transportation and Traffic

The listing of these Study Programs is only indicated; not inclusive; others may be structured and the suggested areas can be modified according to the occupational objectives and preferences of the student.

INTERNATIONAL BUSINESS CURRICULUM
141 Physical and Economic Geography 3 cr
A course examines the present and potential products of the world's major geographic regions. The course focuses on the environmental adaptations of man such as the utilization of natural resources in earning a living. Attention is given to the geographical foundations and operations of major industries including agriculture, manufacturing, extractive activities and transportation. Principal domestic and world trade mechanisms are analyzed.

142 Economic Development of Europe and America 3 cr
A study of the development of Western and Eastern Europe and the Americas. Topics include the growth of capitalism, the development of industries, and the spread of capitalism. Emphasis is placed on the history and development of these systems. The role of the international monetary system is examined.

441 International Business 3 cr
A study of the techniques of international trade analysis. The course covers in detail the legal aspects of foreign trade, customs procedures, and the bill of lading. International trade is examined in terms of the various factors that affect it. Topics include the growth of international trade, the balance of payments, and the role of the international monetary system. The course is designed for students who are interested in pursuing careers in international business.

442 International Economics 3 cr
This course is an introduction to international trade and the principles of international monetary economics as well as foreign trade policies. Topics to be discussed include the classical and neo-classical theories of comparative advantage, foreign exchange markets, and balance of payments adjustment mechanisms. The course is designed for students who are interested in pursuing careers in international trade and the principles of international monetary economics.

LAW ADMINISTRATION CURRICULUM
This curriculum is designed to prepare professionals to aid in the solutions of one of society's most critical problems: the administration of legal systems. Future executives in court management, criminal justice, and legal systems (law enforcement) receive a broad interdisciplinary educational experience with the basic core coursework in the School of Business and Administration.

Other coursework may be appropriate to fit a student's career objectives. Counselors and school officers should be consulted.
64

PRE-LEGAL CURRICULUM

The curriculum of the School of Business and Administration meets the requirements for registration for general purposes of the State Board of Law Examiners in Pennsylvania and of the State Education Department of New York. Coursework in the various areas of the School of Business and Administration provides good preparation for the professional study of law.

251 Legal Process 
An introductory course exploring the nature of law and its sources; its relation to society and government, and the legal right of the judge to the legislative function. Law as an instrument of social change and control, understanding of the legal rights and duties of persons. Acquisition with areas of legal concern to the administrator such as labor, environmental controls, products liability, anti-trust concerns, such as pricing and mergers.

353 Contracts 
Study of the law pertaining to the formation of contracts, the legal requisites of an enforceable agreement, the transfer of contractual rights and duties, the discharge of contracts, the relationship between principal and agent. Prerequisite 251.

354 Commercial Transactions 
Study of the provisions of the Uniform Commercial Code with reference to the nature and legality of sales of goods, the formality of sale contract, transfer of title to goods, warranties, nature, and kinds of commercial paper, requisites and meaning of negotiability methods of transfer. Prerequisite 351.

355 Law of Business Organizations 
Consideration of the nature, creation, and dissolution of the proprietorship, various types of partnerships, other unincorporated organizations, and the corporation. Duties, rights, remedies, and liabilities of owners and managers are studied. Prerequisites 251.

453 Administration of Legal Systems 
Study of the legal system and the procedures by which legal rights and duties are enforced, and the present system and the attainment of its objectives. Administrative problems in the legal system. Prerequisite 351.

MANAGEMENT CURRICULUM

In accord with the objectives of the University and of the School the Management Curriculum aims are:

1. To acquaint students with managerial concepts and practices in both profit and non-profit organizations.
2. To offer an opportunity for some degree of specialization to those students who are interested in a study program in management.

361 Principles of Management 
This course represents an initial introduction to the essential principles of management centered around the concept of management being a basic process which is distinct and applicable to all enterprises. Planning, organizing, actuating, and controlling comprise the fundamental functions of management, making up the management process. These functions constitute the framework around which this course is built. Emphasis is given to planning which is rapidly growing in managerial importance. Decision making, managerial creativity, and the art of management are thoroughly developed.

362 Behavioral Science 
This course is an introduction to the scientific study of behavior. It incorporates concepts from the disciplines of anthropology, psychology, sociology, economics, law, and political science, as well as from the newer fields of organization theory, game theory, and decision theory. This interdisciplinary approach to behavior provides an integrative framework for transfer to any organizational setting. Prerequisite 361.

363 Production Management 
A follow-up course to Principles of Management in which all important phases of management are developed. Topics such as purchasing, inventory control, motion and time study, plant layout, pricing, etc. are covered. Other related organizational problems are considered. An intermediate course to be used as a basis for further specialized treatment of management areas in the advanced courses. Prerequisites 361 and 281.

364 Personnel Management 
A course presenting techniques of personnel management involving study of recruiting and screening techniques, training programs, merit rating, wage payment plans, safety, disciplinary programming, etc. Prerequisite 361.

365 Industrial Relations 
A course developed to present to the student historical knowledge of the labor movement, current status, and importance in industry, and the legal status of labor governing the actions of management in a myriad of ways. Presents the role of labor management and government in collective bargaining and current industrial relations policies and practices. Prerequisites 361.

461 Human Relations in Administration 
An advanced course treating of the human aspect as it is encountered in the industrial organization. Includes an analysis of behavioral patterns of individuals as individuals and as members of work groups. Dealing with motivation, goals, needs frustration, etc., as they relate to the industrial situation.

462 Public Administration 
This course introduces the student to the content of public administration and to the work of the public manager in both local and state levels. It also compares and contrasts public and private management and links management theory and practice. Lecture-discussions and participative methods are employed. Prerequisite 361.

463 Collective Bargaining 
A study of the relation of federal and state legislation to collective bargaining. Methods of substantive issues and administrative aspects of collective agreements, specific provisions including adjustment of grievances, conciliation, mediator arbitration, collective bargaining and public policy. Prerequisite 361.

464 Administrative Organization 
A course presenting organizational concepts as they relate to the operation of an enterprise. Line staff and functional relationships are thoroughly developed. Both formal and informal relationships are considered as they are developed and exist within a firm. Emphasis is given to planning, which is rapidly growing in importance. Decision making, managerial creativity, and the art of management are thoroughly developed.

466 Wage and Salary Administration 
An advanced course involving a comprehensive treatment of the major wage administration problems. Coverage will include such related and diverse facets of compensation as analysis of the contemporary concepts of wage and salary administration such as cost of living, merit rating, appraisal of various payment approaches such as incentive programs and profit sharing, structuring, wage programs, and the final effects such technically oriented practices have on the functional areas of management. Prerequisite 361.

491 Executive Action Simulation 
A course incorporating the Games Theory Approach. The teaching techniques of Case Method and Role Playing are combined in a simulated business environment in which the students make the decisions affecting the conduct of a business. Participants are divided into teams with key corporate duties assigned and several teams compete against each other in an attempt to operate the firm on the optimal profitable basis. Prerequisites Senior standing and 361. Open only to students in the School of Business and Administration.

492 Executive Policy 
Integrates concepts and skills from all functional areas of business and administration in decision making under conditions of uncertainty. Makes use of case histories and other information to allow students to analyze problems and solve with the organization as a whole. Prerequisites Senior standing and 361.

493 Independent Scholarly Study 
This student must initiate an original project in a field of business of his choice. The project is then scrutinized by a Committee of three Faculty members if the project is approved, the Dean will choose a Faculty member to guide the student in the project. The project must be completed within an academic semester. Prerequisite Student must qualify as an Honors Scholar.

494 Field Study 
Organized group study under specific programs and the discretion of the Director. Prerequisites will be required to utilize analytical and decision making abilities in projects in an action setting under faculty supervision. Prerequisite Approval of the instructor.

MARKETING CURRICULUM

In accord with the objectives of the University and of the School, the Marketing Curriculum aims are:

1. To develop an understanding and appreciation of distribution in our economy.
2. To explore the many basic activities involved in the marketing concept and in matching products to markets.
3. To provide an area of specialized study for those students who wish to pursue the marketing phase of business.

371 Principles of Marketing 
The emphasis throughout this course is on problem solving and decision making in marketing. The basis for the course is a systematic analysis of customer behavior and the development of marketing policies and programs. Marketing strategy and designing a marketing plan are stressed, and the student will be exposed to the problems of marketing philosophy and the decision making process. Prerequisites 361.

471 Marketing Research 
This course employs the case method illustrative of typical marketing problems such as merchandising, advertising, selection of channels of distribution, and development of new products. These problems are analyzed as they affect different middlemen in the marketing structure including manufacturers, wholesalers, jobbers, brokers, agents, and similar functionaries. Theories of marketing are subjected to the test of practical examples so that the student may develop a more realistic grasp of the principles involved and the value of the practitioner's judgments. Current marketing developments are studied. Prerequisite 371.

372 Marketing Problems 
An introduction to the fundamentals of salesmanship and the problems confronted by the sales manager. Topics include such areas as Production planning, pricing, packaging, qualitative and quantitative market analysis, and selection of sales management and selection of sales force. Techniques of selection, training, equip manufacture, compensation, supervising and controlling salesmen. Prerequisite 371.

471 Marketing Research 
This course examines the means and methods
business management uses to get the necessary in-
formation for decision making involving what to pro-
duce, how much to produce, and how to distribute
and goods that are produced. The various types of
marketing research—consumer research motiva-
tional research market analysis sales analysis and
sales forecasting product research and advertising
research—are studied in some detail. Prerequisite 371

472 Transportation 3 cr
A comprehensive analysis of the historical evolution
operation and economic development of the roadways
motor carriers water carriers and air carriers of the United States. The Interstate Commerce
Act with its amendments and the public regulation
state and federal of the various carriers will be em-
phazised. Prerequisites 371 221 222

473 Traffic Management 3 cr
This course deals with the organization and functioning
of traffic departments of industrial concerns. Topics treated are organization of traffic
departments, car records for the control of private car lanes, claims routing service and rating
departments, regulations governing parking, shipping and sales
shippers, relations with carriers' freight and express
and, delays in transit receipt and delivery of property.
Intensive work in the rate structures of the United States will be an important item. Prerequisites 221 222

DIVISION OF ECONOMIC SCIENCE
ECONOMIC SCIENCE CURRICULUM

121 Elements of Economics 3 cr
Economics 121 is an introductory course in eco-
nomics intended to afford an understanding of how our economic system works of the forces which af-
flect the level composition and distribution of the
output of the economy and of the issues behind cur-ent economic problems. The course content will define concepts and develop background materials
and develop economic ideas necessary to an understan-
ding of the policy issues constantly before a com-
plex dynamic economy. Not counted toward a degree in the School of Business and Administration.
Prerequisites 221 222

221 Principles of Economics I 3 cr
The first course in economics for the student who plans to major or minor in economics. The course seeks to acquaint the student with concepts and the logical basis to economic reasoning. Emphasis is placed on understanding the behavior of households
and the relationships between households and firms under competitive and imperfectly com-
petitive market conditions.
Prerequisites 221 222

222 Principles of Economics II 3 cr
This course is primarily concerned with aggregate economic relationships. The theory of the determina-
tion of national income is developed and attention
is given to the construction of national income ac-
counts. Attention is given to monetary and fiscal policy and their implications. Prerequisites 221 222

321 National Income Analysis 3 cr
A conceptual analysis of national income theory its
foundations, its basic principles and its social and economic significance. The course treats the macroeconomic
method of economic analysis. It is concerned with
explaining the development and nature of national income aggregates. The basic principles of national
income theory are developed and explained in order
to place into focus the operations of the American
economy and the many problems relating to it.
Prerequisites 221 222

322 Price and Production Economics 3 cr
An intensive study of the theory of demand pro-
duction and distribution. In addition recent
developments in the theory of imperfect competition
and oligopoly are carefully examined. Prerequisites 221 222

323 Public Finance 3 cr
A study of the organization and management of
government revenues and expenditures with emphasis
on American practices and policies at the various levels of government. Benefit-cost and cost-
effectiveness analysis with their implications for pro-
gram and capital budgeting are receive heavy considera-
tion. The economic consequences of various tax
structures and alternative social choice mechanisms
are studied. Prerequisites 321 or 322

324 Comparative Economic Systems 3 cr
A comparative study of capitalism, socialism and
capitalism with emphasis on analysis rather than mere description of the economies of various countries. Prerequisites 221 222

420 Labor Economics 3 cr
Analysis of the principles for wage and employment
determination in contemporary American economy
under non-union conditions as well as under collect-
eve bargaining. The institutional development
underlying labor supply and demand is studied with
direct emphasis on its impact on employment and production on the general wage level and on wage
differentials on the distribution of national income
and on general social welfare. The course also in-
cludes a comparative study of problems in labor
ecomics in American and other democratic coun-
nies. Prerequisites 321 222

421 History of Economic Thought 3 cr
Shows the development of economic thought from
the Age of Mercantilism to 1890. Major emphasis is
placed upon the writings of Mun, Petty, Quesnay, Smith, Ricardo, Malthus, Marx (evons and the
Austrian School. It offers a study of the fundamental
concepts of the writers and the influence of institu-
tional conditions upon their philosophy. Major em-
phasis is placed upon value and distribution theory
as it developed. Prerequisites 221 222

422 Modern Economic Theory 3 cr
A brief review of classical tradition emphasizing
Smith, Ricardo, Mill and Marx and socialists show-
ing their influence on the evolution of Twentieth
Century economic theory. Emphasis is placed
primarily upon the writings of Marshall, Schumpeter
and Keynes applying their theories to the problems
of contemporary economic policy. Special emphasis is
given to economic growth and development and the
essentials of welfare economics in today's society.
Prerequisites 221 222

423 Business Cycles and Forecasting 3 cr
This course is designed to study the process of
economic change. Analyses of Seasonal Cyclical and
Secular movements will be undertaken. Theoretical
and empirical aspects will be covered. Forecasting
techniques will also be studied. Prerequisites 221 222

424 Business and Public Policy 3 cr
A study of the regulatory techniques used by govern-
ment to influence and modify business behavior. This
course also includes an analysis of market structure
and performance considerations pertaining to the firm and the industry. Emphasis is given the
anti-trust laws and special regulatory problems
Prerequisites 221 222

425 Current Economic Issues 3 cr
A seminar-like discussion of the state of the nation's
A A

current economic problems on the basis of critical
A

economic theory. The purpose of the course is to begin
teaching the student the ability to coordinate and apply the analytical knowledge he has acquired during his undergraduate study of economics and related fields of social science and business administration. Prerequisites 221 222

426 Monetary Theory and Policy 3 cr
This course presents the chief theoretical contribu-
tions on money. The policy implications of these theories past and present will be emphasized. Con-
centration will center upon policy proposals and con-
troversy in the monetary field since World War II.
The theories and contributions of Hicks, Keynes,
Friedman and Tobin among others are reviewed. The role of interest rate is reviewed along with wage-
price controversies, international gold flows and the
relationships between fiscal and monetary policies.
Prerequisites 221 222

427 Theory of Economic Development 3 cr
The course is designed to acquaint students with the
area of economic development. The subject matter of
this course conveniently divides itself into five
major categories; the nature of development and problems of measurement, theories of development
factors and forces affecting economic growth differ-
ent approaches to a higher standard of living and
trends of domestic and international stability. Ap-
proach to this course encompasses detailed study
as well as a strong emphasis on theoretical and
critical analysis. Prerequisites 221 222

429 Seminar in Economics 3 cr
The purpose of the seminar is to provide a vehicle
for the advanced student to investigate separate sub-
ject areas in the field of Economic Theory. The in-
tention is to provide a sound basis for further study
at the graduate level. Seminar procedure will stress
written and oral reports. Prerequisites 321 322 and
permission of the instructor.
School of Education

HISTORY
Prior to 1929, teacher preparation courses were offered through a department of the College of Liberal Arts and Sciences in that year the newly-organized School of Education granted its first degrees in programs of secondary education. The following programs have since been approved for certification by the Department of Education of the Commonwealth of Pennsylvania music education in 1930, graduate education in 1936, elementary education in 1937, guidance in 1952, and administration in 1956, special education in 1964, reading in 1969, school psychology in 1969, early childhood education in 1975, and supervision in 1976.

SELECTION AND ADMISSION
Candidates who express a desire to become teachers are admitted to the School of Education through the University Office of Admissions. The College has an Advising and Placement Department to direct the placement of students in the faculty. The curricula for the first two years is devoted to the broad learnings in general and basic professional education and beginning course work in a major discipline or area of concentration.

The School of Education includes and maintains in its enrollment only those students who give definite indications of teacher potential. Students are therefore expected to demonstrate developing personal and professional characteristics and competencies which will recommend them as worthy candidates for the teaching profession. Evaluation and approval by the faculty is based on the student’s development of:

1. A well-balanced personality as evidenced through personal appearance, health and vitality, emotional stability, fluency, confidence, self-confidence, cooperation, judgement, and tact, adaptability, and resourcefulness cultural appreciation and social relationships.
2. Professional attributes and competencies as evidenced through interest in teaching preparation in subject matter and in teaching methods and techniques in laboratory experiences and in public and private schools.

PROGRAMS
The School of Education has program approval from the Pennsylvania Department of Education for the preparation of Elementary Secondary and Special Education, and in the arts and sciences. In 1975, the School of Music was authorized to offer courses in music education.

CURRICULUM

GENERAL EDUCATION
The School of Education requires completion of the established general education which includes courses in the humanities, social sciences and natural and behavioral sciences and for Catholic students, theology.

PROFESSIONAL EDUCATION
The basic professional education program introduces the student to the teaching profession through thorough study of the principles and practices of education and the learning process. Specialized courses provide preparation in teaching techniques and methods required for specific fields of concentration—elementary secondary special (mentally and/or physically handicapped) or early childhood education.

PROFESSIONAL LABORATORY EXPERIENCES
The School of Education has developed broad and diversified professional laboratory experiences designed to provide opportunities for observing and working with children and youth. These include:

1. Programs in neighborhood and community centers, hospitals, recreational and youth organizations, and summer camps.
2. Planned observation in public and private schools.
3. Group observation in schools and institutions, primarily to the care of exceptional children.
4. Teacher aide or tutorial service in public and private schools.
5. Student teaching in a public or private school for an entire semester or year.

All of these experiences are completed under professional supervision from the University and from the public or private school or off-campus agency.

COURSE REQUIREMENTS

GENERAL EDUCATION
The courses in the arts and sciences are an integral part of each program.

SELECTION AND ADMISSION
Candidates who express a desire to become teachers are admitted to the School of Education through the University Office of Admissions. The College has an Advising and Placement Department to direct the placement of students in the faculty. The curricula for the first two years is devoted to the broad learnings in general and basic professional education and beginning course work in a major discipline or area of concentration.

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The School of Education requires completion of the established general education which includes courses in the humanities, social sciences and natural and behavioral sciences and for Catholic students, theology.

PROFESSIONAL EDUCATION
The basic professional education program introduces the student to the teaching profession through thorough study of the principles and practices of education and the learning process. Specialized courses provide preparation in teaching techniques and methods required for specific fields of concentration—elementary secondary special (mentally and/or physically handicapped) or early childhood education.

PROFESSIONAL LABORATORY EXPERIENCES
The School of Education has developed broad and diversified professional laboratory experiences designed to provide opportunities for observing and working with children and youth. These include:

1. Programs in neighborhood and community centers, hospitals, recreational and youth organizations, and summer camps.
2. Planned observation in public and private schools.
3. Group observation in schools and institutions, primarily to the care of exceptional children.
4. Teacher aide or tutorial service in public and private schools.
5. Student teaching in a public or private school for an entire semester or year.

All of these experiences are completed under professional supervision from the University and from the public or private school or off-campus agency.

COURSE REQUIREMENTS

GENERAL EDUCATION
The courses in the arts and sciences are an integral part of each program.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Area</td>
<td>12</td>
</tr>
<tr>
<td>English Composition</td>
<td>6</td>
</tr>
<tr>
<td>English Elective</td>
<td>3</td>
</tr>
<tr>
<td>Communication Area (Speech)</td>
<td>3</td>
</tr>
<tr>
<td>Journalism English</td>
<td>3</td>
</tr>
<tr>
<td>Any Combination of Mathematics/</td>
<td>12</td>
</tr>
<tr>
<td>Science/Foreign Language</td>
<td></td>
</tr>
<tr>
<td>Social Science</td>
<td>12</td>
</tr>
<tr>
<td>Anthropology, Economics Geography History, Political Science Sociology and Psychology, Philosophy/Theology</td>
<td>6</td>
</tr>
<tr>
<td>Catholic minimum of 3 Theology credits</td>
<td></td>
</tr>
</tbody>
</table>

COMPETENCY CORE CURRICULUM
The Competency Core Curriculum consists of 27 credits beginning with Introduction to Education in the freshman year. Developmental Foundations I, II in the sophomore year and concluding with Curriculum and Instruction I, II in the junior year. The Competency Core Curriculum focuses on the philosophical, psychological and pedagogical foundations needed by entry-level teachers extensive involvement in field experiences beginning with the freshman year and an ongoing process of individual advisement and counseling regarding teaching and career decisions.

The Competency Core Curriculum is predicated on four domains: 1) Becoming a person, 2) Becoming a student of education, 3) Becoming an educational theorist, and 4) Becoming a practitioner. The Competency Core Curriculum as the title implies is a competency-based program that is developmentally designed to prepare education students to be entry-level teachers in elementary and secondary education.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching Seminar</td>
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</tr>
<tr>
<td>215 216 Developmental Foundations of Education</td>
<td>4</td>
</tr>
<tr>
<td>217 218 Developmental Foundations of Education II</td>
<td>4</td>
</tr>
<tr>
<td>315 316 Curriculum and Instruction I</td>
<td>8</td>
</tr>
<tr>
<td>317 318 Curriculum and Instruction II</td>
<td>8</td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td></td>
</tr>
<tr>
<td>315 316 and 317 318 are not required</td>
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</tr>
</tbody>
</table>

ELECTIVES

12 Credits

MUSIC EDUCATION
General and professional coursework in music education is offered and the degree is granted only upon the completion of the required coursework in music education.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>184 Child Development</td>
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</tr>
<tr>
<td>407 Curriculum and Methods for Early Childhood Education with Practicum</td>
<td>4</td>
</tr>
<tr>
<td>305 Curriculum and Methods for Day Care with Practicum</td>
<td>4</td>
</tr>
<tr>
<td>310 Curriculum and Methods for Special Programs</td>
<td>4</td>
</tr>
<tr>
<td>311 Teaching Elementary Social Studies</td>
<td>3</td>
</tr>
<tr>
<td>332 Teaching Elementary Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>402 Language Development and Reading</td>
<td>4</td>
</tr>
<tr>
<td>450 Early Childhood Education Teaching</td>
<td>2</td>
</tr>
<tr>
<td>451 Associate Teaching Early Childhood Education</td>
<td>10</td>
</tr>
</tbody>
</table>

Electives

12 Credits

SECONDARY EDUCATION
In addition to the 42 credits (semester hours) in General Education and 27 in the Competency Core Curriculum a student must complete the following:

1. 3 Credits in General Education.
2. 3 Credits in Special Education.
3. A minimum of 30 in an arts or sciences Area to satisy requirements for the degree and certification.

Electives

12 Credits

MUSIC EDUCATION
General and professional coursework in music education is offered and the degree is granted only upon the completion of the required coursework in music education.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>273 274 Art Music and Physical Education for the Classroom Teacher</td>
<td>6</td>
</tr>
</tbody>
</table>

Electives

12 Credits
215 Teaching Grammar and Composition OR
316 Teaching Secondary Mathematics and Science OR
318 Teaching Secondary Foreign Languages OR
319 Teaching Secondary Social Studies

**Professional Preparation**

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>48</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>(All Courses Required)</th>
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</thead>
<tbody>
<tr>
<td>209 Foundations of Special Education 3</td>
</tr>
<tr>
<td>273 274 Art: Music and Physical Education for the Classroom Teacher 3</td>
</tr>
<tr>
<td>276 Methods in Special Education 3</td>
</tr>
<tr>
<td>325 Teaching Reading in the Primary School 3</td>
</tr>
<tr>
<td>330 Teaching Elementary Language Arts and Reading 3</td>
</tr>
<tr>
<td>332 Teaching Elementary Mathematics 3</td>
</tr>
<tr>
<td>333 Teaching Elementary Science 3</td>
</tr>
<tr>
<td>386 Teaching the Mildly Handicapped 3</td>
</tr>
<tr>
<td>387 Teaching the Severely Handicapped 3</td>
</tr>
<tr>
<td>388 Vocational Education for the Handicapped 3</td>
</tr>
<tr>
<td>477 Methods in Special Education II 3</td>
</tr>
<tr>
<td>491 Student Teaching--Special Education 12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

**SPECIAL EDUCATION (MENTALLY AND/OR PHYSICALLY HANDICAPPED)**

This program is designed to prepare students for teaching mentally and/or physically handicapped pupils including brain injured emotionally and socially disturbed learning disabled.

These 48 credits (6 semester hours in Professional Preparation and three in Electives) in addition to the 42 credits in General Education and the 27 in the Competency Core Curriculum are required for the degree.

**CLASS ATTENDANCE**

The School of Education faculty has determined that the following policy will be in effect for all professors who teach undergraduate courses: It is presumed that each student in a professional course will normally attend every session. The maximum number of cuts permitted is equated in credit hours not in periods the class meets in other words a student may miss three hours of class time in a three-credit course.

**STUDENT ORGANIZATIONS**

The School of Education includes in its program opportunities for participation in student organizations related to professional education preparation. Students are encouraged to take an active part in these professional organizations for such interest is interpreted as reflecting social and educational development. The organizations are:

- Duquesne University Chapter of the Council for Exceptional Children
- National student organizations in Special Education

**HONOR AWARDS**

These awards are presented at the annual Honors Day Convocation open to undergraduates in the School of Education.

- Faculty Award for General Excellence in Early Childhood Education
- Faculty Award for General Excellence in Elementary Education
- Faculty Award for General Excellence in Secondary Education
- Faculty Award for General Excellence in Special Education

- Kappa Delta Epsilon National Professional Education Sorority Award for outstanding member of Alpha Kappa Chapter
- Kappa Delta Epsilon National Professional Education Sorority President's Award
- Kappa Phi Kappa National Professional Education Fraternity Award for outstanding member of Beta Phi Chapter
- Lawrence A. Revelle Memorial Award for outstanding achievement in the School of Education

**CURricular DESCRIPTIONS**

**EDUCATIONAL FOUNDATIONS AND PSYCHOLOGY**

- 101 Introduction to Education 3 cr

An overview of professional education programs and careers introduces students to the competency based format of undergraduate curricula and gives them opportunities to meet with faculty and staff in informal information-giving and counseling relationships.

- 201 Child Development 3 cr

Behavior and personality characteristics of children from birth to adolescence as they relate to school and home situations.

- 202 Educational Psychology 3 cr

Examinations affective and cognitive development planning and teaching techniques measurement and evaluation and related theories in an experiential learning environment.

- 203 204 205 206 207

Field Experience I cr each classroom and other school experiences as an aide or observer. Enrollment with consent of the Director of Student Teaching or School of Education faculty advisor one credit each semester for a maximum of five semesters.

215 216 Developmental Foundations of Education I 4 cr

See description for 217 218

217 218 Developmental Foundations of Education II 4 cr

Developmental Foundations I and II examine and provide for demonstration of various generic competencies in the areas of physical cognitive affective and social development of the individual from birth to late adolescence. The components examine the effects that various classroom interactions approaches to various teaching and learning styles recognition of individual differences and various curricula designs including I.E.P.s and multi-cultural approaches have on the physical cognitive affective and social development of all students and the teacher. These components provide for the demonstration of competency in the understanding and the analysis and the managing of these effects. Concurrent with these components is a field placement that requires case studies directed observations data collection and teacher aide experience.

- 301 Foundations of Education 3 cr

Introduction to the study of the philosophical and historical foundations of education and the relationships between the school and other institutions of society.

- 315 316 Curriculum and Instruction I 8 cr

See description for 317 318

- 317 318 Curriculum and Instruction II 8 cr

Curriculum and Instruction I and II focus on the presentation analysis and demonstration of those generic competencies that directly apply to the design and implementation of effective teaching learning practices in the classroom. The components specifically address such topics and techniques as educational taxonomies instructional objectives, planning the lesson, classroom management learning centers, materials utilization, evaluation of learning and grading. These components also include concurrent field placement that continues the directed observations and data collection initiated in the Developmental Foundations components and introduces the student to the evaluation of the teaching-learning situations observed and to the self-evaluation process of his/her own development in the four domains of the competency core curriculum. The field placement for these final components includes teaching experience in an actual classroom.
340 Self-Development for the Classroom
Focuses on a philosophical-psychological approach to self-development using classroom activities to promote personal awareness in the teacher and student...

351 Adolescent Development
Examines the developmental processes of physical, intellectual, social, and emotional faculties during infancy (ages 0 through 2 years) and during the pre-school years (ages 3 and 4). The role of the family as primary socializing agent is stressed.

307 Curriculum and Methods for Early Childhood Education with Practicum
Study of curriculum methodology and implementation in the nursery kindergarten and primary settings. Students will participate in planning and enacting activities and language development art music play social studies science and reading/mathematics readiness for children 3-8 years of age. A weekly practicum placement in an Early Childhood setting is an integral part of this course. Prerequisite 201 (Fall semester only)

308 Curriculum and Methods for Day Care With Practicum
Examination of curriculum design and implementation of day care programs serving children from birth-3 years of age. Topics covered include comprehensive curriculum planning, parent communication and involvement, environmental design, and staff and current research on the impact of day care on young children and their families. A weekly practicum placement in a day care setting is an integral part of this course. Prerequisite 201 (Spring semester only)

310 Curriculum and Methods for Special Programs
Examination of the historical development and current status of early childhood programs designed to provide a well-planned remedial therapeutic or early intervention experience to young children. Curriculum design and implementation for such programs will be examined along with the specific responsibilities of the teacher handling the mainstreamed young child. A weekly practicum placement in a setting serving special needs children under 8 years of age is an integral part of this course. Prerequisite 201 (Fall semester only)

499 School Law and the Pupil
School law as it affects the child—census admission practices, vaccination, compulsory attendance, and non-print materials to meet curricular needs developing materials for individualized classroom instruction.

485 Problems in Teaching Reading
Reading difficulties in elementary and secondary school levels, discussion of classroom and clinical procedures in solving reading problems, diagnostic and corrective techniques and materials for the classroom teacher reading improvement programs special unit on reading problems of the mentally retarded.

492 Language Development and Reading 4 cr
Emphasis is given to a well-planned oral expression by the child combined with knowledge of both the cooperating teacher and the college supervisor. No other credits may be taken while the student is involved in 450 and 451 without special permission of the Director of Early Childhood Education.

ELEMENTARY EDUCATION
273 274 Art, Music, and Physical Education for all Classroom Teacher
An introduction to the basic principles and concepts of teaching visual arts, physical education, health, and music to children of elementary school age including exceptional children.

325 Teaching Reading in the Primary School 3 cr
Major emphasis is on the pre-school readiness and primary grades. Content deals with language experience, cognitive and perceptual development in young children and their relationship to the beginning reading program. In addition, consideration will be given to the basic reading skills which comprise the first three years of a developmental reading program. Techniques of individualizing instruction evaluating and reporting pupil progress.

326 Teaching Reading in Intermediate and Middle Schools 3 cr
Focuses on the transitional period in a developmental reading program in which reading becomes a tool to be used in each content area. In addition, to continue reading skills in the developmental reading program, specialized reading and study skills necessary for students to function in social studies science, language arts, mathematics, and other content areas will be presented. Techniques of determining readability of materials, individualizing instruction, evaluating and reporting pupil progress are also studied.

330 Teaching Elementary Language Arts and Reading 3 cr
Presents psychological principles and historical perspectives in the language arts. The foundation on which a good language arts program should be built. Emphasis on listening, speaking, reading, and writing/reading, as acquired by the child combined with knowledge of the evaluative process, teaching methods and materials. Also provides a realistic approach to teaching language arts and reading experience.

331 Teaching Elementary Social Studies
Provides a combination of theoretical and practical models which furnish multi-level approaches to problem-solving, materials activities and resources inherent to a good social studies program.

332 Teaching Elementary Mathematics 3 cr
Theories, techniques, and content pertaining to mathematics are presented. Emphasis is on exploratory and systematic instructional styles and games as an instructional strategy.

333 Teaching Elementary Science 3 cr
Study of theories, techniques, practices, and content of the science area. Accent is on discovery and inquiry instructional styles for learning.

484 Children's Literature 3 cr
An in-depth survey of books and other printed materials for children. Criteria for the evaluation and analysis of children's books, types of books available, considered in terms of interest needs and abilities of children.

490 491 Student Teaching
-Elementary 9-12 cr
Student teaching in an approved elementary school under the direct supervision of a cooperating teacher and the college supervisor. Prerequisites: Senior status. Good academic standing, completion of required professional courses and recommendation of faculty.

493 Student Teaching —Elementary 6 cr
Student teaching in elementary education for students in the secondary or special education program who wish to complete requirements in two certification areas. Registration is concurrent with 490-Secondary or 490-Special Education.

SECONDARY EDUCATION
215 Teaching Grammar and Composition 3 cr
Focus on the relationship of two major approaches to teaching grammar and composition also provides opportunities for students to develop and use different techniques in min-teaching situations.

316 Teaching Secondary Mathematics and Science 3 cr
Designed to acquaint the student with methods and materials used in the teaching of specific models, research and field-based activities are expected.

318 Teaching Secondary Foreign Languages 3 cr
Explores a variety of approaches for teaching foreign languages. Grammar structure, verbal exercises, and literature germane to the specific language is taught. This is a competency-based experience for social studies/history majors that develops evaluation skills knowledge of curriculum media, and technological experiences. Methods expand planning and questioning skills.

319 Teaching Secondary Social Studies 3 cr
This is a competency-based experience for social studies/history majors that develops evaluation skills knowledge of curriculum media, and technological experiences. Methods expand planning and questioning skills.

490, 491 Student Teaching—Secondary 9-12 cr
Student teaching in an approved public secondary school under the direct supervision of a cooperating teacher and the college supervisor. Prerequisites: Senior status. Good academic standing, completion of required professional courses and recommendation of faculty.
493 Student Teaching—Secondary 6 cr
Student teaching in secondary education for students in the elementary or special education program who wish to complete requirements in two certification areas. Registration is concurrent with Ed 490—Elementary or Ed 490—Special Education.

497 Reading in Secondary Schools 3 cr
A survey course in the teaching of reading appropriate for secondary education majors. Major emphasis is on methods of teaching reading, the materials for evaluating pupil growth in reading, and reading in the content subjects.

SPECIAL EDUCATION
These courses are designed to prepare students for teaching mentally and physically handicapped pupils including brain injured; emotionally and socially disturbed learning disabled

209 Foundations of Special Education 3 cr
Survey of the educational, physical, psychological, and social characteristics of the various types of exceptional persons and methods for meeting their needs. Includes field trips to schools and agencies serving exceptional persons.

211, 212, 213, 214 Field Experience 2 cr each
Classroom and other experiences in educational social welfare and vocational settings as an observer and participant. Enrollment with consent of Director of Student Teaching and School of Education faculty advisor. Students may choose 211 (Elementary) or 212 (Secondary) which involve the mildly handicapped. 213 which is with the severely handicapped and 214 which is with pre- vocational/vocational pupils.

272 273 Art, Music and Physical Education for the Classroom Teacher 3 cr each
An introduction to the basic principles and concepts of teaching visual arts, physical education, health, and music to children of elementary school age including exceptional children.

276 Methods in Special Education I 3 cr
Introduction to management techniques utilized in programs for exceptional persons. Information covering educational assessment procedures, designing and implementing individual education programs, and methods for individualizing instruction will be included. Prerequisite: 209 or equivalent.

386 Teaching the Mildly Handicapped 3 cr
Evaluation integration and implementation of theoretically based methodologies curricula instructional techniques and evaluation procedures for students who have been labeled brain injured; learning disabled mentally retarded physically handicapped; socially and emotionally disturbed. Prerequisites: 209, 276.

387 Teaching the Severely Handicapped 3 cr
Evaluation and integration of the various theories, methodologies curricula instructional techniques and evaluation procedures for severely handicapped persons labeled brain injured learning disabled mentally retarded physically handicapped socially and emotionally disturbed. Prerequisites: 209, 276 or permission of instructor.

388 Vocational Education for the Handicapped 3 cr
Overview of pre-vocational-counseling and occupational education programs to be used for exceptional persons. Students will be given information and experiences enabling them to design and implement counseling programs appropriate to the vocational needs of mentally and physically handicapped pupils. Prerequisites: 209, 276 or permission of instructor.

477 Methods in Special Education II 3 cr
Development and implementation of an individualized student teaching readiness plan that emphasizes the management of problem behaviors and development of instructional environments includes supervised field experience independent study and individual learning conferences. Prerequisites: 209, 276, 387

490 491 Student Teaching—Special Education 9–12 cr
A full semester of supervised classroom experience in a carefully selected school for mentally and/or physically handicapped pupils. Prerequisites: senior status, good academic standing, completion of required professional courses, and recommendation of faculty.

493 Student Teaching—Special Education 6 cr
Student teaching in special education for students in the elementary, or secondary education program who wish to complete requirements in two certification areas. Registration is concurrent with Ed 490—Elementary or Ed 490—Secondary Education.

School of Music
HISTORY
Duquesne University, recognizing that it was most fortunately situated to offer outstanding opportunities for professional preparation in music, in 1926 established a School of Music with a four-year course of study leading to the Bachelor of Music degree. The music education program was approved by the Pennsylvania Department of Education in 1930. In 1959 the School became an associate member of the National Association of Schools of Music and in 1966 was elected to full membership. On April 29, 1967 a new building dedicated to Van Cliburn was awarded an honorary Doctor of Music degree on this occasion.

PHILOSOPHY AND OBJECTIVES
The administration and the faculty of the School of Music believe that the development of the artistic personality is entirely compatible with the objectives of scholars in all fields. It is felt that the best place to educate music students to take their place in society is in a situation where they have an opportunity to share their academic courses in classes with students from other schools of the University. The great advantage of a solid musical preparation and the opportunity to participate in nationally recognized organizations and in performances of professional caliber are available to all students.

The faculty of musical scholars and artists among whom Duquesne students work believes that entrepreneurs are best encouraged and developed in an atmosphere that is friendly while at the same time committed to the development of excellence. The faculty selected with care includes the names of conductors, teachers, soloists, members of the Casals Festival Orchestra, the Pittsburgh Symphony, nationally known composers, soloists, conductors, clinicians and music educators. The Pittsburgh Symphony, Pittsburgh Opera, chamber music and contemporary repertoires are available to all students.

SPECIAL FEES
Student Teaching—Instrument or instrument as a minor each semester 20
Instruction in voice or instrument as a major each semester 150
Piano Class Fee each semester 10
Instrumental rental each semester 50
Instrument for class use each semester 10
Music School fee each semester 25

DEGREES
The School offers programs leading to two undergraduate degrees, Bachelor of Music and Bachelor of Science in Music Education. The Bachelor of Music degree may be earned with a major in piano or organ. Voice, and instrumental music education programs are available. The University offers an exceptional advantage in a variety of standard and contemporary repertoires.

The Symphony Orchestra offers a unique opportunity for students interested in orchestral literature. Participation in university and private orchestras, the Pittsburgh Symphony is an exceptional advantage. The University also maintains various vocal and instrumental ensembles that are receiving national recognition for the excellence of their performances.

The objectives of the School of Music are to educate teachers and performers of music who should possess a sensitive and intelligent musician and who will be equipped by reason of their general and professional education to accept positions in fields of professional education or therapy.

ADMISSION
Students who are interested in applying for admission to the School of Music should request an application from the Office of Admissions, Duquesne University, Pittsburgh, Pennsylvania. After applications have been processed candidates will receive a notice requesting that they contact the Office of the School of Music to arrange an appointment for an audition and a theory examination. Specific instructions concerning the audition will then be mailed to the applicant. A tape recording will be accepted only if requested by the Admissions Committee. This recording is not satisfactory to a personal audition may be required. All applicants will be notified of the status of their candidacy as soon as possible.

Students planning to major in Music are urged to begin study of piano and theory prior to entrance.

ADVISEMENT
At initial enrollment, every student is assigned a faculty advisor who provides assistance with academic matters especially during pre-registration periods. Guidance in professional objectives will also be provided by faculty committees established for that purpose.

SPECIAL FEES
Student Teaching—Instrument or instrument as a minor each semester 20
Instruction in voice or instrument as a major each semester 150
Piano Class Fee each semester 10
Instrumental rental each semester 50
Instrument for class use each semester 10
Music School fee each semester 25
GEORGE BARRELL MEMORIAL SCHOLARSHIP

The Pittsburgh Flute Club offers a scholarship in flute in memory of George Barreller, a member of the Pittsburgh Flute Club. The scholarship is open to students of the School of Music who are majoring in Flute and have achieved academic excellence in the field of flute performance. The scholarship is renewable for up to three years, contingent upon the recipient maintaining good academic standing and consistent participation in flute-related activities.

PITTSBURGH FLUTE CLUB

The Pittsburgh Flute Club is a student-run organization dedicated to the study and promotion of the flute. The club hosts regular practice sessions, master classes, and performances, and participates in regional and national flute competitions. Membership is open to all students, regardless of major, who are interested in the flute.

CONSERVATORY MAJOR IN PIANO

Freshman Year

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<tr>
<th>Course</th>
<th>Credits</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mus 303 304</td>
<td>3</td>
<td>Applied Music Major</td>
<td></td>
</tr>
<tr>
<td>Mus 351 352</td>
<td>3</td>
<td>History and Literature of Music</td>
<td></td>
</tr>
<tr>
<td>Mus 143 143</td>
<td>1</td>
<td>Ensemble</td>
<td></td>
</tr>
<tr>
<td>Mus 143 143</td>
<td>1</td>
<td>Counterpoint</td>
<td></td>
</tr>
<tr>
<td>Mus 143 143</td>
<td>1</td>
<td>Chamber Music or</td>
<td></td>
</tr>
<tr>
<td>Mus 343 344</td>
<td>2</td>
<td>Piano Accompanying</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td>Math or Science Elective</td>
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<tr>
<td>Physics</td>
<td>3</td>
<td>Acoustics</td>
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</tr>
<tr>
<td>General</td>
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Sophomore Year

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<th>Course</th>
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<tbody>
<tr>
<td>Mus 403 404</td>
<td>3</td>
<td>Applied Music Major</td>
<td></td>
</tr>
<tr>
<td>Mus 101</td>
<td>1</td>
<td>Academic or Theology Elective</td>
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<tr>
<td>Art 101</td>
<td>1</td>
<td>Understanding Art</td>
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<tr>
<td>Mus 313 314</td>
<td>2</td>
<td>Piano Pedagogy</td>
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<tr>
<td>Mus 143 143</td>
<td>2</td>
<td>Chamber Music</td>
<td></td>
</tr>
<tr>
<td>Mus 143 143</td>
<td>2</td>
<td>Ensemble</td>
<td></td>
</tr>
<tr>
<td>Mus 340</td>
<td>2</td>
<td>Orchestration</td>
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<tr>
<td>Mus 379 380</td>
<td>1</td>
<td>Conducting</td>
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<td>Mus 121 122</td>
<td>2</td>
<td>Music Elective</td>
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<tr>
<td>Eng 101 102</td>
<td>2</td>
<td>English Composition</td>
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Junior Year

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<th>Course</th>
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<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mus 303 304</td>
<td>3</td>
<td>Applied Music Major</td>
<td></td>
</tr>
<tr>
<td>Mus 351 352</td>
<td>3</td>
<td>History and Literature of Music</td>
<td></td>
</tr>
<tr>
<td>Mus 143 143</td>
<td>2</td>
<td>Ensemble</td>
<td></td>
</tr>
<tr>
<td>Mus 335 336</td>
<td>2</td>
<td>Counterpoint</td>
<td></td>
</tr>
<tr>
<td>Mus 143 143</td>
<td>2</td>
<td>Chamber Music or</td>
<td></td>
</tr>
<tr>
<td>Mus 343 344</td>
<td>2</td>
<td>Piano Accompanying</td>
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</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td>Math or Science Elective</td>
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<tr>
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### MAJOR IN VOICE

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**MAJOR IN JAZZ PERFORMANCE**

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**Senior Year**

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### SACRED MUSIC—MAJOR IN VOICE

#### Freshman Year

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#### Sophomore Year

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### SACRED MUSIC—MAJOR IN ORGAN

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### MUSIC EDUCATION

#### Freshman Year

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#### Sophomore Year

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### Courses Fall

**MUSIC EDUCATION—MAJOR IN MUSIC THERAPY**

See footnote following Music Therapy Curriculum

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<td>Mus 143 143</td>
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| OR 351 Education Psychology  |
| 201 Child Development or 202 Adolescent Development |

### Senior Year

#### Credits

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<td><em>The residence semester may be taken in either the fall or spring of the senior year</em></td>
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### Junior Year

#### Credits

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### Music Education—Major in Music Therapy

#### Credits

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<td><a href="#">Junior Year</a></td>
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### Course Descriptions

#### Applied Music

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<th>Course Code</th>
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<td>101 102 201 202 301 302 401 402</td>
<td>3</td>
<td>Study of voice piano organ string wind or percussion instruments in music education</td>
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The candidate for the Bachelor of Music degree must give a recital during the senior year. The recital will be presented to a faculty committee for approval at least one month prior to the date of the performance.
Changing Assigned Applied Music Teacher

For non-piano majors, jazz piano techniques including comping harmonic continuity through common chord progressions using tradi and 7th chords. 219 may include more advanced comping harmonic continuity through standard and jazz songs and harmonic extensions of 9ths 11ths and 13ths.

Transfer of Applied Music Credit

Credit transfer in the undergraduate Applied Music program can be granted only after the student's proficiency has been evaluated by a faculty panel in the student's area of specialization.

BACHeLOR OF MUSIC

Clarinet


403 404 Tafanell-Gaupert Scales half note equals MM 130 scales in thirds sixths octaves and tenths Moyse De la Sonorite Method and Chromatics Anderson Etudes Artistiques Op 15 including the memorization of certain selected studies Anderson Op 63 Jeannean Etudes Modernes Orchestral Studies Bach Sonata in A minor for unaccompanied flute sonatas by Hindemith Remenecky Concerto by Ibert works by representative contemporary composers.

Guitar—Classical

103 104 Evaluation of student's abilities and basic corrections

If necessary Scales major and minor up to four sharps and flats Carcassi Method selected studies from Carcassi Twenty-Five Etudes Op 60 Renaissance dances works by Carulli Aguado Sor

203 204 All Scales major and minor two and three octaves Henze Method: Sor Concert Etudes one suite and selected pieces from the Renaissance and Baroque works by Luis Milan Tarrega Ponce and Villa-Lobos

303 304 Continue study of the technical foundation for the next year lute music transcribed for guitar Dowland Bach Sonor Concert Etudes and Sonatas chamber ensemble works by Boccherini Schubert Schiedler Ibert Pagarni.

403 404 Bach suit a sonata or suite by a 20th-century composer concerto by Vivaldi Giuliani Carulli or by a 20th-century composer.

Guitar—Jazz

103 104 Evaluation of student's abilities: basic technique and reading abilities including reading knowledge through VII positions all major scales in all positions Berklee Method Book I and Melodic Rushes Book by William G Leavitt basic chord theory position folk chords and alterations all barre chords and a basic knowledge of basic jazz chord forms beginning study of chord-melody solo playing and single-note techniques standard guitar solos

Flute

103 104 Analysis of student's playing and basic corrections if necessary Tafanell-Gaupert Scales scales in thirds trills selected studies by M Moyse and Andersen Etudes Op 33 and 37 Boehm Etudes Op 37 Kuhlau Duets Sonatas of the Baroque Period Solos by Doppler Chaminade Mozart Kuhlau


Harp

103 104 Laniere Exercises and technical studies Standard orchestra parts Bochsa Etudes opus 318 Book II Pieces grade of difficulty of Grandjany Area in Classic Style Tourner Illustrations (Suite II) Saint-Saens Fantasie.

203 204 Technical studies Bochsa Etudes opus 62 Standard orchestra cadenzas Pieces of grade difficulty of Tournier Feere Rousseau Variations Pastoralcs Grandjany Fantasie on a Theme of Haydn

303 304 Technical studies Orchestra parts Bochsa Etudes opus 34 Pieces grade of difficulty of Hindemith Sonata Handel Concerto in Bb major Ravel Introduction and Allegro

Horn

103 104 Scales and arpeggios in all keys review of fundamentals of tone production Alphonse Deux Cents Etudes Nouvelles Gallay Thirtie Studies review ofmuting and trill technic Dubois Cavatine Franz Strauss Concerto.

203 204 Alphonse Deux Cents Etudes Nouvelles Kopprasch Studies Strauss Seventeen Concert Studies Chabrier Largethato Mozart concertos orchestral studies
Organ Class

fugues Vierne 24 Pieces Langlais Dupre Franck schools Bach Orgelbuchlein selected preludes and 
Ouartet Concerto 

studies from Technique of the Oboe Handel sonatas Telemann Sonata in 
Oboe Allegro Dukas Villanelle orchestral studies

Antiphons Messiaen Le Banquet Celeste or Ascen-
closely related keys Introduction to figured bass and 
Review of basic organ technique Selected works 
representative contemporary compositions

Continue scales and arpeggios including scales in 
203, 403, 404 
304 
204 
Alphonse Deux Cents Etudes Nouvelles Kopprasch selected solos 

Blauzet Technique of the Oboe scales in all articula-
tions scales in groups of five and seven scales by interval 
arpeggios and broken arpeggios orchestral studies including the works of J S Bach sonatas 
by Telemann and Hindemith solos by Busser Jollivet 
River Mozart Concerto Symphony Concertrante and 
Quartet Concerto by Goossens contemporary solos

Organ

104, 103, 102

2-3 cr each

Review of basic organ technique Selected works 
from the early English Italian German and French 
schools Bach Orgelbuchlein selected preludes and 
u fugues Vienne 24 Pieces Langlais Dupre Franck 
Organ Class I Pedal Scales in all major keys pedals alone 
Hymn playing transposition modulations to 
closely related keys Introduction to figured bass and 
harmonization of simple melodies

203, 204

2-3 cr each

Selected works by Brahms Mendelssohn Schumann 
Hindemith Joseph Willcox Jenkins Six Pieces Duple 
Antiphons Messiaen Le Banquet Celeste or Ascen-

suite motets I or 4 Langlais Franck Schroeder 
or Pepping Vienne Pieces de Fantaise 

Bach Orgelbuchlein Schubler Chorales Concerti Preludes 
and Fugues Trio Sonatas

Organ Class II Continuation of pedal scales hands and feet 
Hymn playing Modulation transposition counterpoint and figured bass. 
Continued harmonization 
of melodies Score and clef reading

303, 304

2-3 cr each

Selected works by D Aquin deGrigny Handel Mozart Sweelinck Franck Langlais Messiaen Bach 

Premises and fugues Trio Sonatas Orgelbuchlein 
Great 18 chorales Works by contemporary American composers

Organ Class III Continuation of pedal scales hymn 
playing accompaniments transposition figured bass 
clefs playing in open score conducting from the 
console

304, 404

2-3 cr each

Frank Chorales Messiaen Nativite Litz Dupre 
Durulle Langlais Vienne and wind Symphonies 
Alain Tournemire and selected works by contem-
porary composers Bach Passacaglia and fugue 
textured Preludes and fugues Glaveriuburg Part III 
selections Recital

431 432 Organ Improvisation 2 cr

A practical application of the basic tools of improvisa-
tion including harmonization of melodies at the organ 
and the use of two and three voice counterpoint in 
varying styles short AIA chorales and chorale preludes 
with emphasis on their liturgical application

413 Organ Pedagogy 2 cr each

Students learn through demonstration the 
philosophies methods and materials of teaching 
both beginning and advanced students Junior standing 
is required

Percussion

103, 104

3 cr each

Fundamental snare drum technique and its applica-
tion to musical notation exercises in rhythm phras-
ing control Elements of tympani technique their 
application to classical literature tuning Rudimentary 
xylophone technique scales arpeggios forms

203, 204

3 cr each

Advanced snare drum studies repertoire Three and 
four tympani exercises orchestral literature Inter-
mediate xylophone studies transcriptions for solo

203, 304

3 cr each

Tympani study through romantic and contemporary 
literature Advanced xylophone exercises transcrip-
tions Latin American instrumental techniques use 
of special accessory in late 19th and 20th century 
literature Repertoire in all instruments

403, 404

4 cr each

Examination of representative solo material for 
all percussion instruments preparation of solo for 
recital

Piano

103, 104

3 cr each

Bach Three-Part Inventions Haydn and Mozart 
selected sonatas Beethoven Op. 10 and Op. 14 
Chopin Waltzes mazurkas nocturnes selections from 
modern repertoire Major scales in different rhythms 
and tempi and diminished arpeggios

203, 204

3 cr each

Scarlatti selected sonatas Bach Well-Tempered 
Clavier Beethoven Op. 22 Op. 31 Chopin preludes 
impromptus and nocturnes Brahms Intermezzi 
Rhapsodies selections from Impressionist and Con-
temporary repertoire All major and minor scales 
dominant and diminished seventh arpeggios

303, 304

3 cr each

Bach French Suites Partitas Well-Tempered Clavier 
Beethoven sonatas of the difficulty of Op. 10 No 
3 in D minor Scherzi Ballades and Etudes Schumann 
Fantasustecque Papillons Debussy Preludes selected 
contemporary repertoire .Continue scales and 
dominant and diminished seventh arpeggios 
plus major and minor arpeggios

313 Piano Pedagogy I 2 cr

Students will become acquainted with the techniques 
and materials for teaching piano at the elementary 
level For piano majors junior standing is required

314 Piano Pedagogy II 2 cr

A continuation of 313 concentrating on the tech-
niques and materials for teaching piano at the 
intermediate and advanced levels

243 244 343 344 Piano Accompanying 1 cr each

This course is designed for the undergraduate with 
the purpose of affording the student instruction in 
the art of piano accompanying

403, 404

3 cr each

Bach English Suites Partitas Toccatas Well-
Tempered Clavier Beethoven sonatas from middle 
and late periods more extensive compositions from 
The Romantic Period Ravel Jeu d'eau Debussy 
Estampes at least on work selected from the standard 
cardio music literature contemporary literature 
Continue scales and arpeggios

Saxophone

103, 104

3 cr each

Mule Scales and Arpeggios Small 27 Melodious 
and Rhythmic Exercises Labarchi-issi 33 
Concerts Etudes Vol I Concertino by Mulhaupt

204

3 cr each

Mule Scales and Arpeggios Vol II Lambotte 18 
Studies for Saxophone Salvador-Issil Exercices in 
All the Practical Keys Guillou Sontaine Glazounov 
Concerto

303, 304

3 cr each

Mule Scales and Arpeggios Vol III Left 24 Etudes 
Capella 20 Grand Etudes Bozza 12 Etudes Bozza 
Concertino Ibert Concertino

403, 404

5 cr each

Rascher Top Tones and Four Octave Studies 
Mule 53 Studies Lyon Thirty-two Studies Montz Concer-
to Contemporary solos orchestra studies

Trombone and Baritone Horn

103, 104

3 cr each

Scales and arpeggios in all keys review of tone pro-
duction Rochut Melodious Studies Vol I Blume 
Studies Vol I selected solos

204

3 cr each

Scales and arpeggios in all keys with various articula-
tions Rochut Melodious Studies Vol II Blume 
Studies Vol II selected solos orchestral and band 
studies

303, 304

3 cr each

Rochut Melodious Studies Vol III Blazhevich Seventy 
Etudes Eby Bass Studies selected solos orchestral 
studies

403, 404

3 cr each

Gingerv vol Tuba Studies Bernard Etudes and Exer-
cises for Tuba transcriptions of horn and violoncello 
literature solos by Camara Barat Scherzen orchestral 
literature
Three Suites Bach unaccompanied violin or Rode. Continued study of repertoire listed above Kreutzer 203 Violin for Viola concertos 403 404 Sonatas 403 404 403 404

Scales and arpeggios in three octaves selected scales from Rode Caprices Hermann Six Concert Studies Op 18 Concertos by C P E Bach and Hoffmeister Vaughan-Williams Suite Sonata by Milhaud parts from orchestral and chamber music literature

Selected Studies from Paganini Caprices Reger Three Suites Bach unaccompanied violin or violoncello works transcribed for viola Bloch Suite for Viola concertos by Bartok Walton Porter Violin

Scales and arpeggios in three octaves scales in thirds sixths and tenths Selected studies from Rode Caprices Hermann Six Concert Studies Op 18 Concertos by C P E Bach and Hoffmeister Vaughan-Williams Suite Sonata by Milhaud parts from orchestral and chamber music literature

Scales and arpeggios continued Rode or Gavinen Bach Solo Sonatas and Partitas any of the major solos and concertos (Beethoven Brahms Mendelssohn Bartok Sibelius Tschaikovsky)

Scales and arpeggios continued Drott Op 35 or Paganini Caprices continue solo Bach and study of major concertos and sonatas

Violoncello

Scales and arpeggios in three octaves with varied bowings Duport Studies Franchomme Twelve Caprices Sonatas of Veracini Locatelli and Boccherini

Scales and arpeggios in four octaves with varied bowings scales in thirds sixths and octaves chromatic scales and seventh chords Franchomme Twelve Caprices Duport Etudes Concertos by Romberg Popper and Saint-Saens sonatas by Boccherini and Haydn Orchestral studies Contemporary works

Scales and arpeggios Klose Celebrated Method for Clarinet Part II Baerman Method Book II selected solos from Carcassi Twenty-Five Etudes Op 60 Renaissance dances works by Carulli Aguado Sor

All major and minor scales and arpeggios two and three octaves Henze Method Sor Concert Etudes One suite and selected pieces from the Renaissance and Baroque works by Luis Milan Tarrega Ponce and Villa-Lobos

Continuation of technical studies of the first two years lute music transcribed for guitar Dowland Bach Sor Concert Etudes and Sonatas clarinet ensemble works by Boccherini Schubert Scheidler tert Paganini

Bach suite a sonata or suite by a 20th-century composer concerto by Vitaldi Giulani Carulli or by a 20th-century composer

Evaluation of student s abilities basic technique and reading abilities including reading knowledge through VII positions all major scales in all positions Berklee Method Book I and Melodic Rhythm Studies Book by William G Levert basic chord theory basic position folk chords and alterations all barre chords and a working knowledge of basic jazz chord forms beginning study of chord-melody solo playing and single-note techniques standard guitar solos

Continue single-note technique chord studies all major and minor scales continue chord-melody playing Joe Pass Guitar Style Impressed Chord Solos and Single Note Improvised Solos Books intensive rhythm jazz chord studies may be used Bucky Pizzarelli s A Tough Nut of a Rope Ronny Lee s Jazz Guitar Method Bk III intensive chord-melody playing including arrangements done by the student beginning single-note improvisation standard guitar repertoire Berklee Method Book I

Continue rhythm playing studies chord melodies playing and single-note improvisation studies Berklee Method Book III Chord-solos and development of repertoire including solos by George M Smith Eddie Lang Dick McDonough Carl Kreis Johnny Smith Tony Motolla George Van Eps Single-string studies Bach inventions Kreutzer violin studies Paganini violin studies

Intensive single-note improvisation and improvisational lines REH Publications for single-note study (Dioto Carlson Mock Kato Hutchinson Joe Pass Jazz Solos and Jazz Classics; Charlie Christian Studies Howard Roberts Method and Materials Wes Montgomer y s Octave-Style Playing understanding fusion music chord-melody arranging from traditional and contemporary literature record transcription both already existing and ones done by the student Coryell Pass Barnes Rurrett DeMeola Benson and others)
Violin
101 102 2 cr each
Scales and arpeggios in three octaves scales in thirds sixths octaves (Fleschi) Schradieck Mazas or Kreutzer Baroque period concertos and sonatas concertos Bach and Mozart
201 202 2 cr each
Scales and arpeggios continued Fionillo or Kreutzer concertos of Bach DeBeriot Mozart Rode and Viotti
301 302 2 cr each
Scales and arpeggios continued Kreutzer or Rode short pieces of the Romantic period standard concertos and sonatas
401 402 2 cr each
Scales and arpeggios continued Rode or Grandes short pieces of the Romantic period Bach Solo Partitas standard concertos and sonatas
Viola
101 102 2 cr each
Scales and arpeggios in three octaves Sevck Studies Lischesky Herrmann Technical Studies Telemann Concerto in G Klenkel Album of Classical Pieces
201 202 2 cr each
Continue scales and Sevck Studies selected studies from Kreutzer 42 Etudes Stamitz Concerto in D Bruch Romance
301 302 2 cr each
Continue scales and arpeggios scales in thirds sixths and octaves Palachko 20 Etudes Fionillo selected studies from 36 Etudes Bach Three viola da gamba sonatas adapted for viola
401 402 2 cr each
Scales and arpeggios continued selected studies from Campagnoli 41 Caprices Concerto B minor by Handel-Casadesus Hindemith Music of Mourn- ing selected contemporary solos viola parts from orchestral and chamber music literature
Violoncello
101, 102 2 cr each
Scales and arpeggios in three octaves Franchomme 12 Studies sonatas by Handel Corelli Concertos by Goltermann and Romberg
201 202 2 cr each
Scales and arpeggios continued Duport Etudes Gallico Sonata No 2 Marais Rameau Romberg Concerto in D minor
301 302 2 cr each
Scales and arpeggios continued Duport Etudes Grutzmacher Etudes sonatas by Graziani Sammar- tini Goltermann Concerto No 1
401 402 2 cr each
Scales and arpeggios as before but including thirds sixths and octaves Duport Studies selected studies from Franchomme 12 Caprices Concerto No 2 Romberg Sonatas by Nardini and Sammartini or- chestral studies
Voice
101 102 2 cr each
Technical exercises to fit the needs of the student Literature from all periods to fit the vocal needs of the student
201 202 2 cr each
Continuation of technical exercises More challenging repertoire from all periods
301 302 2 cr each
Continuation of technical exercises Opera and oratorio repertoire included when vocally suitable in addition to concert repertoire
401, 402 2 cr each
Continuation of technical exercises More advanced opera oratorio and concert repertoire and contempor- ary theater literature
CONDUCTING
379, 380 Conducting I II 1 cr each
This course provides a study of the fundamentals of conducting as a performing skill teaching technique and as an interpretive art Use of the baton choral and instrumental rehearsal techniques and score reading Two hours a week
327 Jazz Pedagogy & Directing 1 cr
Methods and materials pertinent to rehearsing and conducting jazz ensembles studio orchestras and theater orchestras with an emphasis on conducting as a performing skill as well as an interpretive art
ENSEMBLE
Required for all students as laboratory work during each semester of fulltime enrollment Non-music majors are invited to register for ensemble with permis- sion of instructor
143 Ensemble 0 1 cr each
Voice Piano and Organ Majors will participate in a choral ensemble for each semester of enrollment Instrumental Majors will participate in Band or Or- chestra for each semester of enrollment Instrumentalists are encouraged to take advantage of opportunities to participate in choir keyboard or voice majors are likewise encouraged to gain experience in one of the instrumental ensembles
147 148 Small Ensemble 0 1 cr each
The Small or Minor Ensembles include Brass Ensemble Guitar Ensemble Jazz Ensemble Percussion Ensemble String Orchestra Tumburizza Ensemble and Woodwind Ensemble
116 Opera Workshop 0 1 cr each
A performing class in which students learn standard and other opera repertoire in English and the original languages There is one major production each semester plus several outside performances
141 Chamber Music 1 2 cr each
Study and performance of all types of chamber music for the various instrumental combinations
EURHYTHMICS
121 122 Eurhythmics 2 cr each
Fundamentals of rhythmic movement Study of pulse meter rhythm and duration the expressive qualities of music such as tempo dynamics and phrasing realized and expressed through bodily movement Two hours a week
MUSIC EDUCATION
189 190 289 290 389 390 Music Field Observation
Music education majors are required to complete six field observations per year The observations are not credit bearing but are preparation for student teaching Each student must register for field observation every semester except senior year in order to fulfill the pre-requisite for student teaching
181 Woodwind Class I Fundamentals of principles and techniques of playing and teaching the clarinet Study of literature which is appropriate for beginning class instruction For voice piano and organ majors in the music education program Offered in the fall semester Two hours a week
182 Woodwind Class II 1 cr
Performance technique on clarinet continued Teaching technique of oboe bassoon and saxophone covered For voice piano and organ majors in the music education program Prerequisite Music 181 Offered in spring semester Two hours a week
183 Woodwind Class I 1 cr
Fundamentals of principles and techniques of playing and teaching the clarinet Study of literature which is appropriate for beginning class instruction For woodwind brass string and percussion majors in the music education program Offered in the fall and spring semesters Two hours a week
184 Woodwind Class II 1 cr
Fundamental principles and techniques of playing and teaching the saxophone oboe flute and bassoon Study of mechanism and evaluation of class methods and materials Students are expected to develop a reasonable performing skill on each instru- ment For woodwind brass string and percussion majors in the music education program Music 183 is not a prerequisite for this course Offered in the fall and spring semesters Two hours a week
381 String Class I 1 cr
Each student selects one of the string instruments and studies it throughout the semester in order to attain greater technical proficiency Two hours a week
382 String Class II 1 cr
Fundamental principles and techniques of playing and teaching the violin viola cello and bow- ing positions vibrato and an examination of class methods and materials are presented Two hours a week
383 Elementary Methods 2 cr
Principles practices and materials for the general program in the elementary grades A program of per- formance presentations and discussion periods will be required Two hours a week Prerequisite 214 or 215 Piano Class
384 Secondary Methods 2 cr
Principles practices and materials for the general music program in the secondary schools including voice classification the organization of ensemble ac- tivities concerts assembly programs and the rela- tionship of the school to the community Two hours a week
215 Piano Class for Piano Majors in Music Education 1 cr
Piano majors in Music Education study the develop- ment of functional keyboard skills in sight reading transposition accompaniment and improvisation Required of all Piano Majors Two hours a week
281 Brass Class I 1 cr
Fundamental principles and techniques of playing and teaching the trumpet Study of literature which is appropriate for beginning class instruction For voice piano and organ majors in the music education program Prerequisite Music 281 Offered in the spring semester Two hours a week
282 Brass Class II 1 cr
Performance technique on trumpet continued Teaching technique of French horn trombone baritone and tuba For voice piano and organ ma- jors in the music education program Prerequisite Music 281 Offered in the fall and spring semester Two hours a week
283 Brass Class I 1 cr
Fundamental principles and techniques of playing and teaching the trumpet Study of literature which is appropriate for beginning class instruction For woodwind brass string and percussion majors in the music education program Offered in the fall and spring semester Two hours a week
A study of the origin, development, and styles of jazz music and its ramifications with an emphasis on recorded music as well as scores.

**MUSIC HISTORY LITERATURE AND ART**

251 252, 351 352 History and Literature of Music 2 cr each

An historical survey of the ideas and cultural achievements of Western man in the context of the political and sociological developments to which the art of music is bound. The survey embraces four centuries which are arranged chronologically. These courses seek to provide a broad historical frame of reference within which the relationship of music to the development of man’s thought can be clearly seen along with a survey and analysis of representative literature.

451 452 Organ Literature 2 cr each

A survey of organ literature and organ building as it relates to organ registration. The first semester treats organ music from the Renaissance through J. S. Bach. The second semester deals with the literature from 1750 to the present. Outside listening and readings will be required.

151 Evolution of Jazz Styles 1 cr

A study of the origin, development, and styles of jazz music and its ramifications with an emphasis on recorded music as well as scores.

152 Evolution of Jazz Styles II 2 cr

A study and analysis of recorded improvised solos by major jazz artists from 1940 to the present.

455 Music and Mass Media 1 cr

The use of music in television and film. Industrial shows, stage shows, etc., and the composer/performer rights under U.S. copyright law as well as current trends and relations between various performers and booking agents.

**MUSIC THEORY**

The Theory Department recognizes the individual differences of students and provides an opportunity for them to advance according to their abilities.

131 132 Theory 2 cr each

This course is designed to acquaint the student with the materials of musical composition using diatonic harmony. Opportunities for the student to do creative work are provided. Three hours a week.

133 134 Musicianship 2 cr each

The goals of the course are to develop good intonation and the ability to sight sing. The ability to identify and notate melodies rhythmically and complete compositions and to develop a hearing and memory. The devices used are solfeggi, unison and ensemble music preparation and on sight drills on intervals and broken chords. Unison and two-part exercises, keyboard work and clef reading and systematically graded dictation. The course uses the Moveable Do System based on the Kodaly method. Two hours a week.

231 232 Theory 2 cr each

A continuation of 132 introducing chromatic harmony and the basic principles of contrapuntal writing. Creative opportunities continued. Three hours a week.

233, 234 Musicianship 2 cr each

A continuation of 134. Two hours a week.

335 Counterpoint 2 cr

The course is devoted to a study of the polyphonic technique of the sixteenth century.

336 Counterpoint 2 cr

A course study concerned with the harmonic contrapuntal techniques of the period of J. S. Bach.

340 Orchestration 2 cr

A study of the basic problems of scoring for individual instruments particularly orchestral choruses, the entire orchestra and unique instrumental combinations. Analysis of the techniques of orchestration of selected composers of the 18th, 19th and 20th centuries.

430 Jazz Arranging 2 cr

A study of the basic techniques of scoring for individual instruments and jazz ensembles of various sizes from small groups to studio orchestras. Analysis of scores by contemporary big band arrangers.

440 Advanced Jazz Arranging 2 cr

Advanced arranging techniques for the jazz and studio ensembles.

138 139 Composition 2 cr each

The study of writing of musical composition in the smaller forms.

238, 239 Composition 2 cr each

These courses are offered in order to provide gifted young composers an opportunity to receive guidance in the development of advanced compositional techniques. Permission of the chairman of the Theory Department is required.

226 Jazz Improvisation I 2 cr

Beginning study and practice of melodic improvisation conventional forms and chord progressions employing idiomatic jazz and articulations major and modal scales.

227 Jazz Improvisation II 2 cr

A continuation of 226 with an introduction to altered scales and chords.

426 Jazz Improvisation III 2 cr

A continuation of 227 with an emphasis on chromatically altered scales chords and extended forms.

427 Jazz Improvisation IV 2 cr

Extension and continuation of 426 with an emphasis on the practical application of advanced techniques to standard and jazz literature.

453 Jazz Composition I 2 cr

A study of advanced compositional techniques as applied to contemporary jazz styles. Analysis of jazz compositions from 1940 to the present.

454 Jazz Composition II 2 cr

A continuation of 453 with emphasis on individual style development.

**MUSIC THERAPY**

107 Music Therapy Orientation 3 cr

An introduction to Music Therapy as practiced in a variety of rehabilitation settings. Observations followed by informal group discussions. Basic theory about the validity of music as therapy, the relationship of theory to practice. Intensive class participation will be required to prove qualification for further in-depth study of the profession.

108 Music in Therapy 3 cr

An exposure to music therapy techniques used in working with handicapped children and adults. Applications to current Practicum will be emphasized. Prerequisite Music Therapy Orientation 107.

307 Psychology of Music 2 cr

An exploration of musical behaviors and to a lesser degree: all other art behaviors of a variety of cultures and subcultures beginning with the student’s personal experiences. Class participation will be expected. Prerequisite Introduction to Psychology.

308 Influence of Music on Behavior 2 cr

Reviews different treatment theories and their relationship to music therapy. Emphasizes the effects of music on behavior and total health. Develops a philosophy of music therapy with a background in holistic health.

309 Directed Study in Music Therapy 2 cr

Study topics from areas of music therapy psychology of music brain research and other expressive therapies are reviewed and discussed.

310 Recreational Instruments 1 cr

Stresses a typical and functional uses of guitar and covers other musical instruments and devices for recreational purposes.

No specific text used. Each student required to have a guitar and harmonica.

315 Piano Improvisation for Music Therapy 1 cr

Development of functional keyboard skills in improvisation on rhythm and dissonant chords as an aid in non-verbal communication with the handicapped client.

124 Music Therapy Practicum 1 cr each

Each practicum is a field placement in a clinical setting requiring one hour per week for 12-15 weeks per semester. Students are placed with music therapists who practice in a variety of clinical settings or with staff who can provide a structured therapeutic program. Attendance at four monthly seminars per semester is required.

**SACRED MUSIC**

209 Children’s Choirs 1 cr

Materials and techniques used in dealing with children’s choirs.

431 432 Improvisation 2 cr each

A practical application of the basic tools of improvisation including harmonization of melodies at the organ and two or three part counterpoint. Short ABA and chorale preludes with emphasis on their liturgical application.

478 479 Choral Conducting and Methods 1 cr each

Development of conducting technique. The study of choral works and class performance of choral works in various styles.

464 Church Music Administration 2 cr

Seminar in practical aspects of church music. This course is required for church musicians in a church grade school systems: children’s choirs, instruments in workshop contracts, cantor systems, worship commissions, etc.

421 Gregorian Chant 2 cr

The history, notation and modal system of Gregorian chant. Class participation in the singing of chant Chant as prayer and current liturgical application.

420 Hymnody 2 cr

A study of the church’s heritage of song. The psalms: the great hymns of the Medieval Church, the heritage.
of Luther, Calvin, and their followers. English hymnody, American contributions to twentieth-century hymnody, with special emphasis on the theological framework for each major development in the history of hymns.

476 Organ Design and Maintenance 2 cr
A study of the basic concepts of organ construction with emphasis on the historical development of the organ and the mechanical operation of the pipes and console. Tuning, voicing, and aesthetics of organ design will be discussed.

322 Sacred Choral and Solo Literature 2 cr
A survey of choral and vocal literature for the church with emphasis on practical materials for church choirs, soloists, and congregations.

407 408 Service Playing 1 cr each
An introduction to service playing for students minor ing in organ. Hymn playing, score reading, anthem and canticle accompaniments and conducting from the console will be emphasized.

TAMBURITZANS INSTITUTE OF FOLK ARTS

161 162 Introduction to Folk Dance 2 cr each
The course introduces folk dance as a genre of movement examining the types and styles of folk dance found among different nations and cultures of the world. In addition, it familiarizes the student with the varying types of music and rhythms used as dance accompaniments in different nations and cultures and will touch upon the related areas of folk instruments, folk singing styles, language, customs, and folk costumes.

255 Introduction to Balkan Music 2 cr
An analytical study of the primitive and traditional folk music of the Balkans: its musical styles, forms, and characteristics in terms of its geographical setting and historical background and its general structure and aesthetics.

256 Introduction to Balkan Dance 2 cr
A survey of folk dances of the Balkans highlighting their development from indigenous characteristics, differences, and similarities from one ethnographic region to another.

147 Tamburitza Ensemble 1 cr each
The Tamburitza Ensemble involves the study and performance of music specifically composed and arranged for both small and large Tamburitza string ensembles. It encompasses the fundamental principles and techniques for both playing and teaching the Tamburitza and includes appropriate literature.

NON—MUSIC MAJORS

321 Music for the Classroom Teacher 2 cr
The aim of this course is to assist the student in gaining an appreciation of the importance of music in the lives of children. Knowledge of fundamental principles of instruction in music and a familiarity with the variety of musically enriching experience.

GENERAL EDUCATION

492 Development of the Creative Personality 3 cr
This course encourages creative growth through the development and execution of individual and group projects in music, music education, and music therapy. Limited enrollment with the consent of the instructor.

Prerequisites: Introduction to Psychology and Educational Psychology.

Descriptions of courses in English, modern languages, psychology, sociology, and education required in the several curricula will be found in the College of Liberal Arts and Sciences and School of Education sections of this catalog.

School of Nursing

HISTORY
Since it is the policy of the University to establish its schools under control of an already established school, the School of Nursing was originally organized in 1935 as a unit in the College of Liberal Arts and Sciences. On March 15, 1937, the Department of Nursing Education was given the status of a separate school with a Dean in charge. On December 3, 1937, the State Board of Education of the Commonwealth of Pennsylvania approved the school and authorized Duquesne University to confer the degree of Bachelor of Science in Nursing and the degree of Bachelor of Science in Nursing Education upon graduates according to the appropriate curriculum. Previously, the School of Nursing offered two programs both leading to the degree of Bachelor of Science in Nursing; however, since 1964 both generic nursing students and registered nurse students enroll in the same program.

SCHOOL OF NURSING PHILOSOPHY AND DEFINITION OF NURSING
The philosophy of the School of Nursing evolves from that of Duquesne University. As such, it guides the development of a personal philosophy of life based on a Judeo-Christian frame of reference and supports a commitment to the values which give meaning to life.

The faculty believes that the academic discipline of nursing is a human science profession primarily concerned with the health care of man with family evolving from conception through death. Nursing focuses on helping individuals and families to enhance the quality of living through the promotion of health. The nurse initiates interrelationships with families to help them describe their health and evaluate alternatives and mobilize their resources for planning change. Central to nursing practice is the Nurse/Client/Family process which is deliberate, systematic, and individually designed. This is a shared process where decision-making is focused on freedom to choose within the limitations of expectation while considering the safety of all concerned.

The nurse uses theories, concepts, and research findings to substantiate nursing practice. The professional nurse is a creative innovator who finds satisfaction in giving service to others. Regularly evaluates self and plans for continuing self-growth. Through systematic inquiry the professional nurse promotes the discipline of nursing and provides direction for the future of nursing.

The educational process is co-constituted one in which teacher and learner plan experiences and share knowledge. The emergence of new knowledge is encouraged through the ongoing interrogation of present knowledge and new experience. This enhances the nurse's preparation for future and evolving responsibilities within professional nursing based on changes and characteristics of the population for whom health care will be delivered.

In making explicit the philosophy that underpins the theoretical framework of nursing, the concepts of man and health are studied in relation to nursing as a human science. Man is a sentient living unity. A creative act of God. Man and environment in their openness evolve unidirectionally. Existence with others in the world co-existence is recognized through patterns of expression. This existence is co-constituted that is man's relationship with the environment is participative. Within limitations of situation man has the freedom to choose a way of being with the world and in that choosing gives meaning to a situation.

Health is a process of being and becoming which is experienced by man. It is a personal process that affords each individual the potential for productive and meaningful life that is congruent with individual belief systems and values which arise from a multicultural society. Every person has the freedom to choose changing dimensions of health and health values which emerge from ethic and cultural customs and characteristics. Health is assessed by citizens and promoters of health care through a participative process which involves joint planning and decision-making.

The faculty of the School of Nursing has defined nursing as an academic discipline that seeks to understand man as living health through the processes of life changing, inquiry, and valuing. The practice of nursing applies knowledge and theories from this discipline and from the humanities and natural sciences in the promotion of health. Health promotion occurs through the utilization of the Nurse/Client/Family process as the nurse participates in care giving health education and leadership.

The uniqueness of the Duquesne University graduate is based on an appreciation and understanding of the philosophy and the beliefs about man and health. These beliefs are reflected in nursing practice through an approach that embraces man in his wholeness as one who continually moves forward in increasing in complexity through individual patterns of expression. The nursing practice of this graduate is also based on the recognition that the responsibility for the health situation is a shared process in which the nurse client and family participate.

The Duquesne University School of Nursing encourages the gesture who has the flexibility to practice in a variety of settings. The program emphasizes nursing as a human science and provides a foundation for graduate study.
The purposes of the program are:
1. To prepare the graduate for beginning levels of professional nursing in a variety of settings.
2. To provide the foundation for graduate education in nursing.
3. To practice nursing as a human science in a variety of settings.
   - The program leads to positions of increasing responsibility and to graduate study.
   - It leads to the completion of the University's liberal arts requirement.
   - The faculty of the School of Nursing conducts all professional nursing courses and also directs the practicum learning experiences.

ADMISSION REQUIREMENTS

ADMISSION OF HIGH SCHOOL GRADUATES

The specific entrance requirements for admission are:
1. The applicant's high school curriculum must include a minimum of 16 units distributed as follows:
   - English: 4 units required
   - Social Studies: 3-4 units recommended
   - Language: 2 units recommended
   - Math & Science: 6 units recommended
   - Chemistry: 1 unit required
   - Algebra: 1 unit required

2. A candidate must have been graduated from an approved secondary school in the upper two-thirds of the class and have maintained exemplary personal conduct in the institution.
3. The primary consideration for admission is the secondary school academic record. This is considered to be the most important criterion of success at Duquesne University. It is the desire of the Admissions Committee to admit those candidates who possess qualities of character and intellect and who show promise of development into useful and contributing citizens.
4. A candidate must present satisfactory scores of the required College Entrance Examination Board Scholastic Aptitude Test in accordance with the standards to which the University adheres.
5. In specific instances and at the discretion of the Committee on Admissions, the genuine equivalent of these requirements may be accepted in lieu of the foregoing entrance requirements. See the section on Admissions for other University requirements.

REGISTERED NURSE STUDENTS

Duquesne University School of Nursing currently offers an evening program to be offered to registered nurses. This program is being designed to meet the needs of the registered nurse student who wishes to graduate from a diploma program or an associate degree in nursing program. The nursing portion of the program is being scheduled during the evening hours for the convenience of the working nurse.

All students in the BSN Evening Program must complete the University's liberal arts requirement prior to progressing to the nursing major. Any previously earned college credits will be evaluated for application toward the degree requirements.

Admission Requirements
- High school diploma or equivalent
- Graduation from an accredited associate degree (2.5 GPA minimum) or diploma nursing program
- Current licensure as a registered nurse in Pennsylvania
- Personal interview
- An annual physical examination and certain immunization and health tests are required of all nursing students attending Duquesne University.

Further information can be obtained from the Academic Advisor in the School of Nursing.

TRANSFER STUDENT ADMISSION

See Admissions Section for further requirements.

Admission criteria for transfer students:
1. A cumulative GPA of 2.5 from the transferring student's institution.
2. A unit of English and a unit of algebra which can be from either a secondary school or post-secondary institution.
3. Personal interview with the Academic Advisor in the School of Nursing.

Provisions affecting placement:
1. No transfer student can be accepted into nursing practice courses during the first semester of attendance at Duquesne University.
2. Only courses taken within the past ten years will be evaluated for transfer credit. For courses in the natural sciences, the limit is five years. The time limit may be evaluated in specific instances.

SECOND DEGREE PROGRAM

Applicants holding a baccalaureate with a major other than nursing must complete the academic advisor student admission process. They should also arrange for a personal interview with the academic advisor in the School of Nursing.

TEMPORARY TRANSFER

With the approval of the academic advisor, a nursing student may take courses during the summer at an accredited college or university other than Duquesne University. A student wishing to do this will become a temporary transfer student, providing he or she receives the necessary clearance from both institutions.

1. A student must bring to the academic advisor both the catalogue descriptions of courses he or she wishes to take and a schedule for the summer session in which they are given. The academic advisor will evaluate the proposed courses and confirm the other institution's accreditation status.

2. Ordinarily a student who has acquired 60 or more credits may not receive advanced standing for courses taken at accredited community or two-year colleges.

3. A candidate for the Bachelor's degree must complete the last 30 credits (exclusive of challenge credits) toward the degree at Duquesne University.

A student is responsible for earning a C grade or its equivalent or better if he or she expects to receive advanced standing. The student must arrange to have an official copy of the transcript of grades earned at the institution in which he or she is a temporary transfer sent to the academic advisor in the School of Nursing in order to receive advanced standing. This transcript must be sent immediately upon completion of the course to be transferred.

ADDITIONAL EXPENSES AND REQUIREMENTS

Student Liability Insurance
- For three years: $450.00
- Uniforms: nurse's cap, duty shoes, student identification pin: $107.00
- Transportation to and from clinical agencies (weekly): $120.00
- School of Nursing pin if desired: $50.00
- Physical examination: $150.00
- Immunizations: $50.00
- Physical Assessment Kit: $25.00
- NLN Achievement Test Package: $105.00

All students entering Nursing III are expected to produce evidence of completion of first aid certification and CPR certification. Students will not be permitted to practice clinical without evidence of these competencies. Students are expected to maintain curren-

cy in these competencies as they progress through the program.

An annual physical examination and certain immunization and health tests are required for all students in the School of Nursing. Pre-clinical students must complete specific health requirements by August 1 before proceeding to the Junior and Senior clinical practicum.

Each student is responsible for transportation to and from hospital and other clinical resources. Each student will be expected to have access to an automobile to permit experience with home care of clients and their families.

STUDENT ORGANIZATIONS

The nursing student is a member of the general stu-

99
The following achievement tests will be administered:

1. Health Career Entrance Test (HCT)
2. College Board SAT
3. ACT
4. Graduate Record Examination (GRE) for graduate programs

These tests are designed to evaluate the student's knowledge and skills in various academic areas.

The University supports the growth of the School of Nursing. Each class elects its own officers and conducts special activities. Class organizations are recognized by the University and are included in the student activities list.

Honor Awards:
- The Mary W. Tobin Gold Medal
- The Dean Johnson Memorial Medal

These awards are presented at Honors Day.

GRADUATION REQUIREMENTS

- General University requirements for graduation are in the Academic Policies section of this catalog.
- Successful completion of all clinical practicums.
- Completion of the required curriculum plan.
- A candidate for the Bachelor's degree must complete the last 30 credits toward the degree at Duquesne University. Challenge credits are not included in this 30 credit requirement.

Degree requirements must be completed within 10 years after initial enrollment. At the end of the 10-year period, the student record is re-evaluated in terms of the curriculum in effect at that time and the student is advised of any additional requirements for graduation. The responsibility for fulfilling degree requirements rests with the student.

RECOMMENDED COURSE SEQUENCE

**First Year**
- Courses: Core courses, including Anatomy, Physiology, Psychology, and Social Science.

**Second Year**
- Courses: Advanced courses, including Nursing, Psychology, and Social Science.

**Third Year**
- Courses: Professional courses, including Nursing, Psychology, and Social Science.

**Fourth Year**
- Courses: Electives and capstone courses.

For more information, please refer to the School of Nursing Student Handbook. The handbook contains detailed information on courses, requirements, and policies.

**CURRICULUM STANDARDS**

To progress to the nursing practice courses, a minimum cumulative GPA of 2.0 is required, with a minimum of a C grade in the natural sciences (Biology and Chemistry).

To progress to the nursing practice courses, a minimum cumulative GPA of 2.0 is required, with a minimum of a C grade in the natural sciences (Biology and Chemistry).

The faculty of the School of Nursing reserves the right to change the curriculum standards at any time. The student should consult the latest edition of the School of Nursing Student Handbook for the most current information.

**COURSE DESCRIPTIONS**

Descriptions of courses in liberal arts and sciences may be found in the College of Liberal Arts and Sciences section. Pages 13 to 57 contain additional information on specific courses and requirements.

**Nursing I**

This course introduces the students to the discipline of nursing as a human science. The students in the course explore nursing as a human science in light of the major concepts of man and health. Students are introduced to key themes of the conceptual framework of the School of Nursing. The course emphasizes the role of the nurse in the delivery of patient care, focusing on the processes of life change and the dynamics of health and illness.
470 The Research Process 3 cr
This introductory course offers students an opportunity to examine the historical perspectives of nursing research as well as trends and issues which have emerged. These are discussed and critically analyzed. Ethical implications of nursing research are considered in the context of evolving family relationships. Students are encouraged to examine the research process from a natural scientific viewpoint as well as from a human science approach. Further application of the research process to nursing studies is explored through critical evaluation of current research. Prerequisite: Nursing IV

460 Nursing V 9 cr
Nursing V is the third clinical nursing course. It builds on the learning in Nursing IV. The student examines nursing as a participant with evolving families. The purpose of this course is to evolve family nursing. The student will be expected to examine the family as a primary concern in the nursing situation when spiritual needs are involved. The student will be encouraged to develop an awareness of his/her own belief systems and how they affect his life and specifically the healing process. The student will explore the mystery around unconventional or unexpected healing and look at this in relationship to the spiritual beliefs systems which are a reflection of how man participates in his own health. The student will then look at depth, two ways of healing. One way is biofeedback. The other is visual imagery with relaxation techniques as researched by Dr. Carl O. Simonon. The underlying theory will be explored in case histories which will be discussed and the student will get an opportunity to practice these techniques on him/herself. In addition, the student will be encouraged to develop an awareness of his/her own spiritual growth through nursing experiences. In addition, the student will discover the gift he/she brings to the nursing situation when spiritual needs are recognized and shared in terms of the client's perception. Prerequisite: Nursing IV

NURSING ELECTIVES

260 Ways of Healing 3 cr
This course will explore many of the ways in which clients and their families are involved in the process of healing which are thought to be medically traditional. This course will begin by looking at man's belief systems and how they affect his life and specifically the healing process. The student will explore the mystery around unconventional or unexpected healing and look at this in relationship to the spiritual beliefs systems which are a reflection of how man participates in his own health. The student will then look at depth, two ways of healing. One way is biofeedback. The other is visual imagery with relaxation techniques as researched by Dr. Carl O. Simonon. The underlying theory will be explored in case histories which will be discussed and the student will get an opportunity to practice these techniques on him/herself. In addition, the student will be encouraged to develop an awareness of his/her own spiritual growth through nursing experiences. In addition, the student will discover the gift he/she brings to the nursing situation when spiritual needs are recognized and shared in terms of the client's perception. Prerequisite: Nursing IV

300 Ways of Relating 3 cr
This course builds on basic communication theory and skills. It offers the student the opportunity to enhance interpersonal relationships through increasing self-awareness and critical analysis of one's own patterns. This knowledge promotes the motivation toward changing the individual's style of relating. The student learns to apply the skills of critical analysis to evaluate and change to simulate nurse/client/family situations. Prerequisite: Nursing III

406 Choosing the Living in Dying 3 cr
Choosing the Living in Dying is a three-credit non-clinical elective for nursing majors. The focus of the course is on dying as an evolutionary life experience. Emphasis is placed on the quality of living throughout the dying process. The learners will develop their perspectives of the dying process and current issues in America related to that process. Meaning will be enhanced through the sharing of thoughts, feelings, and perceptions within the group process. Prerequisite: Nursing III

481 Political Accountability in Nursing Practice 3 cr
Political Accountability in Nursing Practice is a three-credit non-clinical nursing elective. The student is involved in learning how to act as a professional nurse in the political system in the United States. The specific method of processing information about public issues will be taught. Individual and group positions on health care issues based on a clear statement of the student's personal philosophy and an analysis of relevant data will be developed. Students will become acquainted with the groups available to professional nurses to assist with data collection. Knowledge of the law and legislative process will be used to make decisions on appropriate actions. Students will contact local state and national legislators for permission to initiate dialogues and receive information and state their positions. Prerequisite: Nursing III

499 Directed Study 3 cr
The course in Directed Studies provides students with the opportunity to pursue an area of individual interest in nursing which is consistent with the curriculum. Students will have the opportunity to generate goals related to the area of interest they wish to pursue and to formulate and implement a plan for achieving these goals. By special permission only.
School of Pharmacy

HISTORY

Plans for establishing a School of Pharmacy were initiated in 1911 when the charter of the University was amended and authority obtained to grant degrees in Pharmacy. On April 20, 1925, the final work of organizing the School of Pharmacy was completed. The first class was received September 21, 1925.

Duquesne University School of Pharmacy is housed in Richard King Mellon Hall of Science, whose design by master architect Mies van der Rohe won the Laboratory of the Year award for 1969 in the annual Industrial Research Inc. survey of new science buildings across the country. The School's specialized facilities include the Hugh C. Muldoon Model Pharmacy, animal operating room, electronics laboratory equipped with individual kits, bioelectronics laboratory, eight additional teaching laboratories and a manufacturing pharmacy laboratory containing basic pharmaceutical manufacturing equipment and separate tabletting and aerosol technology rooms.

PHILOSOPHY AND OBJECTIVES

The School of Pharmacy, as an integral part of the University, embodies as its own the mission and goals set forth by the University.

The School of Pharmacy has many important missions, but the primary mission of the School is to prepare practitioners for life-long careers in pharmacy and allied health sciences. Academic training must build sufficient knowledge and skill to allow graduates to practice in the present environment and to grow and adapt as the practice environment changes.

The curriculum in pharmacy represents a composite of educational experiences that results in a well-educated and well-trained professional and offers the undergraduate student a well-rounded and broad education which will inspire a permanent interest in learning.

In order to be a competent pharmacist the student must become a therapeutic specialist who has knowledge of drugs and their actions. Secondly, the pharmacist must possess skills and knowledge to manage a professional practice. The comprehensive and specialized nature of the curriculum offers the Pharmacy graduate a choice of occupations within the profession and its closely allied fields. Many pharmacists find employment as medical service representatives for drug manufacturers. Some enter the wholesale drug business and the pharmaceutical manufacturing industry. Graduates in pharmacy are exceptionally well qualified to become agents for the enforcement of narcotic and pure food and drug laws. In recent years, pharmacists have entered the field of nuclear pharmacy and drug information-poison control. Many pharmacists find employment as chemists or biologists in industrial and research organizations in allied fields others enter the professional teaching. Additional study is required for some of these positions.

A few pharmacists continue their study in other health professions leading to a second professional degree or an advanced degree in the basic pharmaceutical and medical sciences. The School of Pharmacy directs the professional program leading to the Doctor of Pharmacy degree. Those graduates are qualified for placement in clinical pharmacy positions in hospitals across the nation.

Medical technologists work under the direction of a pathologist or clinical scientist. In the field of Medical Technology positions are available in hospital and industrial laboratories preparing tissue samples and slides for microscopic study, taking blood samples, storing plasma and keeping records of tests.

In the field of Radiological Health positions as health physicist are available in hospitals and any laboratories and industrial facilities which use radioisotopes.

The School of the Graduate School of Liberal Arts and Sciences of Duquesne University offers programs through the Department of Pharmaceutical Sciences leading to the Doctor of Philosophy degree in pharmaceutical chemistry and medicinal chemistry and the Master of Science degree in the fields of pharmacists.

DEGREES

The School of Pharmacy offers programs leading to three undergraduate degrees: Bachelor of Science in Pharmacy, Bachelor of Science in Medical Technology, and Bachelor of Science in Radiological Health. These are described on the following pages.

Descriptions of advanced degrees offered by the faculty of the School of Pharmacy are found in other catalogs available from the School of Pharmacy office.

PROGRAMS PHARMACY

The School of Pharmacy offers a Bachelor of Science degree in Pharmacy upon completion of the undergraduate professional program. The first two years encompass many courses offered by the College of Liberal Arts and Sciences in addition to several professional courses. The latter three years of study are taught mainly by the pharmacy faculty with electives being available from both that faculty and all other schools of the University. Students are enrolled in the School of Pharmacy for all years. Transfer students are enrolled according to qualifications in the second or third year of the five-year sequence. Legal requirements of all states are met with regard to graduation from an accredited college of pharmacy. Licensure in the several states may be acquired by meeting specific additional requirements of each particular state.

Residency Requirements

The pharmacy curriculum has been designed to provide a sequence of courses leading to professional competence. The minimum time period in which this may be accomplished has been determined by the faculty to be three years of full-time residency. This residency requirement for the final years of the professional program in pharmacy is in accordance with proper statement ratified by the American Association of Colleges of Pharmacy and followed by all colleges of pharmacy in establishing minimum residency requirements as well as guidelines for professional education. The residency requirement is applicable to all students regardless of advanced standing status.

Curriculum

A minimum of 30 credits in the combined general education areas of humanities and social sciences is required for graduation from the School of Pharmacy. Fifteen in the Humanities including English Composition and Theology and six in the Social Sciences and nine credits chosen from either area in consultation with the advisor. Courses fulfilling the requirements are listed under the Department of Theology in the College of Liberal Arts and Sciences section of this catalog.

The faculty recommends and reserves the right to require completion of course clusters in the humanities and social sciences as a means to provide a strong general education for all health professionals. A list of the suggested course clusters appears at the end of this section.

The student is cautioned to seek regular advice from the faculty and to keep a record of credits earned and the calculated averages. The School assumes no responsibility for such errors appearing in student records which may prevent the student from being graduated.
**Fifth Year**

This year is organized on a special calendar that does not coincide with other units of the University. No students may enter the year with any prior course deficiencies. Students may not ordinarily enroll for non-professional courses during this year. With the controlled externship (Practical Pharmacy 39-41) schedule, fifth-year Pharmacy students should anticipate possible extra costs for living expenses as well as the loss of income from employment.

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*D—Didactic hours  L—Laboratory Hours  C—Credit hours  Courses are to be completed in the designated sequence  Minimum credits for B.S in Pharmacy Degree—160 sufficient elective courses must be taken to satisfy the minimum credit requirements.

## NEW PHARMACY CURRICULUM*

For classes entering in Fall 1982 and thereafter

### First Year

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### Areas of Concentration

During the fourth year (earlier if possible) each pharmacy student is urged to select an area of concentration from one of the following areas: Community Practice, Institutional Practice, Industrial Practice, Nuclear Pharmacy, or Pre-Graduate Study.

The course clusters represent depth in a professional area of choice. Students may make their own selection of courses in consultation with their advisors.

The following courses are approved for the respective areas of concentration.

#### Community Practice

- 29—Emergency Treatment
- 58—Community Practice I
- 59—Community Practice II
- All—Psychology
- All—Sociology
- 361—Principles of Management
- 341—Practical Pharmacy I II
- 567—Pathophysiology
- 200—Patient Education Techniques
- 201—Social and Behavioral Aspects of Illness and Health
- 005—Non-Prescription Drugs

#### Industrial Practice

- 501—Manufacturing Pharmacy
- 502—Pharmaceutical Formulation and Development
- 539—Bionucleonics
- 506—Applied Electronics Laboratory
- 39—41—Practical Pharmacy I II
- 510—Advanced Biopharmaceutics
- 522—Spectral Methods
- 504—Industrial Pharmacy and Governmental Affairs

#### Nuclear Pharmacy

- 512—Hospice Pharmacy
- 501—Manufacturing Pharmacy
- 536—Principles of Management
- 539—Biomedical Electronics
- 567—Pathophysiology
- 39—41—Practical Pharmacy I II
- 54—Sterilization and Parenteral Pharmaceuticals
- 200—Patient Education Techniques
- 201—Social and Behavioral Aspects of Illness and Health
- 005—Non-Prescription Drugs
- 813—Clinical Nutrition

#### Pre-Graduate Study

Students who elect this option must consult with the chairman of the department of their area of interest in order to select courses most adaptable to the program they desire to pursue. A combined B.S/M.S program is available to qualified students.

### MEDICAL TECHNOLOGY

The program leading to the degree B.S in Medical Technology is a joint effort between Duquesne University and Mercy Hospital Pittsburgh Pa. The program involves completion of 124 credits with 30 of the credits being taken in Mercy Hospital’s School of Medical Technology in the fourth year of the program. Graduates of the program are eligible for national certifying examinations.

The School of Medical Technology at Mercy Hospital is approved by the National Accrediting Agency for Clinical Laboratory Sciences which acts as advisor to the Council on Medical Education of the American Medical Association. It is responsible for establishing and maintaining high standards of education in A.M.A-approved schools of medical technology.

Students in the program enroll in the School of Pharmacy as medical technology majors. These students are advised through the Office of the Dean of the School of Pharmacy.
Admission to the fourth year of the program will be on a competitive basis with those as the determining factors:

1. A student must have a minimum quality point average of 3.0 in the sciences.
2. No student with lower than 3.0 in any chemistry course will be considered for admission.
3. Written recommendations.
4. Personal interview with the Education Coordinator of Mercy School of Medical Technology.

Applications for entrance to the fourth year are to be made before October 31 of the third year. Information and applications are available from the Office of the Dean of the School of Pharmacy. During the fourth year of the program students will register and pay tuition to Duquesne University. They will be permitted to reside in the University dormitories and enjoy all of the privileges of Duquesne University students.

Failure in any of the major courses included in the fourth year will lead to immediate dismissal from the Mercy School of Medical Technology.

Curriculum

A minimum of 15 credits in the combined areas of humanities and social sciences is required for graduation. The School of Pharmacy assumes no responsibility for such errors appearing in student records which may prevent the student from being graduated.

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<th>Spring Semester</th>
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<td>71 Nuclear Pathology</td>
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**These courses may be offered in semesters other than those indicated as the Pharmacy curriculum is revised.

All of the required course work laboratories supplies facilities and faculty for the fourth year of the program will be provided by the Mercy School of Medical Technology. The faculty of the School of Medical Technology is recognized as faculty at Duquesne University.

RADIOLOGICAL HEALTH

Since 1972 the School of Pharmacy has offered a four-year 123-credit program leading to a Bachelor of Science degree in Radiological Health. Graduates from the program qualify for positions of health physicists in many facilities using radioactive isotopes. Students in the radiological health program enroll in the School of Pharmacy as radiological health majors. These students are advised through the Office of the Dean of the School of Pharmacy.

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* D—Didactic hours L—Laboratory C—Credit hours

** These courses may be offered in semesters other than those indicated as the Pharmacy curriculum is revised.

Curriculum

A minimum of 15 credits in the combined areas of humanities and social sciences is required for graduation. The faculty of the School of Pharmacy assumes no responsibility for such errors appearing in student records which may prevent the student from being graduated.

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ADMISSION
Students who plan to enter any of the programs offered by the School of Pharmacy are encouraged to meet with the Dean of the School for a personal interview. Entrance requirements are listed under Admission in the General Information section of this catalog. Applications should be submitted as early in the year of matriculation as possible.

The national Pharmacy College Admissions Test (PCAT) may be taken by applicants. Results should be reported to the Admissions Office and to the School of Pharmacy. The test is not required for admission to the School but the results are used by advisers to assess the level of knowledge and skill related to the program. Superior performance in certain topics will alert the student to enroll for advanced placement examinations.

The School of Pharmacy admits students into each of the first three years of the medical technology and radiological health programs and into the first second or third year of the pharmacy program. Procedures for entrance are outlined under Application Procedures in the General Information section.

All transfer students must be interviewed by the Dean or Assistant Dean of the School of Pharmacy. Students intending to transfer into the pharmacy program must have successfully completed the appropriate pre-pharmacy course requirements into the second or third year of the curriculum. Advisors at the School of Pharmacy are available to meet with students to discuss the requirements necessary for possible future placement in the School of Pharmacy.

Transfer pharmacy students must complete a minimum of three academic years of residence in the School of Pharmacy.

REGULATIONS

In extending circumstances and with the permission of the School of Pharmacy Student Standing Committee, a waiver of the three years of residence required by the American Association of Colleges of Pharmacy will be sought by the faculty on behalf of the student. Failure to request and obtain such a waiver requires the student to complete a minimum of six semesters in residence as full-time students.

Advanced credit for courses completed at other institutions may be allowed for those courses which appear in the Duquesne curriculum. No credit is allowed in any subject in which a grade lower than a C is earned or for a course not related to the major. Each course, once enrolled at Duquesne, may not pursue courses at other institutions for transfer credit without specific permission from the Office of the Dean.

Advanced standing for students to fall in residence until the student completes a minimum of one semester's work (16 semester hours). If his work proves unsatisfactory, the student will be requested to withdraw.

Applicants who have completed advanced courses in high school are encouraged to take advanced placement tests (see Admission section of this catalog). Partial advanced placement credit for some courses may be awarded for these examinations. Students are advised to investigate carefully the credit equivalency.

SCHOLARS PROGRAM

Any student designated as an Admissions Scholar upon entrance to the University and to the School of Pharmacy, or who maintains a cumulative average of 3.0 is named to the School of Pharmacy Scholars Program. Students enrolled in any major offered by the School are eligible. Selection is made annually on the basis of academic standing. No application is required. Recognition is given annually at the fall social gathering and encouraged to investigate Advanced Placement CLEP and Challenge Examination opportunities, faculty research projects in which they may participate and independent study courses.

SPECIAL FEES

Laboratory

Required laboratory courses scheduled by all schools of the University are subject to fees as published. Pharmacy laboratory fees require a fee of $40 each semester. This is a prorated charge derived from the total costs of all laboratory operations throughout the professional years. Other courses offered in the program of medical technology and radiological health are subject to special fees. No laboratory fees are assessed for courses scheduled in the fourth year of the technological program.

Activities

Instilled by student request, this fee of $25 a semester for a minimum of six semesters covers such miscellaneous items as local and national Student American Pharmaceutical Association dues and journal subscriptions. Scholarships and aid to the pharmacy student newsletter are included in this fee. Partial travel expenses for one required field trip to a pharmaceutical manufacturing firm are included in the fee. The pharmacy student newsletter is published by the faculty, an aid to students.

School of Pharmacy Fee

All students enrolled in any program of the School of Pharmacy are required to pay a fee designated by the University. The fee assists with the special operating expenses of the School of Pharmacy.

REGULATIONS

Students in the School of Pharmacy are preparing themselves for entry into a respected health profession where the highest degree of character and sense of responsibility are basic requirements. As such they are expected to conduct themselves at all times in a manner befitting this position and according honor to it. For these reasons, the School of Pharmacy insists on strict adherence to the following regulations.

1. Class Attendance

Regular class attendance in the School of Pharmacy is normally required for maximum educational advantage. The responsibility for all course material rests wholly with the student. Under no circumstances will class attendance be used as the sole basis for altering a grade in a course. This principle shall not modify the prerogative of each instructor to establish specific policies for attendance at tests, examinations, class lectures, deadlines for projects, or other specific school or course requirements.

2. Academic Standards

All students who are admitted to the School of Pharmacy must maintain a 2.0 GPA (quality point average) in the required courses in the professional pharmacy curriculum throughout the program. Students who do not achieve a 2.0 GPA by the end of the first professional year may be admitted to the second year on a probationary basis. No student will be admitted to the third fourth or fifth years of the program with less than a 2.0 GPA in all courses and in professional courses. A minimum of 2.00 GPA in the pre-pharmacy science and math courses is required for entrance into the third year of the pharmacy program.

3. Required Programs

Pharmacy students in the fourth year of the curriculum are required to participate in one institutional visit arranged by the School.

The School of Pharmacy arranges for students to participate in a special course in surgical appliance fittings offered by a field representative of a manufacturer of such devices. The biennial programs are required for all pharmacy students in the last two years of the curriculum. Record of participation is made in the students' permanent files.

The faculty of the School of Pharmacy may require Pharmacy student attendance at other seminars and special programs. The School of Pharmacy is normally required for maximum credit equivalency.

4. Health Requirements

Any School of Pharmacy student entering studies in a hospital setting may be required to participate in the program of medical technology and radiological health. Farm students are required to participate in one such program.

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5. Honors Program

A student, upon entrance to the University and to the School of Pharmacy, may be invited to participate in the Pharmacy Honors Program. Membership in this program is normally required for maximum credit equivalency. This program is designed for student entering studies in a hospital setting such as a tour of the School of Pharmacy laboratories, and participation in a special course in surgical appliance fittings offered by a field representative of a manufacturer of such devices. The biennial programs are required for all pharmacy students in the last two years of the curriculum. Record of participation is made in the students' permanent files.

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6. Transfer Pharmacy Students

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Pharmacy for superior achievement in pharmacological history or activity.

American Pharmaceutical Association Award. A certificate of recognition is presented annually to the graduate who has made the most significant contribution to the Student American Pharmaceutical Association at Duquesne University.

Bernard and Blanche Hellman Award in the Humanities and Social Sciences. An annual award of $50 is presented to the graduate who has demonstrated an understanding of the value of the humanities and social sciences in his development as a professional person. This fund is used for the purchase of books on any aspect of the humanities in which the student is interested.

Mary McPartland Beck Award. An award of $25 is presented annually to the graduate who has shown outstanding ability and interest in the clinical practice of pharmacy.

Bristol Award. An award is presented annually by the Bristol Laboratories Inc. New York City to a Doctor of Pharmacy candidate for excellence in scholastic achievement.

Bristol Award. A copy of a standard reference book is awarded annually by the Bristol Laboratories Inc. New York City to the graduate who has in the opinion of the faculty attained unusual distinction in the work of pharmaceutical administration.

Faculty Award. The faculty of the School of Pharmacy may present an appropriate award to an outstanding member of the graduating class who has displayed exceptional qualities of academic excellence and a GPA of over 3.75.

Maurice H. Finkelpearl Award. An award of $50 is presented annually to a student who intends to practice Community Pharmacy.

Galen Society Award. The Galen Society of Pittsburgh annually offers two $25 awards to the two members of the graduating class who have achieved the highest standing in the departments of pharmacy and pharmacaceutics.

Samuel W. Curtis Award. An award of $25 is presented to the graduate who has shown outstanding ability and interests in the field of pharmacists.

Medicinal Award. A replica of an Early American Mortar and Pestle is awarded annually to an outstanding student of Pharmacy Administration.

Lilly Achievement Award. A gold medal is presented annually to a member of the graduating class who has demonstrated unusual scholarship and professional achievement as well as qualities of leadership.

Merk Sharp and Dohme Award. Each year Merck and Company, Rahway, New Jersey offers a set of valuable reference books to a member of the graduating class who attains the highest average in medicinal chemistry.

Rho Chi Award. Alpha Chapter of Rho Chi awards annually a suitably inscribed key to the student who earns the highest general average in all subjects during the first two years of the pharmacy program. It is presented at a meeting of the Student Chapter of the American Pharmaceutical Association.

Roche Pharmacy Communications Award. A personalized plaque is awarded annually to the graduating student who has demonstrated exceptional ability in patient communication through coursework and application.

Smith Kline & French Laboratories Award. A personalized plaque is presented annually by the Smith Kline & French Laboratories, Philadelphia, Pennsylvania for superior achievement in Clinical Pharmacy.

Student American Pharmaceutical Association Award. An annual award is presented to the graduating student who has demonstrated through service reporting and activity an avid interest in organization work.

Syntex Preceptor of the Year Award. An appropriately designed plaque is awarded annually by the Syntex Laboratories Inc. Palo Alto, California to the preceptor who in the opinion of the Pharmacy Interns best exemplifies professionalism ethics and clinical practice.

Upjohn Award. A suitably inscribed plaque is awarded annually by the Upjohn Company, Kalamazoo, Michigan for outstanding public service.

Western Pennsylvania Society of Hospital Pharmacists Award. An annual award of $25 is presented to the graduating student who demonstrates outstanding ability and interest in the area of Hospital Pharmacy.

Lennon Company Award. A certificate and award of $50 is presented to the graduating student who has completed the degree program through unusual and extraordinary perseverance and determination in the opinion of the graduating class.

Pennsylvania Pharmaceutical Association Award. A certificate and an award of $150 is presented annually to the graduating student who has been most actively involved in pharmaceutical organizations.

Felder Scientific Award for Outstanding Medical Technology Student Award. A personalized plaque is presented annually to the graduating Medical Technology student who achieved the highest standing in the clinical program at Mercy Hospital.

GRADUATION REQUIREMENTS. A committee of the faculty will review the record of each candidate for graduation to ascertain full compliance with specific School of Pharmacy curriculum requirements and the General University Graduation Requirements as stated in Academic Policies section of this catalog. This committee will then recommend candidates for faculty certification for graduation or for remedial work to be fulfilled during the last six months of the program. Graduates retaining this certification may be entered in the Office of the Dean.

STATE LICENSING PENNSYLVANIA. A candidate for licensure as a Registered Pharmacist in the Commonwealth of Pennsylvania must meet the following requirements before he may be admitted to the licensing examinations which are conducted by the Pennsylvania State Board of Pharmacy.

1. Character—the be of good moral character.

2. Professional Training—have a degree in Pharmacy granted by a School or College of Pharmacy which is accredited by the American Council on Pharmaceutical Education.

3. Practical Experience and Internship—any person enrolled as a student of pharmacy in an accredited college may at the end of the second year of college file with the State Board of Pharmacy an application for registration as a pharmacy intern.

To insure proficiency in the practical aspects of pharmacy the State Board shall by regulation prescribe internship requirements which must be satisfactorily completed prior to issuance of a Pharmacist's license.

Specific information concerning practical experience requirements as well as all other requirements concerning licensure may be obtained from the State Board of Pharmacy, Department of State Box 2649 Transportation and Safety Bldg. 6th Floor Harrisburg Pennsylvania 17120.

STATES OTHER THAN PENNSYLVANIA. According to law the licensing of an applicant seeking to become registered as a pharmacist is under the sole jurisdiction of the state in which he seeks to practice. Although the requirements for licensure in the Commonwealth of Pennsylvania are similar to those of other states differences may exist. Space limitations preclude a complete listing of the requirements of other states and the District of Columbia. The candidate for licensure in another state is advised to consult the Board of Pharmacy in that particular state for complete information.

CAREER GUIDANCE CENTER. A Guidance Center has been established within the School of Pharmacy to keep students informed about the latest career opportunities available to those possessing a pharmacy education and to attract high school and college students to the profession. The Center consists of faculty members, School of Pharmacy alumni, and pharmacy practitioners. It provides upon request for career day programs and information to high school counselors on all matters relating to a pharmacy education and career. Pamphlets containing career information on pharmacy are also available through the Guidance Center. Inquiries should be directed to the Pharmacy Career Guidance Center, School of Pharmacy, Duquesne University Pittsburgh Pennsylvania 15282.

RESEARCH FOUNDATION. The Hugh C. Muldoon and Pharmacy Alumni Foundation of Duquesne University established in 1950 to celebrate the twenty-fifth anniversary of the founding(715,916),(963,928)
DEPARTMENT OF PHARMACOLOGY-TOXICOLOGY

Chairman Gene A. Riley, Ph D

2 Drug Abuse
A course designed to present the pharmaceutical and toxicological properties of substances of abuse. The major classes of drugs are described with direct reference to toxic and adverse effects. The myths and misconceptions commonly attributed to some substances of abuse are clarified. The philosophy of the course is to present an objective picture of the drug abuse era in this country. The course is intended for all students beginning their collegiate studies. Admission to this course for students who have completed Pharmacology 33 or its equivalent by approval of the instructor. 4 cr

3 Basic Pharmacology
A course dealing with the major classes of therapeutic agents designed for students with a limited background in biological sciences. Drugs are considered from a disease state point of view and include basic mechanisms of action. Important drug interactions as they relate to patient care are included. Not open to Pharmacy Students. Prerequisites. Six credits of biological science including physiology Lecture three hours 3 cr

4 Social Diseases
Causes course of diseases prevention treatment and social effects of venereal diseases. Awareness and common sense should be awakened in students by the course. Lecture one hour a week Open to students who have not completed Pharmacology 33 4 cr

5 Pharmacology and Toxicology of Nonprescription Drugs
A course designed to familiarize students with the pharmaceutical and toxicological properties of over-the-counter drugs. The course will prepare the student to counsel the public on the appropriate use of OTC drugs. To select the proper nonprescription drug for a particular disease state and to determine if treatment with a non-prescription drug is appropriate Lecture three hours 4 cr

6 Chemical Testing for Intoxication
Deals with the pharmacology, toxicology and biochemistry of ethanol and the physical and technical aspects of breath analyses. Various instruments will be discussed and the Breathalyzer will be used specifically. This course is approved by the State of Pennsylvania Department of Transportation and is offered only to individuals associated with law enforcement agencies. One week workshop course 3 cr

7 Anatomy and Physiology
An integrated course of the structure and function of tissue and organs. The various organ systems of vertebrate species are discussed as integrated functional units. Laboratory consists of lecture presentations of gross anatomy and laboratory procedures including the microscopic examinations of tissues hematology and the clinical appraisal of physiological functions. Prerequisite General Biology 112 Lecture three hours Laboratory three hours 4 cr

18 Anatomy and Physiology
A continuation of Anatomy and Physiology 17. Prerequisite Anatomy and Physiology 17 Lecture four hours 4 cr

26 Pharmacognosy
Deals with the important medicinal agents which are derived from natural sources. Emphasis is placed on the medically important antibiotics, alkaloids, glycosides, volatile oils, fixed oils, vitamins, and the biochemistry of enzymes. The course includes a discussion of the natural source of the drug its precise chemical nature, its pharmacological effect on the body and its importance in medicine today. Prerequisite Organic Chemistry Lecture four hours 4 cr

29 Emergency Treatment
A lecture-demonstration course. The course teaches how to render first-aid of emergency while awaiting the arrival of a physician. Special emphasis is placed on emergencies which the pharmacist is most likely to be confronted with. The course includes the use of the Breathalyzer in alcohol determination. Lecture three hours demonstrations included during lecture hours 3 cr

33 Pharmacology
A basic course in pharmacodynamics and pharmacotherapeutics. Special emphasis is placed on the sites and mechanisms of action of therapeutic agents. Prerequisites. Anatomy and Physiology 17 and 18 Lecture three hours 3 cr

34 Pharmacology
A continuation of Pharmacology 33. Prerequisite Pharmacology 33 Lecture four hours 4 cr

35 Medical Microbiology and Immunology
Covers the general characteristics and morphology of bacteria, the important staining techniques, methods of growing bacteria on artificial media, testing the effects of chemotherapeutic agents on pathogenic and nonpathogenic bacteria and immunity. Includes discussions of the important bacterial, nontuberculous, viral, and protozoal diseases along with wound infections, their causes, symptoms and treatments. Lecture three hours Laboratory three hours 4 cr

36 Public Health
A discussion of Public Health measures such as immunization, water purification, sewage disposal, treatment of contaminated individuals and objects, control of rodents and insects and the relationship of these to the spread of disease. Lecture three hours 3 cr

40 Pharmacology
A continuation of Pharmacology 34 Lecture three hours 3 cr

130 History of Pharmacy
A survey of the origins of science medicine and pharmacy from the earliest recorded events to the present with emphasis on the nineteenth and twentieth centuries. Prerequisite in the United States Lecture two hours 2 cr
DEPARTMENT OF MEDICAL TECHNOLOGY

Director Jeanne A. Cooper, M.D.
Education Coordinator M. Elaine Linkhauser M. T.

61 Clinical Chemistry
4 cr
A comprehensive study of the chemistry and metabolism of proteins, carbohydrates, lipids and electrolyte extremities. Hormone systems are revealed by the various examinations performed on blood and other body fluids.

62 Uroanalysis
2 cr
The study of renal function and its abnormalities as portrayed by alterations in the composition of the urine.

63 Hematology
5 cr
Determination of the anatomy and physiology of the blood and vascular laboratory methods used in establishing inherited or acquired abnormalities of blood and blood forming organs.

64 Blood Banking
3 cr
Essentials and importance of proper selection of blood for transfusion. Testing methods, records, and administration of blood. Also included are studies of tests pertaining to isosensitization.

65 Bacteriology
5 cr
The study of clinical bacteriology, including culture methods, biochemical and immunological aspects of identification and the application of these to the disease state.

66 Parasitology
2 cr
Methods of identification of various parasites infesting man with detailed study of their morphology and habitat.

67 Immunology
2 cr
Study of the procedure's used in analysis of immune mechanisms of the body and their application in disease processes.

69 Mycology
1 cr
The study of the pathogenic fungi: the diseases they cause and the technical methods of identification.

70 Virology
1 cr
The study of the viruses causing disease and the technical methods of identification.

71 Nuclear Pathology
2 cr
The study of the use of radioisotopes in the diagnosis and treatment of disease.
DEPARTMENT OF RADIOPHYSICAL HEALTH
Chairman: Mitchell B. Borke, Ph.D.

51 Radiological Health Practice 4 cr
Designed to provide the student with practical experience in at least four broad areas of radiological health industrial hospital reactor and university. This experience will be acquired through observation of fission products and other radioactive emissions within local organizations representative of the four broad areas of radiological health. Emphasis will be placed on personnel monitoring and dosimetry, radiological chemical assaying of biological and environmental materials, field surveying of plant operations involving large quantities of fission products and other radioactive materials, environmental monitoring practices, decontamination procedures, and radiation protection record keeping. Prerequisites: Bionucleonics 539 Radiological Health 541. Co-requisite: Radiological Health 542 Laboratory 16 hours

306 Applied Electronics Laboratory 2-3 cr
This course seeks to combine a treatment of the principles of modern electronic instrumentation with practical laboratory experience. Topics will be included in some applications of passive and active electronic components, electronic measuring instruments, power supplies, amplification, feedback and control impedance matching, linear and digital devices. Emphasis will be on proper use of instrumentation rather than on advanced principles of design. Permission of instructor.

539 Bionucleonics 3 cr
A study of the fundamental techniques of manipulation and measurement of radioisotopes. Experiments are performed individually by each student. The scope of the course includes passive and active electronic components, electronic measuring instruments, power supplies, amplification, feedback and control impedance matching, linear and digital devices. Emphasis will be on proper use of instrumentation rather than on advanced principles of design. Permission of instructor.

540 Advanced Bionucleonics and Radio-Pharmaceuticals 3 cr
A course devoted to the practical applications of radioisotopes in pharmacy, chemistry, biology, and medicine. The scope of the course includes neutron activation analysis, gamma spectrometry, tracer methods, and radio- pharmaceuticals. Prerequisites: Bionucleonics 539.

541, 542 Radiological Health I and II 4 cr each
A course designed to review the fundamental physical and biological principles of radiation protection and the application of these principles to the measurement techniques, radiation hazard evaluation, radiation protection surveillance and administration. Scientific principles most applicable to solving the problems of protecting humans from unacceptable levels of radiation exposure both in occupational and public environment are emphasized.

RECOMMENDED PROFESSIONAL ELECTIVES
The following courses offered by the Graduate Department of Pharmaceutical Sciences are available to qualified upperclassmen in the School of Pharmacy:

501 Manufacturing Pharmacy
502 Pharmaceutical Formulation and Development
510 Advanced Biopharmaceutics
522 Spectral Methods
523 524 Advanced Medicinal Chemistry I and II
539 Bionucleonics
540 Advanced Bionucleonics and Radio-Pharmaceuticals
541 542 Radiological Health I and II
561 General Toxicology
563 Pathology
566 Clinical Toxicology
567 Pathophysiology
569 Toxins Their Chemistry, Biology, and Toxicology

Descritions of these courses may be found in the Graduate School of Liberal Arts and Sciences Catalog.

RECOMMENDED ELECTIVES FOR RADIOPHYSICAL HEALTH

106 Logic
104 Introduction to Philosophy
105 Ethics
107 Medical Ethics
101 Introduction to Political Science
312 International Law and Organization
103 Introduction to Psychology
101 Survey of Sociology
323 Medical Sociology
201 202 English Literature
231 232 Development of the United States
305 History of Medicine
307 308 History of Science
204 Interpersonal Communications
121 Elements of Economics
203 Genetics

ELECTIVES—COURSE CLUSTERS
The following courses in liberal arts and sciences are especially selected by the several departments to support and complement pharmacy programs:

Students are encouraged to view these electives with the aim of providing an appropriate depth of knowledge in the areas. Each cluster is intended to offer an interesting sequence of electives that will count toward minimum elective requirements of all programs in the School.

Department of English—
1) 201 202 English Literature Survey
2) 205 206 American Literature Survey
3) 210 211 World Literature Survey
4) 207 plus courses in Film as Literature Science Fiction Literature of Crime and Detection Popular Culture Series
5) 207 208 209 Study of Literary Form
6) English Honors Program 12 credits
7) All 12 credits minors listed by the Department in the current catalog.

Department of History—
1) 305 History of Medicine 307 308 History of Science
2) 231 232 Development of the U.S. 309 Industrialism 309 American Science and Technology
3) World History Western Civilization
4) Non-American History Sequence

Department of Classics—
1) 121 or 122 123 245 246 240 Greek Civilization
2) 121 or 122 123 264 247 248 241 Roman Civilization

3) 245 246 247 248 Ancient History
4) 101 102 201 202 305 306 Latin Language and Literature

Department of Sociology—
1) Any one of areas of concentration suggested under minor

Department of Psychology—
1) 103 courses suggested under minor

Department of Speech Communication—
1) Courses suggested under minor

Department of Philosophy—
1) 104 105 or 107 106
2) Courses suggested under minor

Department of Political Science—
1) 101 courses suggested under minor

Department of Fine Arts—
1) Courses suggested under minor

Any course taught in the University may be chosen as an elective course by students who have met the prerequisites. Descriptions for courses outside the School of Pharmacy may be found in the appropriate section of the University catalog.
The program is structured to give the student a variety of practical experiences in leading and managing civilian careers or competing for active duty in the Reserves or National Guard while pursuing their commissioning. Students serve as an officer in the Army ROTC, which is open to all male and female students at Duquesne. It provides students with the opportunity to earn a commission as an officer in the US Army Army Reserve or Army National Guard. After commissioning, students serve as an officer in the Reserves or National Guard while pursuing their chosen civilian careers or compete for active duty. The program is structured to give the student a variety of practical experiences in leading and managing people and resources while learning about the military profession and the role it plays in our system of government. Four-year and two-year programs are offered both of which are taken in conjunction with a student's required or normal course of study leading to a degree.

FOUR YEAR

The four-year program is divided into two parts: the Basic Course and the Advanced Course. The Basic Course is usually taken in the freshman and sophomore years, during which time the student would take ROTC courses as they would any other courses. There is no military service obligation or special requirements of any kind. The freshmen and sophomore follow the Basic Course curriculum followed by an adventure skill learning and leadership track which is designed to enhance self-confidence and provide new experiences and place students in realistic leadership situations. Freshmen learn survival techniques how to handle and fire a rifle, and how to navigate cross-country using a map and compass. Sophomores learn about leadership, management, and the role of the military in the United States. The Basic Course may be compressed into less than a two-year period if the student meets certain prerequisite conditions.

Basic Course Curriculum

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>MS 101 Survival Techniques</td>
<td>0-1</td>
</tr>
<tr>
<td>Fall</td>
<td>MS 102 Individual Skills</td>
<td>0-1</td>
</tr>
<tr>
<td>Fall</td>
<td>MS 201 Leadership and Management</td>
<td>0-1</td>
</tr>
<tr>
<td>Fall</td>
<td>MS 202 Introduction to Military Skills</td>
<td>0-1</td>
</tr>
<tr>
<td>Spring</td>
<td>MS 301 Military Skills Development</td>
<td>0-2</td>
</tr>
<tr>
<td>Spring</td>
<td>MS 302 Military Skills Development</td>
<td>0-2</td>
</tr>
<tr>
<td>Summer</td>
<td>MS 401 Professional Seminar</td>
<td>0-2</td>
</tr>
<tr>
<td>Summer</td>
<td>MS 402 Professional Seminar</td>
<td>0-2</td>
</tr>
</tbody>
</table>

DIRECT ENTRY INTO THE ADVANCED COURSE

Students may receive placement credit for MS I and II and be granted direct entry into the Advanced Course. This placement credit may be granted for:

1. Completion of Army Basic Training or its equivalent in the Navy Air Force Coast Guard or Marine Corps.
2. Attendance at a service academy for one or more years.
3. Completion of equivalent level training in Navy or Air Force ROTC.
4. Completion of three or more years training in Junior ROTC (any service) or NDCC.

EARLY COMMISSIONING

Many students are able to complete the requirements for commissioning prior to graduation through the direct entry concept. These students may be commissioned upon completion of the Advanced Course, permitting them to serve in salaried positions with the National Guard or Reserves while completing their degree work.

SIMULTANEOUS MEMBERSHIP PROGRAM (SMP)

This program permits students to participate in the Army ROTC Advanced Course and serve in a Reserve or National Guard unit as an officer trainee at the same time. The advantage to SMP is that the student will receive regular drill pay from the Reserve or National Guard as well as the $100 per month living allowance for participating in the Army ROTC.

TWO-YEAR PROGRAM

The two-year program is designed primarily for transfer students and students who did not participate in ROTC as freshmen or sophomores. Any student with at least two academic years remaining and meeting the program's eligibility requirements may qualify for this program. The program is completed in two years at Fort Knox, KY.

ARMY ROTC SCHOLARSHIPS

Army ROTC offers four two-year scholarships which are awarded on a competitive basis. ROTC students as well as those students currently participating in ROTC are eligible to apply. Each scholarship pays for tuition, textbooks, laboratory fees, and other purely academic expenses. Scholarship students also receive a tax-free living allowance of $100 per month during the school year while on scholarship status. For details, see the ROTC Scholarship catalog in the Financial Aid Section of this catalog.

MILITARY SCIENCE CURRICULUM

THE BASIC COURSE (Military Science Levels I and II)

Military Science (MS) 101 Survival Techniques

This is an introductory course designed to prepare students to recognize survival situations and to provide information on survival techniques. The course is taught in the spring semester. Module I (MS 101) Administration/Staff Operations and Procedures is taught in the fall semester. Module II (MS 402) Military Law and Justice is taught in the spring semester.

THE COMMON HOUR

Military Science (MS) 100 Cadet Corps Laboratory

The Common Hour and Cadet Corps Laboratory are synonymous. This class is required for all cadets and is scheduled for the common hour meeting once a week for a year. The Cadet Commander uses the lab to disseminate information and to organize the activities of the Corps of Cadets. All students are required to attend unless a conflict exists between this class and their academic course work.

VOLUNTARY ADVENTURE AND SOCIAL ACTIVITIES

In an urban environment, it is not possible to provide students with the kind of surroundings suitable for the conduct of adventure activities as rappelling and small unit tactics. Therefore, off-campus sites are available for students to fulfill their adventure and social activities requirements.
weekends are utilized in order to effectively apply techniques taught in the classroom. Weekend activities are student run and instructor supervised. For this reason these activities are ideally suited for cadets to practice leadership and organizational and military technical skills. Some weekday or weekend evenings are set aside for social activities which incorporate exposure to military customs and traditions. These events include a Dining-In, the Military Ball, an Awards Ceremony, and the Annual ROTC Commissioning Program. All of these activities (dining in, social events) are conducted with the combined elements of the Pittsburgh Senior ROTC Instructor Group (PSRIG). Universities represented in addition to Duquesne are the University of Pittsburgh, Carnegie-Mellon University, and those institutions in the city which have students cross-enrolled into one of the three detachments of the PSRIG.

Part III: Student Services, Programs, and Organizations

STUDENT LIFE

OFFICE OF THE DEAN OF STUDENTS

The Dean of Students coordinates the following departments: Athletics, Health Services, Residence Life, and Duquesne Union. In addition, the Dean of Students Office is responsible for the following specific programs: Early Alert Leadership Training, Returning Students Center, Mini-Courses, Commuter Concerns, Alcohol Awareness, Honor Societies, and Interact.

The Student Affairs area provides the student with opportunities to benefit from a variety of experiences with fellow students, faculty members, and administrators as well as initiating new programs, implementing change, and participating in the essential processes of University governance on many levels.

The Office of the Dean of Students is responsible for coordinating and implementing several programs and services which provide individual students and groups with opportunities for personal, intellectual, and social growth. In addition to providing counseling services and coordinating the University Judicial System, the Dean of Students Staff is responsible for Orientation, Freshman/Transfer Assistance Program, College Skills, special Scholarships, and Awards.

The Office of the Dean of Students coordinates and provides services available to students with disabilities. The office serves as an advocate for disabled students at Duquesne, surveying the needs of these students and developing programs to meet those needs. Specific services currently available include reading and typing service for the blind or dyslexic students and orientation to campus facilities.

The Office of the Dean of Students serves as a liaison with the Registrars Office in changing classroom locations if necessary for students in wheelchairs with the Department of Public Safety in obtaining special parking permits for disabled students and with the Affirmative Action Officer and Physical Plant in identifying and correcting physical facilities and barriers.

International Students

The responsibility of the International Students Advisor is to be of service to all international students in the area of personal counseling and adjustment. Other services include preparation of forms to obtain employment and to do practical training. The International Student Advisor is located in the Office of the Dean of Students.

UNIVERSITY JUDICIAL SYSTEM

The University Judicial System is administered by the Dean of Students Office. The University Judicial Board plays an important role in developing responsible student conduct. The Board serves to protect the rights and freedoms of all students while acting as a check to ensure that these same rights and freedoms are not misused within the context of students' responsibilities to the University. The Board has a student chairperson and is comprised of administrators, faculty, and students.

When a student has violated a policy or procedure, the Director of University Judicial Systems has a confidential hearing. The hearing will be determined by the Director of University Judicial Systems in a confidential hearing. If the student is found guilty, a sanction will be determined by the Director of University Judicial Systems.
ties are minimized and emphasis is placed on the rights and responsibilities that exist between the individual student and the University. Students' rights and responsibilities and the University's judicial policy are outlined in the Duquesne University Code of Student Rights, Responsibilities, and Conduct, with which each student should become familiar.

ATHLETICS

Duquesne University is a member of the National Collegiate Athletic Association, the Eastern Collegiate Athletic Conference, the Association for Intercollegiate Athletics for Women, and the PennWest Conference. The University follows the rules of these organizations in determining a student's eligibility for a varsity team.

The Athletic Department fields varsity teams in the following sports: baseball, basketball, cross-country, football (Division III), golf, rifle, swimming, and tennis for men as a member of the NCAA and basketball, volleyball, swimming, and tennis for women as a member of the AIAW. The Department also sponsors a coed bowling team which competes in the Club League of Western Pennsylvania and a club hockey team. Although they are primarily men's sports under the NCAA, women are eligible and have competed on the sport of golf.

The men's varsity basketball team (Division II) competes nationally as a member of the Eastern Athletic Association. Prospective candidates for any of the teams may obtain information from the office of the Athletic Director of the Duquesne University Athletic grants-in-aid are available in all sports except bowling, football, swimming, and hockey.

Intramurals

The Intramural Program at Duquesne offers a variety of sports. Beginning in September, the program offers a tennis tournament, three touch football leagues, basketball, two-man basketball, and volleyball.

During the spring semester, students can participate in basketball, coed volleyball, a chess tournament, street hockey, two-man hearts, and foul ball. During the fall semester, students can participate in basketball, two-man basketball, and volleyball. The program is based on two assumptions: (1) the student's residence hall living experience can be an important part of the total university education and (2) the residence hall staff has a defined educational mission that can greatly enhance the residence hall experience.

Health Insurance

It is recommended that each student carry some form of health insurance. The University provides a Student Health Insurance Program which has been designed to meet the needs of the student and is priced lower than individual health insurance policies. Complete information about this insurance plan may be obtained from the University Insurance Officer. Second Floor of the Administration Building. The University is not responsible for medical expenses resulting from participation in intramural sports.

RESIDENCE LIFE

Residence Life is dedicated to the task of creating an environment in which a student can grow and develop. The goal is to provide a program designed to meet the needs of the student and is priced lower than individual health insurance policies. Complete information about this insurance plan may be obtained from the University Insurance Officer. Second Floor of the Administration Building. The University is not responsible for medical expenses resulting from participation in intramural sports.

ALL INTERNATIONAL STUDENTS ARE REQUIRED TO CARRY HEALTH INSURANCE

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The University does not accept the responsibility for loss or damage (from any cause) to the personal property/effects of the student, nor will the University assume responsibility for any personal liability while the student is a resident. It is suggested that students carry personal liability and property insurance.

STUDENT LIFE

The Office of Student Life administers the programs, services, and facilities of the Duquesne Union as well as the services and programs of the Duquesne University YMCA, the Association for Intercollegiate Athletics for Women, and the American Association of University Women. The Office of Student Life is responsible for recruiting and the application process of UPB members.

Promotion Committee

The Promotion Committee serves all the other committees and student organizations with creative ideas in advertising and promotion for on campus and also publicizes the Union through newsletters and activity calendars. Included in this Dial-an-Activity is a free promotional telephone service for campus events.

Every student is welcome to join the Union Program Board and may do so by obtaining an application in the UPB Office (Third Floor Union).

Recreational Center

The Recreational Center located on the First Floor provides a wide variety of recreational activities including open and league bowling, shoe rental, billiards, ping pong, arcade machines, table soccer, and various board games. Several tournaments and special events are offered regionally.

The Recreational Center services include Reading and TV Lounge and an Emporium carrying many recreational and craft items and custom T-shirts for sale at reduced prices.

Information Center

The Information Center located on the third floor concourse provides a central point for campus information and a place to go when you need to know where to go. Included among the numerous services provided by the Information Center are: student organization mailboxes, newspapers (Pittsburgh Press and Post Gazette-daily and weekly New York Times—available on a semester subscription basis) and athletic event tickets, interoffice and U.S. mailboxes, paging announcements, lost and found, student organization listserve program.
tion office keys duplicating services weekly and monthly PAT bus passes. Bell telephone bill collection and in general information.

Scheduling

All registered student organizations and Duquesne University employees wishing to use space on campus for university-related non-academic functions should make arrangements to do so through the Duquesne Union Scheduling Office. Refer to the scheduling policy available in the Scheduling Office for specific procedures to be followed.

Governing Council

Overall direction for the Union's programs and operations is provided by its Governing Council. Specifically, the Council advises the Associate Dean about internal policies and insures the implementation of balanced programming through the allocation of funds in accordance with established goals. A broadly representative body, the Council includes the Associate Dean Director of Operations, Director of Programs and Activities, and representatives from the faculty, alumni, student Government Association, the Union Program Board, Commuter Council, Residence Council, and Student Affairs Division.

Duquesne University YMCA

The Duquesne YMCA located in the Student Life Office in the Union offers students a wide variety of opportunities to become active in the greater Pittsburgh community and on campus.

Community programs are designed to encourage students to have fun while learning about Pittsburgh's rich cultural heritage and to explore potential careers and broaden the dimensions of their education. YMCA members work with children, adolescents, and adults in hospitals, parks, playgrounds, correctional institutions, and on the streets.

Campus programs are planned by students and around their current interests and include background information, activities, and cultural communications.

Student ideas and participation are encouraged in the organization and administration of all YMCA programs.

DEVELOPMENT SERVICES

CENTER FOR ACADEMIC AND CAREER DEVELOPMENT

The Center for Academic and Career Development (CAD) is a coordinated student counseling referral and consultative program within Duquesne University comprised of three services: Career Planning and Placement, Learning Skills Program, and Testing Bureau. The Center provides for both direct counseling and guidance service to students assisting them through the educational process and the career development process. Through the Center a student can seek any or all of the following services: academic planning, tutoring, academic skills development, vocational guidance, career planning, career information, job placement assistance, academic skill assessment, career assessment, and personality assessment. Also, students can receive indirect assistance through referral to appropriate University and community programs. The Center can further assist all University departments and divisions as a source for their student referrals and as a consultative service for occupational community and University surveys of academic and career needs.

Career Planning and Placement

Students and graduates of Duquesne University are available to them for the University's services and programs of Career Planning and Placement. Persons with uncertain or changing vocational goals may seek career planning through personal contact with the professional staff and use of the career resources. Early use of this service is encouraged.

The individual with well-defined career goals may seek employment advice including resume preparation, job application and interview techniques, job referrals and credentials. The graduating student may also be interested in campus interviews with visiting employers.

Any student group or academic department may contact Career Planning and Placement for aid in developing a career program and/or in securing a career speaker.

The part-time and summer employment program is important to students in financing their education and in gaining work experience. An ancillary service of the Center is college training. Placement in campus jobs is largely dependent on financial need. Part-time and summer jobs in the community are also available with new listing arriving daily.

Learning Skills Program

The Learning Skills Program, located on the third floor of the Administration Building, is an auxiliary academic service whose primary charge is the intellectual development of students. Services are provided in coordination with academic offices of the University.

As part of its academic assistance efforts, the Learning Skills Program delivers diagnostic and prescriptive services. Individualized developmental programs in reading, writing, mathematics, and science are offered students who seek to upgrade their academic skills and advance their intellectual growth.

A free tutorial service provides students with competent tutors in numerous subject areas. In addition, a comprehensive study skills program is available to help students prepare study skills as well as to assist students in improving their academic success.

The program is free to all Duquesne University students.

The Testing Bureau is the primary role of the staff of the Testing Bureau to provide the student with the opportunity to explore interests and abilities as they pertain to choosing a degree major or minor and planning a career.

Trained counselors focus upon test results and the student's personal style when considering the student's questions or concerns. Counseling is also available to students whose concerns are of a more personal nature such as adjusting to college life, anxiety, etc. Professional assistance with study skills, test anxiety, and personal concerns is available in both individual and group counseling formats.

Information and applications required to national qualification examinations (LSAT, GRE, SAT, etc.) are available. The Bureau has information regarding preparatory services for these national exams. Interested students may call or drop in for information. In addition, the Testing Bureau regularly administers the MAT and CLEP examinations.

The Testing Bureau is open free of charge to all Duquesne students and is located in Room 308 of the Administration Building. Appointments may be made in person or by telephone (434-6208) hours are 8:30 a.m. to 4:30 p.m. Monday through Friday.

PSYCHOLOGICAL CENTER FOR TRAINING AND RESEARCH

The Psychological Center for Training and Research is staffed by the Psychology Department and is available to students for personal counseling. Counseling provides the student with an opportunity for personal growth through the development of the individual's ability to find one's own solutions for difficulties of a personal nature. Single conferences or a series of conferences in individual or group counseling can be arranged at the Center with fees charged on the first floor of the Center for Training and Research in Phenomenological Psychology Counseling Building.

STUDENT GOVERNANCE

STUDENT GOVERNMENT ASSOCIATION

The Student Government Association, through the expression of student views and interests to maintain academic freedom and responsibility and to foster intelligent interest and participation in all phases of university life. Two major functions of the SGA are to serve as student representatives on important University committees and to serve as the sole body that recognizes and funds student organizations.

COMMUTER COUNCIL

The Commuter Council is an officially recognized student government organization open to all students at the University. The purpose of the Council is to identify commuter concerns and to provide educational, social, and service-oriented programs for the University's large commuter population. To involve the entire community in its programs, the Council works closely with the Student Government Association, Residence Council, University Program Board, and the administration.

RESIDENCE COUNCIL

The Residence Council coordinates residence hall activities and is involved with the Office of Residence Life in developing and implementing residence hall policies and procedures. All resident students are automatically members of Residence Council and are encouraged to attend meetings and functions sponsored by the group.

It is the aim of the Residence Council to serve as a link between the resident students and the administration. Aside from the council activities representatives of the Residence Council serve on the Council on Student Services and the Food Service Committee to provide student input for the formulation and review of University policies affecting residence life.

INTER-FRATERNITY COUNCIL

The Inter-Fraternity Council serves as a clearing house for general fraternity social information and as a forum for airing constructive proposals for the improvement of the fraternity system. Membership in the Council is composed of three elected or appointed representatives from each of the eight member fraternities. The IFC establishes and enforces rules governing inter-fraternity sports and regulates pledging.

PANHELLENIC COUNCIL

The Panhellenic Council was established for the purpose of strengthening women's fraternities as organizations and for promoting cooperation among the groups through scholastic, athletic, and social activities. Membership in the Panhellenic Council is composed of the presidents and elected representatives of each of the six women's fraternities. The Panhellenic Council establishes and enforces rules regarding the raising and pledging of new fraternity members.

STUDENT ORGANIZATIONS

GENERAL

There are more than 100 active student organizations at Duquesne. Some serve the needs of specific interest groups as well as those of residents and commuters. Others relate directly to major areas of study. Some are student affairs. Membership in these student organizations is open to all students at the University. Membership may be formed to meet religious, service or social needs and interests. Whatever their purpose, these organizations and their activities comprise a major part of campus life.

HONOR SOCIETIES

These societies have as their purpose the recognition of academic excellence and leadership achievement and are members of the Association of College Honor Societies.

PROFESSIONAL AND DEPARTMENTAL ORGANIZATIONS

These professional organizations exist to provide the fertile ground for the growth of informal exchange of ideas pertinent to the students academic pursuits. With this purpose in mind, these organizations sponsor numerous programs including debates, symposiums, and lectures.
SERVICE ORGANIZATIONS
The purpose of these nationally-affiliated organizations is to provide a high standard of service to the campus and local communities while at the same time developing leadership qualities of and cooperation among each member of the organization. With this purpose in mind service organizations sponsor a wide variety of professional service charitable and social programs.

SOCIAL ORGANIZATIONS
Social organizations are composed of college men and women who have joined together to enhance their identities by promoting and sponsoring social athletic cultural and academic events. Many of these organizations belong to Inter-Fraternity Council of Panhellenic Council.

PERFORMANCE GROUPS
TAMBURITZANS
The Duquesne University Tamburitzans were founded in 1937 at the University and were the first university-based performing folk ensemble in the United States. The group takes its name from the Tamburitza family of stringed instruments indigenous to the folk cultures of Southeastern Europe. The group exists for the dual purpose of preserving and perpetuating the Eastern European cultural heritage in the United States and offering scholarship opportunities to deserving students.

THEATRE
The Red Masquers serve to provide an extracurricular outlet for students who wish to participate in the theatre. Its aim is to provide the University and its students with educational and cultural benefits that accrue from a dramatic program. In line with these objectives, the Masquer's program offers a variety of stage entertainment—one-act plays, musicals, comedies, tragedies. Any Duquesne student is eligible for membership.

MEDIA ORGANIZATIONS
WDUQ RADIO AND TELEVISION
The University's radio station (WDUQ—90.5 FM) and television (closed circuit) provide academic support to the individual schools and departments through seminars, workshops, laboratory experience, and extracurricular opportunities in communication skills for individuals and groups. Most positions on the staff are filled by students. The University radio station operates on a 25,000 watt frequency over a radius of seventy miles.

WDRC
This radio station purchased by Residence Council and operated by students provides music and announcements in the Duquesne Tower's Cafeteria during the lunch and dinner hours. Students interested in being disc jockeys and/or announcers on WDRC should contact Residence Council.

PUBLICATIONS
The Duquesne University Code of Student Rights Responsibilities and Conduct
The Student Code is the definitive statement of standards, policies and procedures regarding student rights and responsibilities. Campus organizations, student governance, student records, student conduct and the University Judicial System. Copies are available at the Duquesne Union Informational Center and the Office of The Dean of Students.

The Duquesne Duke
The University campus newspaper is written and edited by the students for the students. It appears every Thursday during the academic year except during examination periods and holidays, and provides an array of campus news, student opinions, editorials and advertisements. The paper is geared to all members of the University administration, faculty, staff, employees, and most of all students. Membership in the Duquesne Duke is open to all students.

The Duquesne Magazine
is a literary publication published each semester which affords students the opportunity to submit written, artwork, and photographs.

L'Esprit Du Duc
The yearbook highlights the events of the previous year to remind all graduates of their alma mater. It is mailed to all seniors after their graduation.

The Student Handbook
published annually contains information about the University which concerns the students. Copies are available at the Information Center Third Floor: Duquesne Union.

Part IV:
Campus Ministry

The Campus Ministry is deeply concerned with the religious life and growth of Duquesne students and campus residents. Its policies and programs are oriented to furthering that growth at the personal as well as the community level. For Catholic students, Eucharistic liturgies are celebrated daily and at all times of the day and at all times of the day there is easy access to the Sacrament of Reconciliation. For all students, the chaplains are available to help with spiritual direction, counseling advice, or sympathetic listening. Ministers and rabbis of other faiths are a vital part of the Campus Ministry staff providing services in conjunction with nearby churches and synagogues. The University Chapel is open each day for private prayer and quiet meditation. It is available to groups for specific services of a religious nature.

The Campus Ministry sees itself at the service of all in an open, unstructured, nonthreatening relationship and invites the entire Duquesne Community to make use of its services.

The Ministry's activities are announced by posters in Residence Halls, the Union, and a weekly Chapel bulletin. Its main office is in Room 102 on the first floor of the Administration Building with additional offices in the Duquesne Towers and Assumption Hall dormitories.
Part V: Admission, Financial Aid, Tuition and Fees

Admission

OFFICE OF ADMISSIONS
The Office of Admissions is located on the first floor of the Administration Building
Telephone (412) 434-6220 434-6221 434-6222
Office hours Monday through Friday from 8:30 A.M. to 4:30 P.M.

POLICY
It is the policy of Duquesne University to admit applicants who are best qualified to profit from opportunities which the University offers for intellectual, spiritual, and social growth. In general admission is based upon past academic performance, scholastic ability, and personal characteristics. Information about religious preference, sex, racial characteristics, and ethnic origin is not taken into consideration by the Committee on Admissions.

ADMISSION REQUIREMENTS
1. A candidate should have graduated from an approved secondary school in the upper three-fifths of the class and demonstrated exemplary personal conduct in that institution. Applicants who have not completed four years of high school must submit a High School Equivalent Diploma issued by their state department of education.
2. High school curriculum must include 16 units distributed as follows: four units in English, eight units in any combination from the area of social studies, language, mathematics, art, science, and four elective units for which the secondary school offers credit toward graduation. In specific instances and at the discretion of the Committee on Admissions, the equivalent of these requirements may be accepted in lieu of the precise requirements specified.
3. Scores in accordance with the standards adhered to by the University must be presented for the required College Entrance Examination Board Scholastic Aptitude Test (SAT) or the American College Testing Program (ACT). {Note for admission to the School of Music: an audition is required.}

APPLICATION—NEW FIRST-YEAR STUDENTS
Application should be addressed to the Director of Admissions, Duquesne University, Pittsburgh, Pennsylvania 15282. It may be submitted at any time during the candidate's senior year up to July 1. The application procedure is as follows:
1. Obtain and file the Application for Admission with the Office of Admissions.
2. Include the $50 non-refundable application fee with the application form. International students must pay a $300 non-refundable application fee. No application will be processed for consideration by the Committee on Admissions unless accompanied by the required fee.
3. Request the secondary school principal or guidance counselor to submit a transcript of the candidate's academic record. A recommendation is required.
4. Complete the required SAT or ACT examination during the spring of junior year and/or fall of senior year. It is the personal responsibility of each candidate to have test scores forwarded to the University.
5. An interview is highly recommended for prospective students. Auditions are required for School of Music applicants.
6. Students interested in being considered for University Scholarships should submit their application by February 1 of their senior year.

EARLY DECISION
Students who desire Duquesne University as their first choice for college should consider the Early Decision Plan. This plan requires that the student apply by November 15 of his/her senior year. The student is notified of the decision by December 15 and is required to send his/her non-refundable tuition deposit within two weeks. This offers the candidate the advantage of knowing of the admissions decision early in his/her senior year.

APPLICATION—OTHER CATEGORIES
It is the responsibility of persons who apply for admission to Duquesne University as postgraduate students, transfers, temporary transfers, and veterans or for the Summer Semester to arrange to have all supporting credentials forwarded to the Office of Admissions and the Financial Aid Office prior to the deadline dates.

ADMISSION OF UNDERGRADUATE INTERNATIONAL STUDENTS
All international applicants must meet the requirements for freshmen and/or transfer candidates as determined by the academic unit to which they propose to transfer. In addition, official transcripts of all degrees, diplomas, mark sheets, and examination records in original or photostatic copies must be sent with certified translations where applicable from all high schools, colleges, and universities attended to the Admissions Office.
A declaration of financial resources must be submitted which has been completed and certified by the appropriate persons. Acceptance letters will not be issued until the Admissions Office is in receipt of this form and approval has been granted.
If English is the applicant's principal language of instruction, SAT results must be submitted. If English is not the applicant's native language or principal language of instruction, the Test of English as a Foreign Language (TOEFL) is required unless the applicant has finished one year of college in the United States and has successfully completed at least 16 semester credit hours and demonstrated proficiency in English. All TOEFL accepted international students must take English diagnostic tests upon arrival at the University for appropriate placement regardless of the academic level of acceptance. If the results of the diagnostic examinations indicate the need for remedial work in English to assure satisfactory progress in the projected plan of study, the student must enroll in a course in developmental English during his/her first semester at the University.

NON-REFUNDABLE Tuition Deposit
$250 for resident students by May 1 of their senior year. International students must submit their non-refundable tuition deposit by May 1.

Financial Aid
It is the responsibility of the applicant to arrange to have all supporting credentials forwarded to the Office of Admissions and the Financial Aid Office prior to the deadline dates.

EARLY ADMISSION
Although the University believes that most students profit from four years in the secondary school, the Early Admission Plan is open to outstanding students. This is a plan whereby unusually able and mature candidates who have completed less than four years of a secondary school program may apply for consideration to begin college after their junior year. The high school diploma is awarded following successful completion of the third year in college. Two separate interviews are required. Further details may be obtained by telephoning or writing to the Admissions Office.

APPLICATION—ADMISSIONS DECISIONS
The candidates senior year is the personal responsibility of each student. It is the responsibility of the candidate to have test scores forwarded to the Office of Admissions unless accompanied by the required fee.

ADMISIONS ADVICE
Notification will be in the form of a letter from the Committee on Admissions unless accompanied by the required fee. In both instances, proof of degree is required either by an official transcript or a certificate of graduation.

READMISSION
Any student who withdraws from the University must apply for re-admission through the Office of Admissions regardless of the time interval involved since the student is considered to be a new applicant. The re-admission application must be submitted.

TRANSFER STUDENTS
A student who wishes to transfer from another college or university must have the complete transcripts of high school and college records forwarded to the Office of Admissions and must submit an application for admission. When accepted, the student must supply to the dean of his school a description of the course work appearing on the transcript.

Students transferring from a regionally accredited institution must present academic records which show an overall average of C (2.0 on a 4.0 quality point system)
Persons seeking admission to the University as transfer students from a state approved college which does not have regional accreditation must have attained a cumulative average of 3.0 based on a 4.0 quality point system. In addition such prospective students must take the College Entrance Examination Board tests and attain the appropriate scores on each test. An interview is highly recommended for all transfer students and will be required of those students whose Admissions Office notifies personally.

TEMPORARY TRANSFERS
Temporary Transfers are students who are enrolled in another college or university but who desire to take a course or courses at Duquesne for one semester.

No Temporary Transfer Student will be granted admission without formal application and an official transcript or permission from an official at the University at which the student is enrolled. A Temporary Transfer Student must reaply if he/she should desire to take a course or courses at Duquesne University beyond one semester.

No Temporary Transfer shall be permitted to register for more than two semesters without making arrangements to become a permanent transfer.

SUMMER SESSION
DUQUESNE STUDENTS
Any Duquesne University undergraduate student who was granted continuance at the close of the preceding Spring Semester is eligible to continue to register in the Summer Session. Students who were dismissed by their school at the close of the preceding Spring Semester for academic reasons may register for summer classes by permission of the Committee on Student Standing of their school. All students must have their course selections approved by their academic advisor.

Graduates and other former students including any who withdrew from the University must obtain readmission before they may register for summer classes.

STUDENTS FROM OTHER INSTITUTIONS
A student of another college or university who wishes to enroll for the summer session and who intends thereafter to return to the original institution and is eligible to continue there may be admitted to the Summer Session. A tear-out admission application and registration form for the summer study is provided in the announcement of summer offerings which may be obtained from the Office of Admissions at mid-March. These students are considered to be Temporary Transfer Students.

ADVANCED PLACEMENT
Students who have followed the College Entrance Examination Board college level program in secondary schools and have performed satisfactorily in the advanced placement examinations are eligible for advanced placement Duquesne University grants credit as well as placement for achievement that merits such consideration. Subjects included in the program are: English composition history history of art modern foreign languages French German Spanish Latin mathematics AB mathematics BC mathematics H and C chemistry physics AB chemistry physics C biology AB biology C economics AB economics C government AB government C history AB history C psychology AB psychology C Spanish AB Spanish C

CREDIT BANK HOUR
The Credit Hour Bank is designed for high school students and adults who would like to sample college courses prior to official enrollment. The maximum number of credits that may be taken is 15. Credits completed in the Credit Hour Bank are held in escrow until the applicant applies and the credits are granted. All applicants must be enrolled in a pre-approved program. The University's Director of Testing Bureau or the Office of Academic Advisement College of Liberal Arts and Sciences.

Applications who hope to receive advanced placement credits must request that scores be sent to the University. Information about equivalent University courses for which qualifying students may receive credit may be obtained from the University's Director of Testing Bureau or the Assistant Dean for Administration College of Liberal Arts and Sciences.

COLLEGE LEVEL EXAMINATION PROGRAM
The special examinations for which the College of Liberal Arts and Sciences will award credit with acceptable scores are:
1. General Examinations: Humanities, social sciences
2. Subject Examinations: American government, American history, analysis and interpretation of literature, biology, business administration, economics, English, fine arts, general chemistry, government, history, mathematics, music, philosophy, psychology, religion, science, social science, sociology, and Spanish

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PRINCIPLES OF AID
FINANCIAL NEED
The major criterion of most aid programs is the student's need for funds. In general parents and the student are expected to pay the expenses of education. However, to the extent they cannot reasonably be expected to meet this expense there is a demonstrated need for eligibility for aid. Methods of determining need may vary slightly among aid sources but all have the common objective of identifying the difference between educational costs and the family's ability to contribute to these costs. The costs considered include tuition, fees room and board or an allowance for maintenance at home travel or commuting expenses books and necessary personal expenditures. Need analysis presumes the family's ability to contribute to these costs will approximate that of families of similar size and financial strength with consideration given for individual circumstances. It is extremely important that all financial information reported by the family be complete accurate and up-to-date for all major changes. Information is considered and treated confidentially by aid administrators.

AWARD CONDITIONS
All financial aid awards are subject to terms and conditions set forth in applications and award notifications. It is important that the student carefully read all information provided by aid sources and promptly notify them of changes pertinent to their applications or awards.

STUDENT SELF-HELP
As the primary beneficiary of higher education the student is expected to accept at least partial financial responsibility for the cost. This principle is reflected in both the determination of need and the types of aid available. In determining need consideration is given for at least a minimum contribution to cost from the student's summer earnings savings and resources. Two types of self-help programs of aid are available: loans and work. Student loans provide rates terms and conditions superior to those offered by commercial lenders and offer the student the opportunity to help himself/herself by accepting future repayment responsibility. Student employment programs provide the opportunity to earn a portion of the educational costs.

GIFT ASSISTANCE
Non-repayable scholarships or grants are available in accordance with one or a combination of the following criteria:
1. Financial Need
2. Superior Academic Potential
3. Special Ability
4. Potential or Achievement
5. Commercial lenders

MEETING STUDENT NEED
The Financial Aid Office attempts to provide aid equal to need for all student applicants. Normally this requires the matching of a student's financial resources with the student's need for funds. However programs of financial aid are subject to limitations which are under the direct control of the Aid Office. All need as defined by the financial aid application must be accepted. The student to accept some form of self-help assistance.

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UNIVERSITY AID
APPLICATION PROCEDURE

1. Applicants must be currently enrolled in the University or be in the process of applying for admission. Incomplete applications should not be submitted, and students should not wait for official acceptance to the University before applying for financial assistance.

2. Obtain the formal application for financial assistance if transfers and students may obtain the form through Admissions Office publications or through the Financial Aid Office. Currently enrolled students may obtain the form only through the Financial Aid Office. Complete this application and submit it to the Financial Aid Office. Do not delay. Incomplete applications will be considered on the basis of available funds. Students interested in being considered for scholarships should submit their financial aid applications by February 1.

3. Obtain the scholarship application from the high school guidance office or the Financial Aid Office’s financial aid document by February 1.

4. Applications must be filed annually.

PROGRAMS

The following programs for which the following applications are approved are administered directly by the Financial Aid Office and the University’s Admissions Office.

University Scholars Awards. The University awards scholarships annually to exceptional high school scholars. These awards are not based on a demonstrated need and may be renewed each year provided the student maintains a high level of academic achievement and demonstrates a need. Renewal amounts may vary relative to the degree of achievement. The minimum academic requirement is a cumulative Quality Point Average of 3.0.

Health Professions Loans. Health Professions Student Loans are available to full-time undergraduate students in the Bachelor of Science in Pharmacy program. These loans are available to full-time undergraduate students, and students must be able to demonstrate need and meet eligibility requirements.贷金的计算公式为：

Guaranteed Student Loans. This program provides long-term low interest student loans available through the cooperative efforts of the federal and state governments and participating private lending institutions. These loans are available to students enrolled in an institution of higher learning on at least a half-time basis. They are available through commercial lending institutions in every state. To apply the student should inquire at a local lending institution or the Pennsylvania Higher Education Assistance Agency (PHEAA). Current rates and grants range from 5% to 3%. The loan is available to graduate students and is based on considerations of financial need. Filing deadline is normally May 1.

OTHER SOURCES OF AID

PELL GRANT PROGRAM

Direct grant assistance through the federal government is available to undergraduates based on an eligibility determination reviewed and adjusted each year by Congress. All undergraduates are advised to apply for this form of aid. Students receiving aid through the University are required to apply for a Pell Grant. Necessary forms may be obtained through the Financial Aid Office or the High School Guidance Office.

STATE GRANT ASSISTANCE

General: Depending upon the student’s legal status of residence, direct grant assistance from the state may be available for study at Duquesne University. Non-Pennsylvania residents should contact their high school guidance counselor or state Department of Education to determine eligibility and availability and to determine application procedures.

Pennsylvania residents should obtain the State Grant Application from the high school guidance office of the University. Financial Aid Office or the Pennsylvania Higher Education Assistance Agency (PHEAA). Current rates and grants range from 5% to 3%. The loan is available to graduate students and is based on considerations of financial need. Filing deadline is normally May 1.

OTHER POSSIBILITIES

Applications are reviewed in the order in which they are received. In general, the student seeking potential sources of aid may inquire of 1) high school guidance counselors, 2) parents, employers, or labor unions, 3) fraternal social religious or professional organizations, 4) major organizations utilizing the skills of the field for which the student majors and 5) specific departments within the University.

AID FROM DEPARTMENTS AND SCHOOLS

COLLEGE OF LIBERAL ARTS AND SCIENCES

Pittsburgh Communications Foundation Loans. The Foundation has established a loan fund available to deserving junior and senior full-time students in the Department of Journalism. Students will be required to repay the loan in full, or as part of a cumulative Quality Point Average of 3.0, or above.

Other Aid. Other forms of aid available to students may include any of the following: scholarships, grants, or loans. Students working under either program may not exceed 15 hours a week when classes are in session. Students working under either program may not exceed 15 hours a week when classes are in session.

THE ELEVEN PELS CAPONE MEMORIAL AWARD

The scholarship consists of the total annual income from a restricted growth endowment fund and is awarded to an undergraduate student enrolled at the University who will be selected on the basis of merit of these loans begins six months after graduation.

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Duquesne University who is planning to major in journalism. The award is administered by the Launts Scholarship Committee of Journalism faculty and friends. Deadline for application is April 1.

Edward T. Leech Scholarship: This annual scholarship was established in 1971 by the Scrpps-Howard Foundation for Journalism junior/senior students who demonstrate outstanding academic promise concurrent financial need and are preparing for a journalism career in the newspaper or broadcasting fields. It is administered by the faculty of the Department of Journalism.

School of Business and Administration

Alcoa Scholarship: This award is made annually to an undergraduate student in the School of Business and Administration. Recipients are selected by the School on the basis of academic achievement.

School of Education

School of Education Competitive Scholarships are available to freshmen and transfer students who were among the top fifth of their high school class or who maintained a 3.0 high school average. Transfer students applying for these scholarships must have a B average from the school they last attended. Applicants are required to submit three recommendations representing the areas of academic performance and personal achievement. An interview is also required to discuss individual perceptions and ideals as well as a statement of career goals. Freshmen applicants must have an SAT score of at least 900 with a minimum of 400 on any one test. Transfer applicants must be new students to Duquesne. For renewal requirements and procedures contact the School of Education.

Lawrence Revile Memorial Scholarship: The award will be made to a student who as a junior in the School of Education has in the judgment of the Awards Committee demonstrated those qualities of scholarship, character and professionalism which merit special recognition. The awardee must have a minimum Quality Point Average of 3.0 at the time of application. The student must be officially registered as a senior in the School of Education at the time of the receiving the award. Applications must be submitted to the Dean’s office no later than March 1.

School of Music

Women’s Advisory Board Scholarships: This fund provides scholarships in varying amounts each year to vocal performers. These scholarships are available to entering freshmen and upperclassmen.

Jazz Scholarship: Available to all full-time undergraduate music students involved in the jazz program. Applications are available in the Dean’s Office.

George Barrere Memorial Scholarship: The Pittsburgh Flute Club offers a scholarship in flute in memory of George Barrere, founder of the flute club in the United States. This $300 scholarship is awarded to a freshman or a sophomore flute major.

Music Arts League Scholarship: This award is made annually by the Music Arts League of Pittsburgh to an outstanding student in the School of Music. Preference will be given to a student of Polish ancestry. Other students will not be excluded from consideration.

Music School Scholarships: These awards are made possible by donations from individuals and organizations in appreciation of performances by School of Music students.

University Solo Wind Scholarships: These scholarships in varying amounts are awarded only to potential First Chair performers.

University String Scholarships: These scholarships for tuition and applied music fees have been established by the University to promote the study of string instruments.

Pittsburgh Flute Club Award: This award is given to an outstanding woodwind student.

University Piano Scholarships: These scholarships are awarded to students showing outstanding talent in piano.

School of Nursing

Biehl Scholarship: The R. J. Biehl Annual Nursing Scholarship is a $500 scholarship awarded annually to a nursing student who is in good academic standing. The award is based on need, professional involvement and future aspirations.

School of Pharmacy

Women of Galen: The Women’s Auxiliary of the Galen Pharmaceutical Society of Pittsburgh annually provides scholarships to be awarded to deserving pharmacy students in their last year of attendance in the School of Pharmacy.

Bever County Pharmaceutical Association Loan Fund: This revolving loan fund provides financial assistance to students in the School of Pharmacy who are residents of Beaver County, Pennsylvania. Applications are to be made to the Dean of the School of Pharmacy.

Samuel W. Curtis Loan Fund: This fund is intended to provide financial assistance to students in the School of Pharmacy.

Cholin Loan Fund: A revolving loan fund established in 1946 through the generosity of Francis P. Cholin and expanded by the contributions of Pharmacy alumni provides financial assistance to worthy students in the School of Pharmacy.

Joel P. Laughlin Scholarship: In honor of Joel P. Laughlin, a fraternity brother whose life was terminated early in his professional career, the Graduate Chapter of Phi Delta Chi annually awards three $300 scholarships to one fraternity brother in each of the three professional years. The recipients must have demonstrated academic achievement and active participation in the function of the Fraternity.

Peter and Dorothy Manzone Memorial Fund: A revolving fund donated by Rosetta and Geraldine Manzone and friends of the family is available to all students in the School of Pharmacy.

Clinton Edly Conna in Memorial Scholarship: This scholarship was established to honor the memory of Clinton Edly Conna by making annual awards to deserving Pharmacy students. Candidates must be a declared Pharmacy major attaining a minimum quality point average and have an interest in and demonstrated commitment to the University’s Athletic Program. Apply through the Dean of Students Office.

Mary McPartland Beck Scholarship Award: Scholarship funds are available from earnings on a fund started by a bequest to the School of Pharmacy in 1970. Established by the National Association of Retail Druggists in honor of its executive secretary John W. Dargavel, this fund provides the opportunity for a student in the School of Pharmacy to utilize funds in their last five semesters for payment of tuition fees and books.

Galen Pharmaceutical Society Loan Fund: This revolving fund was established in 1963 for the purpose of providing financial assistance to worthy students of pharmacy during times of urgent financial distress.

Fred Schiller Loan Fund: This loan fund was established by Mr. Fred Schiller in honor of a Pittsburgh pharmacist in memory of the late Emanuel Spector for worthy and qualified students in the School of Pharmacy. This revolving fund makes available loan funds of varying amounts depending on the applicant’s need and general financial situation.

John Closter Sims Memorial Fund: This revolving fund established in 1954 was made possible through the generosity of the family of the late Mr. Sims executive of Sun Drug now Eckerd Company. Pittsburgh partial tuition loans are made available to students under the conditions that apply to the Fred Schiller Loan Fund.

Pittsburgh Graduate Chapter of Kappa Psi Pharmaceutical Fraternity: Maintains a revolving loan fund for members of the undergraduate chapter. Details are available from the School of Pharmacy.

Rite-Aid Scholarship: A $1,000 scholarship from the Rite-Aid Corporation is available to students entering the final year of the pharmacy program. Letters of application should be addressed to the Dean of the School of Pharmacy. Selection is made based on financial need and participation in the pharmacy program.

McPartland Beck Scholarship: Scholarship funds are available from earnings on a fund started by a bequest to the School of Pharmacy in 1970. Established by the National Association of Retail Druggists in honor of its executive secretary John W. Dargavel, this fund provides the opportunity for a student in the School of Pharmacy to utilize funds in their last five semesters for payment of tuition fees and books.

Fred W. Mertz Scholarship: This scholarship is annually awarded to a student in the School of Pharmacy who has demonstrated scholarship, character and volunteer service to the community. Applications are made directly to the Office of the Dean of Students.

Vira I. Hewitt Travel Award: This fund was established to provide an educational and cultural opportunity for promising young women students. Recipients are selected on the basis of academic achievement and evidence of interest in intercultural or international relations. Inquiries should be directed to the Office of the Dean of Students.

Mahan and Harry Daly Scholarship: This is an annual award that is to be made to such deserving person or persons from Butler County, Pennsylvania attending Duquesne University. Selection is made by a committee of students, faculty, staff and representatives of the University’s Financial Aid Office. Candidates are considered for academic achievement and financial need. Interested students should apply through the Financial Aid Office.

Elizabethtown College Scholarship: This award was established to assist needy students from Allegheny County to continue their educational endeavors at Duquesne University. Recipients are selected by the University and awards are based on both academic achievement and financial need.

Minnie Hyman Scholarship: A gift from the Hyman Family Foundation. Awards are based on academic criteria and need. The amount of the awards varies. Recipients are selected by the Financial Aid Office and the Hyman Family Foundation. Interested students should apply through the Financial Aid Office.

James H. and Margaret Lavelle Ferry Memorial Scholarship: This award was established to assist needy students from Allegheny County in their name. Recipients are selected by the University with the primary consideration being financial need and academic achievement as a secondary consideration. Recipients must be enrolled as undergraduate students. Interested students should apply through the Financial Aid Office.

Mehville Alexander Eberhardt Memorial Fund: This fund was provided to develop a language laboratory in the Department of Foreign Languages.
established to provide scholarships for the benefit of students residing in the United States. Worthy students are recommended by the University to the Trustees of the fund with both academic and financial considerations being used. Interested students should apply through the Financial Aid Office.

Louis and Ida Amdursky and Benjamin Amdursky Memorial Fund. This fund was established to assist Jewish students who are residents of Allegheny County. Recommendations are made by the University to the Trustees of the fund and are on the basis of merit and need. Interested students should apply through the Financial Aid Office.

J W Rhade Memorial Scholarship Fund. A newly-established fund in honor of J W and Ruth Lewis Rhade in recognition of their long-time affection for the City of Pittsburgh. Factors to be considered for selection include leadership qualities, good character, strong potential for civic contributions (especially to the City of Pittsburgh) and the ability to relate well with others. Interested students should apply through the Financial Aid Office.

Stella and Charles Cattman Scholarship Foundation. Awards are based on need with academic considerations. Secondary interested students should apply through the Financial Aid Office.

John Joseph Mongillo Memorial Scholarship Fund. Awards are based on financial need. The fund was established through a gift to the University from Marie Locher in memory of her brother John Mongillo. Interested students should apply through the Financial Aid Office.

UNIVERSITY DISCOUNTS

Clerical Discounts. University-recognized members of the Christian and Jewish clergy and religious who have been ordained or professed are eligible to enroll in certain graduate programs at half-off the regular tuition rate. The reduced tuition benefits may be applied toward any terminal master’s degree program. The reduction does not extend to the Institute of Formative Spirituality. The Master of Liberal Studies program, doctoral degree programs, or any designated special program with differential fees. Only if a Duquesne degree may be obtained under this reduced tuition policy. University fees, laboratory costs, room and board, and other non-tuition related expenses will be charged at full rate.

Catholic Lay Teachers Discount. Full-time teachers in Catholic schools who have completed a minimum of two years teaching at an approved diocesan school are eligible to receive a tuition discount. They must be admitted to the graduate program of their choice under the usual and standard conditions. The discount is 30 percent of tuition only. The same restrictions indicated under the section on Clerical Discounts apply.

Senior Citizen Discount. Men and women who are 60 years of age or older may also enroll in certain graduate programs at half-off the regular tuition rate. The same restrictions indicated under the section on Clerical Discounts apply.

RESERVE OFFICER TRAINING CORPS (ROTC) SCHOLARSHIPS

Army ROTC offers a number of four-year scholarships for qualified students on a very competitive basis. These scholarships pay for tuition fees, room, board, and other non-tuition related expenses. Scholarship recipients who are not eligible to participate in the University’s three-year and two-year scholarships are available. Army ROTC offers a number of four-year scholarships for qualified students on a very competitive basis. For additional information, contact the Military Science Department at 434-6064.

TUITION and FEES

The University reserves the right to change tuition and fee charges if exigencies require such action. The figures shown apply to the 1982-83 term only unless otherwise indicated.

TUITION

Undergraduate Tuition: $150 per semester hour credit
Graduate Tuition: $160 per semester hour credit
Auditors pay the same as students taking courses for credit.

FEES

Application (non-refundable): $20
Matriculation Deposit (non-refundable): $100
Residence Hall Pre-Payment (non-refundable): $100
Residence Hall Damage Deposit: $50
Change of Schedule: $5
Credit by Examination: $20

REGISTRATIONS

Late Registration Fee: $25
Removal of I Grade: $5
Registration Correction Fee: $15
Continuing Registration Fee: $50

SCHOLARSHIPS

Undergraduate Business and Administration Student when carrying 12 or more credits: $5
Undergraduate Music Student when carrying 12 or more credits: $5
School of Pharmacy Undergraduate Fee: $150
Undergraduate Pharmacy Student Activities (for Third Fourth and Fifth Year Students): $25
University Fee: $11 per credit

LABORATORY FEES

All amounts are for one semester where applicable the yearly charge is double. In addition to the laboratory fee, some programs also require a breakage charge of $15.00 a semester which is proportionately refundable depending on the losses incurred. Laboratory fees apply to the 1982-83 academic year. Lab fees will be increased in 1983-1984 and 1984-1985.

Biology (each laboratory): $35
Business 491: $25
Chemistry (each laboratory): $35
Computer Science: $10
Education 490 491 (Student Teaching): $40
English 203 380 381 382 383 384 385: $35
English 439: $10
English as a Second Language: $300
Journalism 367 369 380 405 409 485: $15
Journalism 297 297 370 377 379 381 413: $25
Journalism 375: $25
Mathematics 307 308: $10
Music Applied Music 101 102 103 104 201 202 203 204 301 302 303: $150
Music Applied Music 104 401 402 403 404: $50
Music Applied Music 111 112 118 119 211 212 218 219 311 312 411 412: $75
Music Class Piano 213 214 215 315: $10
Music Class Methods 181 182 183 184: $10
Music Class Brass Methods 281 282 283 284: $10
Music Class String Methods 381 382: $20
Music Student Teaching: $25
Pharmacy 301 302 303: $40
Pharmacy 304 305 306 307 308 309: $15
Physiology (each laboratory): $10
Psychology 356: $10
Speech 101 220 251 263 264 311 315: $25
Graduate Biology With Laboratory: $35
Graduate Chemistry 520 561: $35
Graduate Classics 551: $160
Graduate Communications 512: $15
Graduate Modern Languages 051 052: $25
Graduate Psychology 571: $15
Graduate Pharmacy (each laboratory): $15
Graduate Education 512 692 693: $10
Graduate Music 501 502 503 504 505 601 602 603 604 605 606: $150
Graduate Music Minors 511 512 513 514 515: $75
Graduate Study Abroad: $15

*Charged on each semester registration

*Academic Breakage Fee

One breakage card per semester will cover laboratory breakage in Chemistry

*No Academic Credit. Flat Fee
SUMMER AND SPECIAL SESSION TUITION AND FEE CHARGES

Undergraduate Tuition
for each semester hour credit

Graduate Tuition
for each semester hour credit

University Fee
$11 per credit

GRADUATION FEES
Bachelor Degree

Master Degree

Doctor of Philosophy Degree

Thesis Binding Fee—Doctoral Dissertation

Thesis Binding Fee—Master Thesis

WITHDRAWAL AND TERMINATION OF ATTENDANCE

Upon officially withdrawing from the University, a student receives remission of part of the tuition charged for the semester or session in accordance with the Tuition Remission Schedule. The amount of the remission is added to payments and a refund is made upon request where a credit balance is created on the student's total account.

The Effective Date of Withdrawal for determining the percent of remission is that on which the appropriate Academic Dean was notified by letter of the student's decision to terminate attendance and requested official withdrawal. It is also the recorded date of the student's separation from the University and regarded as the last day of attendance. A student is considered enrolled and in attendance until he or she acts to terminate attendance in conformity with this policy even though absences from classes were observed and recorded before the Effective Date of Withdrawal.

The University requires that a prepayment of $100, which is applicable to the following semester's room and board account, accompany all applications for room reservations or renewals. This pre-payment is non-refundable.

The request for on-campus residence is made on the same form used for application for admission to the University. After the student has completed the admission procedure and has paid the matriculation deposit, the residency request is referred automatically to the Assistant Dean of Residence Life. The request is processed and necessary application forms are forwarded to the student.

The University reserves the right to modify these charges if exigencies require such action.

Regular Session—Room and Board (20 meals a week)

Single for each semester

$1355.00

Double for each semester

$1123.50

Summer Sessions—Room and Board

6 Weeks

$541.80 (Single Room and Board)

$449.40 (Double Room and Board)

8 Weeks

$712.40 (Single Room and Board)

$599.20 (Double Room and Board)

ROOM AND BOARD—WITHDRAWAL AND REFUND

A resident student must notify the Assistant Dean of Residence Life in advance of the planned withdrawal. No refund of room charges will be made where withdrawal occurs after the opening classes. In the event of withdrawal, the board will be refunded at the rate of 75% per cent of the balance remaining on the student's meal plan, up to mid-semester. After the mid-semester point, no refund will be made.

The student or his or her authorized representative must ensure that the official withdrawal procedure is followed. The student must also notify the Financial Aid Office of the official withdrawal required to determine eligibility for student aid.

FINANCIAL MATTERS

All charges for tuition fees, room, and board are non-refundable. The request for on-campus residence is made on the same form used for application for admission to the University. After the student has completed the admission procedure and has paid the matriculation deposit, the residency request is referred automatically to the Assistant Dean of Residence Life. The request is processed and necessary application forms are forwarded to the student.

Room assignments are made on a first-come, first-serve basis. Therefore it is extremely important for the student to return his/her housing application immediately upon receipt of it. Overcrowded conditions have occurred in the past and students have been temporarily assigned three to a room or in lounges. Therefore students returning their application after all rooms have been assigned will be housed in temporary housing before placing a waiting list or being assigned a space in the residence area.

All students occupying rooms in the University residence halls are required to take their meals at the Resident Dining Hall. Charges are for 20 meals a week with meals served commencing with the evening meal of the day before the first day of classes.

Residence Halls are closed during vacation (Thanksgiving, Christmas, and Easter) periods. All resident students must present evidence of health and accident insurance coverage such coverage is available through the University.

The University reserves the right to modify these charges if exigencies require such action.

Regular Session—Room and Board (20 meals a week)

Single for each semester

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Double for each semester

$1123.50

Summer Sessions—Room and Board

6 Weeks

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8 Weeks

$712.40 (Single Room and Board)

$599.20 (Double Room and Board)

STUDENT FINANCING PROGRAM

The Student Financing Program provides for the semester or session in accordance with the Student Financing Section at the University. The Student Financing Program provides for the semester or session in accordance with the Student Financing Section at the University. The Student Financing Program provides for the semester or session in accordance with the Student Financing Section at the University. The Student Financing Program provides for the semester or session in accordance with the Student Financing Section at the University. The Student Financing Program provides for the semester or session in accordance with the Student Financing Section at the University. The Student Financing Program provides for the semester or session in accordance with the Student Financing Section at the University. The Student Financing Program provides for the semester or session in accordance with the Student Financing Section at the University. 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Part VI: Registration and Scholastic Policies

REGISTRATION

Students who attend the Fall Semester, which begins in late August, receive academic advisement and register for classes during the preceding months of April, May, June, and July. Spring Semester students register in the Fall Semester during November and early December.

Orientation programs for new students are conducted by the school in late spring and summer in conjunction with academic advisement and registration.

A comprehensive invoice that confirms the class schedule of courses for which the student is registered and lists fees tuition dormitory charge deposits financial aid awards and balance due is mailed to the student at his or her permanent address one month before classes begin. Thus enabling the student or parent to make payment by mail.

Three-day final registration for students who have not obtained registration for classes nor concluded financial arrangements is held just before the opening of classes.

The financial obligation for class places reserved by a registered student who does not subsequently attend cannot be canceled unless written notification of the decision not to attend is given to the Registrar before the first day of classes. Notification received on or after the opening day of classes is subject to the official withdrawal policy. Withdrawal from room and board reservation contracts is to be made in accordance with the provisions of the contract See Room and Board—Withdrawal—Refund page 141 of this catalog.

OFFICIAL REGISTRATION

Only students who are recognized as officially registered are bona fide students of Duquesne University. Unless students are officially registered, they are not permitted to attend classes, engage in student affairs or generally have access to the buildings and grounds or use of the University’s facilities. Official registration is the recognition given by the University to persons who have met these conditions.

1. Appropriate authority for admittance to study in a school or department has been given by an authorized office of the University. The admitting authority for undergraduate students resides in the Director of Admissions.

2. Authorization to continue in the program selected has been given and registration for classes has been accomplished in compliance with all academic requirements and procedures.

3. Arrangements have been made to the satisfaction of the University for payment in full of all financial charges including fees tuition and housing charges all of which are due and payable in full before the beginning of classes.

CHANGE OF SCHEDULE

Students requiring a change of class schedule to change class times or to add or to drop a class are permitted to do so during the pre-registration period, the final registration period, and the first class week of the semester. Change of class schedule is not permitted after the Latest Date for Change of Schedule as announced in the semester academic calendar.

All schedule changes must be approved by the academic advisor and processed with the Registrar. Schedule change requests processed with the Registrar during the first week must also have the signatures of the instructors whose classes are being added or dropped.

Students who tardily process change forms are not entitled to refund for the course credits dropped. Courses dropped after the deadline for making schedule changes are classified as course withdrawals (See Withdrawal from a Course and Withdrawal from the University—mentioned elsewhere in this catalog).

Except for changes requested by the dean or advisor, a fee of $50 is charged for each change form processed after the close of pre-registration.

CROSS-REGISTRATION

Crosscollege and university registration provides opportunities for enrolled educational programs approved by a student’s advisor or dean at any of the following institutions:

Carlow College
Carnegie-Mellon University
Chatham College
Community College of Allegheny County
La Roche College
Pittsburgh Theological Seminary
Point Park College
Robert Morris College
University of Pittsburgh

The opportunity for cross-registration will be available to each full-time student enrolled in any program leading to a degree. Full credit and grade will be transferred.

Each college or university accepts registration in regularly accredited courses designated by it as open to cross-registration. First priority in registration shall go to the students of the host college.

The student's advisor or dean is responsible for assuring eligibility for the course in which the student intends to enroll. Each quality student may enroll in no more than one course off campus in any one term or semester under this program. Cross-registration is conducted through the office of the home registrar.

Duquesne University students who are participating in this program are charged tuition and University fee in accordance with the current rates charged by Duquesne University. However, students are responsible for paying any course or laboratory fees to the host institution.

These policies on cross-registration are not effective at this time for enrollments in summer sessions including the spring term of the University of Pittsburgh.

LATE REGISTRATION

With approval of the appropriate dean and on payment of the late registration fee, late registration may be permitted for a serious reason; however, no student may be registered and begin attending classes later than the Latest Date for Registration and Change of Schedule as announced in the Academic Calendar.

RECORDS AND REPORTS

SEMIESTER GRADE REPORTS

Every registered student who is free of financial obligations to the University is sent a report of grades to the permanent address of the student or parent to make payment by mail.

TRANSCRIPTS

Each student receives a summary transcript of his or her complete academic record at the close of the academic year. Students should carefully examine their records for accuracy and immediately report errors to the Registrar.

To obtain additional copies of their academic records, students must write to the Registrar for transcripts for themselves or for the other institutions and agencies. All official transcripts issued by the Office of the Registrar bear the signature of the Registrar and the embossed seal of the Office of the Registrar. Whenever an official transcript is released directly to the student the Registrar will also bear the stamped designation Issued to Student.

No transcript will be issued unless all financial obligations owed by the student to the University have been fulfilled. A fee of $20 is charged for the issuance of each transcript.

CONFIDENTIALITY OF STUDENT RECORDS

The University regards the student’s personal information and academic record as a matter of confidence between the student and the University. The contents of either may be revealed only in accordance with the Family Educational Rights and Privacy Act of 1974 (Public Law 93-380 Section 438 as amended).

In order that parents of students may receive from University officials information concerning the college attendance academic record of their childit is required by the Family Educational Rights and Privacy Act of 1974 (FERPA) (Public Law 93-380 as amended section 99 31[8] that either the parent must prove financial dependence of their child upon them according to the dependency test as defined in section 152 of the Internal Revenue Code of 1964 or the child must grant a waiver of rights given by FERPA.

Students wishing to waive the requirement of FERPA relating to the release of academic information to parents must complete the waiver obtainable at the office of the academic advisor.

Academic Policies

POLICIES

ACADEMIC ADVISOR

Every student attending the University is assigned or selects an academic advisor. It is the student’s responsibility to ascertain the advisor’s name, which may be obtained from the office of the school in which the student is enrolled.

The student should consult with the academic advisor about the program and any questions of an academic nature. No student may register without the academic advisor’s approval and signature.

ACADEMIC SUPERVISOR OF INTERCOLLEGIATE ATHLETICS

The academic progress of student athletes engaged in intercollegiate competition is monitored by the ASIA. The delivery of academic support systems to those student athletes who need them is facilitated via this office.

AUDITING COURSES

To audit courses, a student must be officially registered and pay the same charges for courses that are taken for credit. Enrollment in a course for audit is subject to approval of the student’s academic advisor permission to audit graduate and professional courses requires consent of the dean of the school in which the desired course is offered. Registration in a course as Auditor must be declared at registration and is irrevocable after the Latest Date for Change of Schedule.

CANCELLATION OF COURSES

The University makes every reasonable effort to offer courses as announced in the Semester Schedule of Courses and the Summer Session Bulletin. It reserves the right however to make changes or cancel courses in the academic schedule because of insufficiency enrollment or for any other equally valid reason.

CLASS ATTENDANCE

Regular class attendance is normally essential for maximum educational advantage and is strongly en-
The responsibility for all course material is the instructor's responsibility to make the course policy known at the first class session as it pertains to the course and school.

The student who is unable to attend class because of serious illness, hospitalization, a serious accident, or other extenuating circumstances is responsible for notifying the office of his academic dean. He should supply the necessary written verification as soon as possible.

The student must submit the work assigned and take the examination in the course at the specified time. If the work is not submitted or an examination is not taken at the scheduled time, the policy is to assign a zero for that part of the course. An accumulation of zero grades could result in a final grade of F if a student has for significant reasons missed a part of the course or an examination, the grade may be assigned as an F. If the temporary grade results in conversion of that grade to an F, recorded on the transcript, the student may petition for a grade change.

CLASSIFICATION OF STUDENTS

Freshman: less than 30 credits completed
Sophomore: 30 to 59 credits completed
Junior: 60 to 89 credits completed
Senior: 90 or more credits completed

Full-time Student: A student with an academic schedule of at least 12 credits is considered a full-time student. This status is extended to the benefits of various activities. A student may not change status during the semester without the permission of the academic advisor and the Dean of the student's school.

Part-time Student: Anyone who carries less than 12 credits is regarded as a part-time student.

Post-graduate Student: A person who has completed a baccalaureate degree and is seeking additional undergraduate credits.

COURSE EXAMINATIONS

Unit examinations are given on the dates announced by the instructor during the course. These examinations are not available to currently enrolled students who have previously completed the course. The instructor's decision whether to give the examination is final. Final examinations are given at the end of each semester and summer session. No student is excused from taking the final examination.

CREDIT BY EXAMINATION

Examinations for recognition of proficiency in a subject or for course credit as authorized by the College or a particular School of the University are available to currently enrolled students who have previous experience or exposure that have acquired mastery of the knowledge in certain courses. An application fee of $20.00 is charged for each course credit application forms may be obtained from the Office of the Registrar. As policies vary among the Schools, students who feel they may qualify for credit by examination should consult the Dean of the School in which they are enrolled for specific information about courses open to this examination procedure.

GRADING SYSTEM

The officially recognized method of grading course work and rating academic performance of students at the University is as follows:

A — Excellent
B — Good
C — Average
D — Below average passing
P — Pass (used in some courses where scaled grading an inappropriate indicates satisfactory completion of course work with credits earned but without quality points and is independent of the quality point system)
S — Satisfactory (used in pass/fail elected courses and is independent of the quality point system)
F — Failure (course must be repeated for credit)
U — Unsatisfactory — Indicates student is not prepared to complete course work with credits earned and is independent of the quality point system.
I — Incomplete (A temporary grade given by an instructor when neither a passing or failing grade can be determined because of incomplete course work. Unless a cogent explanation of extenuating circumstances acceptable to the instructor is presented and the missed examination or required assignment is made up by the date specified in the Academic Calendar the I becomes a permanent F grade).
W — Official Withdrawal (Used on a student's permanent record to indicate termination of attendance in courses under conditions of official withdrawal. See page 722 and 720 Withdrawal from a Course and Withdrawal from the University)

QUALITY POINT SYSTEM

The student's overall academic quality point average (OPA) is obtained by dividing the total quality points earned by the total number of semester hours attempted. These quality point values of grades are used for each credit attempted:

A — four points
B — three points
C — two points
D — one point
F — zero points

Courses in which grades P, S, U, I, and W were given are not used in calculating the quality point average.

REPEATING COURSES AND COURSE RETROGRADATION

Students ordinarily are permitted to repeat courses in which F grades were received. The request for permission to repeat a course is to be submitted in letter form to the academic advisor before registering in the repeat course. All grades are retained on the permanent academic record. The result of the final attempt is the grade recorded. A corollary of the repeat credit rule under which a student may earn credit once only for a course prescribes that a student may not move backward from an advanced course to a lower level course and receive credit for both. Any doubtful situation must be decided by the department chairman or dean involved.

PASS/FAIL ELECTIVES

One course a semester elected by a junior or senior and approved by the academic advisor as providing an opportunity to expand and enrich the student's experience may be taken on a pass/fail (P-U) basis. It is possible that F grades may be used for each credit attempted. The decision to elect the pass/fail option must be made during registration or no later than the close of the period provided for making schedule changes.

STUDENT STANDING

Progress toward a degree is measured by the cumulative quality point average. The scholastic records of students who fail to meet the minimum requirements as established by the faculty of each college or school will be submitted to the College or School Committee on Student Standing for review and appropriate action. Normally academic records will be reviewed annually at the conclusion of each academic year.

The policy of the Council of Academic Deans on StudentAthletes vis-a-vis academic standards reads as follows:

a) A student athlete shall participate in the formal athletic programs at the University a student must be currently enrolled as a full-time student. Full-time status is defined by University catalog as enrollment of 12 credits minimum per semester. Such a program allows a student athlete to graduate within five years.

b) A student athlete must be making satisfactory academic progress. This means that a student must have successfully completed 24 credits during the previous academic year. This would allow a student athlete to graduate within three years.

The policy of the Council of Academic Deans on Student Athletes vis-a-vis academic standards reads as follows:

a) A student athlete (as all students in the University is academically dismissed if the student athlete fails three courses in one semester. Student athletes can be readmitted by the student standing committee of the college or school to which the student athlete is returning. If a student transfers to another school within the University the student athlete can be admitted only by the Dean of that school.

For students who have attempted 15-30 credits or more than 30 credits in one year the guidelines are:

Academic Warning: 1.75 to 1.99 OPA (Letter of warning may be readmitted by the appropriate Committee on Student Standing).
Probation: 1.50 to 1.74 OPA (Subject to the jurisdiction of the appropriate Committee on Student Standing and may be required to modify or restrict academic program)
Dismissal: Less than 1.50 OPA (Readmission may be permitted on recommendation of the appropriate Committee on Student Standing).

Students who have attempted 31-60 credits or who have attempted up to 61 credits within four semesters these guidelines prevail.

Academic Warning: 1.85 to 1.99 OPA (Letter of warning may be sent by appropriate Dean).
Probation: 1.75 to 1.84 OPA (Subject to the jurisdiction of the appropriate Committee on Student Standing and may be required to modify or restrict academic program)
Dismissal: Less than 1.75 OPA (Readmission may be permitted on recommendation of the appropriate Committee on Student Standing).

Students who have attempted 61 or more credits and who have attempted a GPA of between 1.85 and 1.99 may continue on probation for one semester. However, students who have earned more than 90 credits are subject to dismissal unless they have a GPA of 2.0 or better. Students who accumulate three F grades in one semester are subject to dismissal. Appeals of academic dismissal must be directed to the appropriate College or School Committee on Student Standing. Students subject to the jurisdiction of the appropriate Committee on Student Standing in accordance with the established guidelines are permitted to re-enroll on a full-time basis but continue participation in non-curricular and extra-curricular activities shall be without appeal if they are subsequently dismissed from the University for poor scholarship.

DEAN'S LIST

To achieve distinction of being named to the Dean's List a student must have a record for a semester that shows completion of full-time schedule: quality point average of at least 3.5 and no grade lower than C. A full-time schedule must include at least 12 credits exclusive of pass/fail credits.

GRADUATE COURSES FOR UNDERGRADUATE CREDIT

Qualified seniors may be permitted to register in certain graduate courses at the 500 level for under-
graduate credit on the recommendation of the ad-
visor and with the approval of the dean of the
graduate school involved. All 500 courses are
described in the graduate school catalogs.

GRADUATION REQUIREMENTS
The candidate for a University degree must be a per-
son of good moral character who has satisfactorily
completed all academic requirements for the degree
program and in addition has the recommendation
of the appropriate Academic Dean filed the Ap-
lication for the University Degree with the Office of
the Registrar on or before the latest date to apply
for graduation as announced in the Academic Calen-
dar and paid all indebtedness to the University.
It is the student’s responsibility to determine that
the courses taken in each semester are sequentially
correct and necessary for the degree program.

The student must periodically review in consulta-
tion with the appropriate academic advisor progress
toward graduation and seek with the advisor the
resolution of any question about fulfillment of grad-
uation requirements.

Each school and each department sets forth in this
catalog requirements for graduation which the stu-
dent is expected to know as well as the aforemen-
tioned general requirements and the following:

1. The bachelor’s degree requires a minimum of
120 semester hours of course credits in all except
Radiological Health, Medical Technology and Phar-
macy which require, respectively 123, 125 and 160
credits.

2. All bachelor’s degrees require an overall mini-
imum quality point average of 2.0 which is a C grade
average in a 4.0 system. Students should further
determine the need for minimum GPA requirements
in their major science courses.

3. The last year’s work (a minimum of 30 semester
hours of credit) must be completed in residence at the
University.

4. Not less than three credits (or one course) in
theology are required for all undergraduate Catholic
students in every program at the University.

5. Students on academic probation may be candi-
dates for graduation only with permission of the Com-
mmittee on Student Standing of their school.

The candidate who has satisfied graduation re-
quirements by a Challenge Examination (credit by
examination) when taken timely within the last 30
semester hours of study for the degree will fulfill
the residence requirement provided a minimum of
30 semester hours of credit has been earned in
course work at the University in the last year’s study.

HONORS
Degrees are awarded with special mention cum laude
magna cum laude or summa cum laude to students who
have completed the regular course with unusual
 distinction and who have completed a minimum of
60 credits in residence. Honors are based on these
standards.

Cum Laude—Quality Point
Average 3.50 to 3.74

Magna Cum Laude—Quality Point
Average 3.75 and above

Summa Cum Laude—Upon recommendation of the
faculty and a 3.90 GPA. The Magna Cum Laude cita-

tion may be raised to Summa Cum Laude.

UNIT OF CREDIT
The unit of credit is the semester hour. One semester hour
of credit is granted for the successful completion of one
hour a week of lecture or recitation, or at least two
hours a week of laboratory work for one semester of
15 weeks.

TRANSFER WITHIN THE UNIVERSITY
It would be to the student’s advantage to discuss the
proposed transfer with the academic advisor of the
new school no later than two weeks prior to pre-
registration. The advisor will then use the form and
procedure established as uniform for the University
to effect any change.

WITHDRAWAL FROM A COURSE
First semester freshmen may withdraw from courses
with the approval of their advisor up to the period
of final examinations and receive a grade of W by
processing the proper form for official withdrawal.
If a student other than a first semester freshman
wishes to withdraw from a course, he may do so with
the approval of his academic advisor and by process-
ing the proper form up to the date announced in the
Academic Calendar for withdrawal with a W grade.
If a student wishes to withdraw from a course after
the date announced in the Academic Calendar, the
student must seek approval of the Committee on Stu-
dent Standing of the student’s School. The student
will be notified of the Committee’s decision if
approval is granted. The student then initiates the ap-
propriate procedure through the advisor.

A student who is not granted approval of the re-
quest and withdraws from the course unofficially will
receive an F grade for the course.

UNIT OF CREDIT

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<th>Position</th>
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Irene McLennahan  R  N  M  P  H  Director Public Health Nursing

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Central Medical Health Services
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Children's Hospital of Pittsburgh
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Mary W  Young  R  N  B  S  E  D  Director of Nursing

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Patricia Scullie  R  N  M  E  D  Administrator
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Mercy Hospital
Sr  Joanne Marie Andonio  R  S  M  M  A  L  S  M  P  H  Executive Director
Margaret Harper  R  N  M  S  E  D  Assistant Executive Director Nursing Services

Montefiore Hospital
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Barbara Piskor  B  S  N  M  P  H  Assistant Director Education

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Vivian Romofo  R  N  M  S  N  Director of Nursing

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Assistant to the President
Coordinator
Assistant Coordinator
Assistant Dean for Administration
Director of Placement and Law Alumni Coordinator
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Assistant to the Office of the Vice President for Academic Affairs
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Director of Academic Advisement
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Dean
Dean
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Professor of Military Science
Archivist
Director
Director
Director
Assistant Registrar
Registrar
Assistant Registrar
Director
Director
Director
Director

### Athletics

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
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<tbody>
<tr>
<td>Eileen Livingston M Ed</td>
<td>Director of Athletics</td>
</tr>
<tr>
<td>Nelson J King</td>
<td>Assistant Athletic Director</td>
</tr>
<tr>
<td>James J Satalin M S</td>
<td>Sports Information Director</td>
</tr>
<tr>
<td>Frank Satalin M S A</td>
<td>Varsity Basketball Coach</td>
</tr>
<tr>
<td>Bernard Tomlin B A</td>
<td>Assistant Basketball Coach</td>
</tr>
<tr>
<td>Richard Spear M Ed</td>
<td>Associate Basketball Coach</td>
</tr>
<tr>
<td></td>
<td>Director Intramural Athletics</td>
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### Campus Ministry

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<tr>
<td>Rev Robert N Roach C SSp</td>
<td>University Chaplain</td>
</tr>
<tr>
<td>Rev William F Crowley C SSp Ph D</td>
<td>Associate Chaplain</td>
</tr>
<tr>
<td>Sr Dolores Montini C S J M A</td>
<td>Assistant Chaplain for Physical Plant and Purchasing</td>
</tr>
<tr>
<td>Rev Leo J Kettl C S Sp</td>
<td>Internal Auditor</td>
</tr>
</tbody>
</table>

### Management and Business

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>James O Allison M B A</td>
<td>Vice President for Management and Business</td>
</tr>
<tr>
<td>Rev Joseph A Duchene C S Sp B S A B D</td>
<td>Associate Vice President for Physical Plant and Purchasing</td>
</tr>
<tr>
<td>James F Kleyle M Ed</td>
<td>Assistant Vice President for Management and Business</td>
</tr>
<tr>
<td>Timothy J Palencik M B A C P A</td>
<td>Internal Auditor</td>
</tr>
<tr>
<td>Paul Dolan B S</td>
<td>Assistant Internal Auditor</td>
</tr>
</tbody>
</table>

### OFFICE OF THE CONTROLLER—FINANCIAL OPERATIONS

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Betty Beamann B S C P A</td>
<td>Controller—Financial Operations</td>
</tr>
</tbody>
</table>

### OFFICE OF THE CONTROLLER—INVESTMENTS AND DEBT SERVICES

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>John F Gannon B S</td>
<td>Controller—Investments and Debt Services</td>
</tr>
</tbody>
</table>

### OFFICE OF FINANCIAL AID

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frank M Dutkovich Jr M Ed</td>
<td>Director</td>
</tr>
<tr>
<td>Lorraine Delaney B A</td>
<td>Assistant Director</td>
</tr>
<tr>
<td>Sondra Furedy M Ed</td>
<td>Assistant Director</td>
</tr>
<tr>
<td>Sandra J Ougley</td>
<td>Assistant Director</td>
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</table>

### FINANCIAL OFFICE—AUXILIARY SERVICES

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ernest L Conti B S</td>
<td>Director Contracts and Enterprises</td>
</tr>
<tr>
<td>David DiPetro B S</td>
<td>Assistant Director</td>
</tr>
</tbody>
</table>

### INSTITUTIONAL RESEARCH

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
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<tbody>
<tr>
<td>James F Kleyle M Ed</td>
<td>Director</td>
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</tbody>
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### OFFICE SERVICES

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robert L Pifer</td>
<td>Manager</td>
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</table>

### PERSONNEL SERVICES

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ruth Harberth B A</td>
<td>Director</td>
</tr>
<tr>
<td>Robert J Munting M S</td>
<td>Assistant Director</td>
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</table>

### PHYSICAL PLANT

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>John A Davis</td>
<td>Co-Director</td>
</tr>
<tr>
<td>Marra DiSalvo Jr</td>
<td>Co-Director</td>
</tr>
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</table>

### PUBLIC SAFETY

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>James J Caputo Jr</td>
<td>Director</td>
</tr>
<tr>
<td>Charles A Bosetti B A</td>
<td>Assistant Director</td>
</tr>
<tr>
<td>Michael Dudenas M S</td>
<td>Safety Manager</td>
</tr>
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### PURCHASING

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Henry B Franz B A</td>
<td>Director</td>
</tr>
<tr>
<td>Ralph Sloan</td>
<td>General Stores Manager</td>
</tr>
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### SYSTEMS CENTER

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>James R Hayes M B A</td>
<td>Managing Director</td>
</tr>
<tr>
<td>Richard R King A S</td>
<td>Lead Programmer</td>
</tr>
</tbody>
</table>

### UNIVERSITY BOOKSTORE

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donald W Langloss B A</td>
<td>Manager</td>
</tr>
</tbody>
</table>

### Student Life

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dennis C Golden Ed D</td>
<td>Vice President for Student Life</td>
</tr>
</tbody>
</table>

### OFFICE OF THE DEAN OF STUDENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patricia E Watt M A M Ed</td>
<td>Dean of Students</td>
</tr>
<tr>
<td>James F Fitzpatrick M S Ed</td>
<td>Assistant Dean of Students and Director of University Judicial Systems</td>
</tr>
<tr>
<td>Charmaine R Kanosa M S Ed</td>
<td>Assistant Dean of Students</td>
</tr>
</tbody>
</table>

### OFFICE OF RESIDENCE LIFE

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marian E Hirst M S</td>
<td>Associate Dean of Students for Residence Life</td>
</tr>
<tr>
<td>Debra Licato-Meiman M E D</td>
<td>Director Union Operations</td>
</tr>
<tr>
<td>Greg Phenice M A</td>
<td>Director Programs and Activities</td>
</tr>
<tr>
<td>Pamela J Morgan B S</td>
<td>Director Recreation</td>
</tr>
<tr>
<td>Frank A Parsons B S</td>
<td></td>
</tr>
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### OFFICE OF STUDENT LIFE

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Willard L Fuller M Ed</td>
<td>Director</td>
</tr>
<tr>
<td>Ronald C Hughes</td>
<td>Assistant Director</td>
</tr>
<tr>
<td>James C Raymond Jr B A</td>
<td>Resident Director for Physical Plant and Purchasing</td>
</tr>
<tr>
<td>Joseph R Toth M B A</td>
<td>Resident Director for Assumption Hall</td>
</tr>
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### UNIVERSITY HEALTH SERVICES

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teresa H Byrne B S N M P H</td>
<td>University Physician</td>
</tr>
</tbody>
</table>

### University Relations

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regis J Ebner B A</td>
<td>Vice President for University Relations</td>
</tr>
<tr>
<td>Patricia Zalin</td>
<td>Assistant to the Vice President</td>
</tr>
</tbody>
</table>

### ALUMNI RELATIONS

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rev Francis M Philben C S Sp</td>
<td>Director</td>
</tr>
<tr>
<td>John T Rago B A</td>
<td>Assistant Director</td>
</tr>
</tbody>
</table>

### COMMUNICATIONS

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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</thead>
<tbody>
<tr>
<td>Mary R Kukovich B A</td>
<td>Director</td>
</tr>
<tr>
<td>Georgette Blanchfield B A</td>
<td>Assistant Director</td>
</tr>
<tr>
<td>Ann D Amico B A</td>
<td>Assistant Director</td>
</tr>
<tr>
<td>Sandra Osborne B A</td>
<td>Assistant Director</td>
</tr>
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### DEVELOPMENT

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>Kathleen A Hoffmaster B S</td>
<td>Director Annual Fund</td>
</tr>
<tr>
<td>Rev Sean M Hogan C S Sp M E Sc</td>
<td>Assistant to the Director</td>
</tr>
<tr>
<td>Kenneth M Kornick M A</td>
<td>Development Associate</td>
</tr>
</tbody>
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### SUPPORT SERVICES

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diane Patton M Ed</td>
<td>Director</td>
</tr>
<tr>
<td>Jody Riesmeyer B A</td>
<td>Assistant Director</td>
</tr>
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</table>

### UNIVERSITY EVENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lillian K DeDomenic A S</td>
<td>Director</td>
</tr>
</tbody>
</table>