# Majors, Minors & Certificate Programs

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Majors</td>
<td>25</td>
</tr>
<tr>
<td>The Minors &amp; Certificate Programs</td>
<td>26</td>
</tr>
</tbody>
</table>
The Majors

School of Arts & Sciences

American Studies
Applied Physics
Art History
Biology
3/4 Biology/Optometry
Biochemistry
Chemistry
Classics
Computer Science
Economics (Business, Quantitative)
English (Creative Writing)
Foreign Language Studies
(French, Italian, Spanish)
Global Studies
History
Humanities
Mathematics
Music
Music- Musical Theater
Music Education
Philosophy
Political Science
Pre-Engineering
Psychology
Public & Community Service
Social Science
Sociology
Studio Art
Theatre, Dance & Film
Theatre, Dance & Film – Musical Theatre
Theology
Women’s Studies

School of Business

Accountancy
Finance
Finance- Fast Track
Management
Marketing

School of Professional Studies

Elementary/Special Education
Health Policy & Management
Secondary Education in:
  Biology (BA & BS)
  Chemistry
  English
  French
  History
  Italian
  Mathematics
  Physics
  Spanish
Social Work
The Minors & Certificate Programs

School of Arts & Sciences
Applied Physics
Art History
Asian Studies
Biology: Evolutionary Biology & Ecology
Black Studies
Classics
Computer Science: Business Programming
Computer Science: Technical
Dance
English Literature
Economics
Film/Video
Foreign Language Studies (French, German, Italian, Spanish)
History
Labor Management Relations – Certificate
Latin American and Latina/o Studies (LALS)
Mathematics
Music
Neuroscience – Certificate
Philosophy
Political Science
Public Administration – Certificate
Public & Community Services
Public & Community Services: Health
Sociology
Studio Art (Concentrations in Ceramics, Digital Imaging, Drawing, Painting, Photography, Printmaking, Sculpture)
Systems Science
Theatre
Theology
Women’s Studies
Writing

School of Business
Accountancy
Finance
Minors offer students the opportunity to focus on an academic area that may complement their major. They are entirely optional, not required, and should be declared **AFTER** selecting a major. Minors generally require completion of 5-7 courses in the selected discipline. Certificate Programs are offered in Labor-Management Relations, Neuroscience, and Public Administration.

<table>
<thead>
<tr>
<th>Minor</th>
<th>Requirements</th>
</tr>
</thead>
</table>
| **Accountancy**               | *Students entering in the minor must have a GPA of at least 2.0  
Required Courses  
1. ACC 113 Data Applications in Business, 2 credits  
2. ACC 203 Financial Accounting, 3 credits  
3. ACC 204 Managerial Accounting, 3 credits  
4. ACC 310 Intermediate Accounting I, 4 credits  
5. ACC 311 Intermediate Accounting II, 4 credits  
6. ACC 301 Cost Accounting, 3 credits  
7. ACC 406 Taxes and Business Decisions, 3 credits  
Elective: One accounting elective numbered 300 or higher |
| **Applied Physics**           | 1. EPS 101 General Physics I, 4 credits  
2. EPS 102 General Physics II, 4 credits  
3. EPS 201 Modern Physics, 4 credits  
4. Two additional non-research courses at 200 level or higher |
| **Art History**               | 1. ARH 106 Art History Survey  
One introductory studio art course  
2. At least four additional courses in art history. A basic minor must consist of one course in each of the following areas: ancient art, medieval art, Renaissance art, and modern art  
*All are one semester, 3 credit courses |
| **Asian Studies**             | Eighteen (18) credit hours (six courses, of which at least one must be at the 300 or 400 level)  
Suggested course distribution:  
1. 3 credits in Asian humanities  
2. 3 credits in social sciences of Asia  
3. 12 credits draw from any combination of courses approved by the program  
*Because this minor tends to be interdisciplinary by nature, courses in the program are listed separately under departments. Course offerings can be expanded through the use of special topics within relevant departments, at the discretion of the Director.  
Note: **Limit of four (4) courses (12 credits) from any one department.** |
| **Biology: Evolutionary Biology & Ecology** | *Six required courses.  
1. BIO 103 General Biology I  
2. BIO 104 General Biology II  
3. BIO 310 Evolution  
4. BIO 401 Ecology  
5-6. Two courses from the following: |
Black Studies

To complete the minor in Black Studies, students take one required course, BLS 101 - Introduction to Black Studies, and select an additional five courses from among program and departmental electives. Each student is required to complete one elective from each thematic track. The remaining two electives allow for and promote specialization within a particular track. It is possible that a single course might satisfy the requirement of one or more tracks. However, a course will only be counted as meeting the requirements of ONE thematic track. For students whose interests are not directly addressed in formal course offerings, the program also offers the opportunity for independent reading and research, at the student’s initiative, with the support of a faculty sponsor.

**Required Course**

BLS 101 - Introduction to Black Studies

**Elective Courses**

Students must take one course from each thematic track:

**Thematic Area: Culture, Language, Literature and the Arts**

- BLS 107 - The African-American Artist 3 Credits
- BLS 215 - Dimensions of Contemporary Black Life 3 Credits
- BLS 225 - The African World View 3 Credits
- BLS 227 - History of Jazz 3 Credits
- BLS 334 - African Politics 3 Credits
- BLS 365 - Twentieth-Century African-American Literature 3 Credits

**Thematic Area: Historical Inquiry**

- BLS 210 - Topics in African and African-American History 3 Credits
- BLS 304 - Social Movements 3 Credits
- BLS 325 - African-American Women 3 Credits
- BLS 344 - History of Africa Since 1850 3 Credits
- BLS 346 - African-American History to 1877 3 Credits
- BLS 347 - African-American History Since 1877 3 Credits

**Thematic Area: Social & Structural Analysis**

- BLS 215 - Dimensions of Contemporary Black Life 3 Credits
- BLS 230 - Faith and Spirit in the Black Family and Community 3 Credits
- BLS 303 - Urban Politics in the United States 3 Credits
- BLS 304 - Social Movements 3 Credits
- BLS 305 - Race and Ethnic Relations 3 Credits
- BLS 307 - Urban Sociology 3 Credits
- BLS 313 - The Power of Whiteness 3 Credits
Black Studies continued

- BLS 320 - Diversity and Culture in Social Work Practice 3 Credits
- BLS 323 - Contemporary Social Problems 3 Credits
- BLS 325 - African-American Women 3 Credits
- BLS 335 - The Economics of the Developing Nations 3 Credits
- BLS 416 - Race and Politics in the Americas 3 Credits

Special Topics Series
May meet requirements for any one of the thematic tracks, depending on topic.

- BLS 480 - Seminar in Black Studies 3 Credits
- BLS 490 - Independent Reading in Black Studies 3 Credits
- BLS 491 - Directed Research Project in Black Studies 3 Credits

Business and Innovation

To complete the minor in Business and Innovation, students must be a Non-Business major and must be in Class of 2022 or higher. Each student is then required to complete:

- Twenty-one (21) credit hours
  1. 3 Required Courses (9 credit hours)
  2. 1 Capstone Course (3 credit hours)
  3. Complete one 3 course concentration track (9 credit hours)
     a. Organizations and Entrepreneurs
     b. Global Engagement
     c. Applied Science
     d. Design Thinking

Pre-requisites may apply to some of the courses listed in any of the four tracks. Depending upon the rules of the Department hosting the students’ major, students may double count 2 of the courses in whichever track they chose toward their BI minor and their major.

Required Courses
- ACC 103 - Introduction to Accounting and Finance
- CSC 120 - Applied Data Analytics
- ART 205 - Design Thinking & Innovative Problem Solving

Required Capstone Course
- BSP 440 - Business Policy and Decision-Making Analysis (to be re-designated as BUS 440 at the close of the Business Studies Program)

Track One: Organizations and Entrepreneurs:
Students may choose any three courses listed below:
- ECN 101 - Principles of Economics: Micro
- ECN 102 - Principles of Economics: Macro
- ECN 320 - Labor Economics
- ECN 321 - Labor-Management Relations
- FIN 217 - Statistical Analysis for Business Decisions I
- MTH 217 - Introduction to Statistics
- FIN 325 - Entrepreneurial Finance
- HIS 364 - Panics and Depressions in US History, 1789
- HIS 366 - Corporations and Entrepreneurs in United States History
Track Two: Global Engagement
Students are required to complete the following curricular elements listed below:
1) Globalization course
2) Foreign language proficiency
3) Coursework at PC directly related to an international educational experience (or approved substitute for students unable to study abroad).

1. One Course on globalization from the list below:
   GST 101 - Introduction to Global Studies
   GST 370 - Special Topics in Globalization
   SOC 418 - Globalization and Social Justice
   PSC 207 - International Relations
   PSC 369 - International Law and Organization
   PSC 430 - International Political Economy
   PHL 337 - Philosophy and Globalization

2. Foreign Language Proficiency: Students must pass one 3-credit language courses at the 104 level or higher to demonstrate intermediate language proficiency.

3. One PC course connected to study abroad
   GST 410 - Crossing Borders (post-study abroad course)
   Area studies course connected to study
   GST 371 - Topics in Global Service Learning (approved courses)
   Maymester PC course with international travel (approved courses)

Track Three: Applied Science
Students may choose any three courses from the list below:

BIO courses (students may double count two of these courses in the Biology major):
BIO 220 - An Introduction to Tropical Biology
BIO 240 - Marine Biology
BIO 395 - Research (upon approval)
BIO 396 - Research (upon approval)
BIO 401 - Ecology
BIO 450 - Internship (upon approval)
BIO 451 - Service Learning in Biology (upon approval)
BIO 475 - Advanced Topics Seminar (upon approval)
BIO 476 - Advanced Topics Seminar (upon approval)
BIO 479 - Advanced Topics Seminar (upon approval)
BIO 495 - Research (upon approval)
BIO 496 - Research (upon approval)
<table>
<thead>
<tr>
<th>Business and Innovation (continued)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM courses:</td>
</tr>
<tr>
<td>CHM 105 - Contemporary Chemistry: Environmental Matters</td>
</tr>
<tr>
<td>CHM 106 - Billion Dollar Molecules: Chemistry in Life, Drugs, and Medicine</td>
</tr>
<tr>
<td>CHM 108 - You Are What You Eat: The Molecular Reasons Behind Good Nutrition</td>
</tr>
<tr>
<td>CHM 310L - Biochemistry Laboratory</td>
</tr>
<tr>
<td>CHM 395 - Research (upon approval)</td>
</tr>
<tr>
<td>CHM 396 - Research (upon approval)</td>
</tr>
<tr>
<td>CHM 452 - Nutritional Biochemistry</td>
</tr>
<tr>
<td>CHM 470 - Special Topics in Biochemistry</td>
</tr>
<tr>
<td>CHM 495 - Research (upon approval)</td>
</tr>
<tr>
<td>CHM 496 - Research (upon approval)</td>
</tr>
<tr>
<td>EPS courses:</td>
</tr>
<tr>
<td>EPS 222 - Elements of Systems Modeling</td>
</tr>
<tr>
<td>EPS 303 - Systems Approach to Complex Problem Solving</td>
</tr>
<tr>
<td>EPS 495 - Research (upon approval)</td>
</tr>
<tr>
<td>EPS 496 - Research (upon approval)</td>
</tr>
<tr>
<td>Maymester courses upon approval</td>
</tr>
<tr>
<td>MTH courses:</td>
</tr>
<tr>
<td>MTH 218 - Biostatistics (BIO majors only)</td>
</tr>
<tr>
<td>MTH 304 - Ordinary Differential Equations</td>
</tr>
<tr>
<td>MTH 307 - Combinatorics</td>
</tr>
<tr>
<td>MTH 318 - Topics in Applied Mathematics</td>
</tr>
<tr>
<td>MTH 325 - Probability Theory and Mathematical Statistics I</td>
</tr>
<tr>
<td>MTH 326 - Probability Theory and Mathematical Statistics II</td>
</tr>
<tr>
<td>MTH 331 - Graph Theory</td>
</tr>
<tr>
<td>MTH 390 - Independent Study in Mathematics (with permission)</td>
</tr>
<tr>
<td>MTH 391 - Independent Study in Mathematics (with permission)</td>
</tr>
<tr>
<td>MTH 490 - Independent Study in Mathematics (with permission)</td>
</tr>
<tr>
<td>MTH 491 - Independent Study in Mathematics (with permission)</td>
</tr>
<tr>
<td>PSY courses:</td>
</tr>
<tr>
<td>PSY 202 - Research Design &amp; Statistical Analysis II</td>
</tr>
<tr>
<td>PSY 317 - Social Psychology</td>
</tr>
<tr>
<td>PSY 318 - Cultural Psychology</td>
</tr>
<tr>
<td>PSY 321 - Industrial/Organizational Psychology</td>
</tr>
<tr>
<td>Note: All PSY courses require PSY 100 pre-req</td>
</tr>
</tbody>
</table>

Track Four: Design Thinking
Students must choose three courses from the list below, but the three courses must draw from at least two different disciplines/departments and show progression of at least two different levels (from 100 to 400-level courses).

<table>
<thead>
<tr>
<th>100-level courses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101 - Visual Design I: 2D</td>
</tr>
<tr>
<td>ART 102 - Visual Design II: 3D</td>
</tr>
<tr>
<td>ART 108 - Introduction to Desktop Publishing</td>
</tr>
<tr>
<td>ARH 106 - Art History Survey</td>
</tr>
<tr>
<td>ARH 110 - Introduction to Museum Studies</td>
</tr>
</tbody>
</table>
### Business and Innovation (continued)

<table>
<thead>
<tr>
<th>200-level courses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 246 - Digital Imaging: Type/Design/Art</td>
</tr>
<tr>
<td>ART 270 - Special Topics in Studio Art</td>
</tr>
<tr>
<td>ART 273 - Introduction to Digital Photography: Digital Workflow and Concept</td>
</tr>
<tr>
<td>EPS 222 - Elements of Systems Modeling</td>
</tr>
<tr>
<td>TDF 210 - Introduction to Theatrical Design</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>300-level courses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 333 - Community Lens</td>
</tr>
<tr>
<td>ART 370 - Special Topics in Studio Art</td>
</tr>
<tr>
<td>ART 374 - Photography: Concept and Process</td>
</tr>
<tr>
<td>ART 248 - Digital Imaging: Web Animation (or approved digital imaging course)</td>
</tr>
<tr>
<td>BIO 330 - Comparative Biomechanics</td>
</tr>
<tr>
<td>BIO 378 - Biological Imaging</td>
</tr>
<tr>
<td>CSC 371 - Special Topics in Computer Science (such as Web Application Programming, Mobile Application Programming, and/or Advanced Database Systems, etc.)</td>
</tr>
<tr>
<td>CSC 424 - Database Management Systems</td>
</tr>
<tr>
<td>CSC 433 - Computer Networks</td>
</tr>
<tr>
<td>TDF 328 - Film/Video Production</td>
</tr>
<tr>
<td>Two advanced Computer Science Courses (300-level or higher) by approval</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>400-level courses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 475 - Advanced Topics Seminar (approved topics)</td>
</tr>
<tr>
<td>BIO 476 - Advanced Topics Seminar (approved topics)</td>
</tr>
<tr>
<td>BIO 479 - Advanced Topics Seminar (approved topics)</td>
</tr>
<tr>
<td>CSC 433 - Computer Networks</td>
</tr>
</tbody>
</table>

### Classics

Requires at least six courses for a total of 18 credit hours.
1. Four of these courses must be in ancient Greek (GRK) and/or Latin (LAT)
2. The remaining two courses can be chosen from the list of approved courses offered by the History Department in the following concentrations:
   - Classics, History, Greek, Latin
   *One of the history electives may be substituted for an approved course from an affiliated department.*

### Computer Science: Business Programming

Required Courses:
1. MTH 117 Discrete Mathematics OR MTH 290 Foundations of Higher Mathematics, 3 credits
2. CSC 103 Computer Science I, 4 credits
3. CSC 104 Computer Science II, 4 credits
4. CSC 225 Discrete Data Structures, 4 credits
5. CSC 424 Database Management Systems, 3 credits
6. CSC 433 Computer Network, 3 credits
<table>
<thead>
<tr>
<th>Computer Science: Technical</th>
<th>Required Courses:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. MTH 117 Discrete Mathematics OR MTH 290 Foundations of Higher Mathematics, 3 credits</td>
</tr>
<tr>
<td></td>
<td>2. CSC 103 Computer Science I, 4 credits</td>
</tr>
<tr>
<td></td>
<td>3. CSC 104 Computer Science II, 4 credits</td>
</tr>
<tr>
<td></td>
<td>4. CSC 225 Discrete Data Structures, 4 credits</td>
</tr>
<tr>
<td></td>
<td>5. CSC 387 Computer Architecture, 4 credits</td>
</tr>
<tr>
<td></td>
<td>6. CSC 445 Operating Systems, 3 credits</td>
</tr>
</tbody>
</table>

| Dance | 1. TDF 319 Dance History |
|       | 2. TDF 212 Modern Dance or TDF 313 Intermediate Modern Dance |
|       | 3. TDF 315 Dance Composition |
|       | 4. Plus three electives in dance chosen in consultation with the student’s advisor; one or more must be at the 300-level or above, for a total of six courses, plus two crew experiences worth ½ credit each. |

Opportunities for off-campus study are available during the junior and senior years. Six semesters of participation in the Providence College Dance Company may be accumulated to count as one 3-credit dance elective.

| English Literature | 1. ENG 175 Introduction to Literature |
|                   | 2. Two Pre-1800 Literature courses |
|                   | 3. Two Post-1800 Literature courses |
|                   | 4. One Course receiving Major Credit |

| Economics | 1. ECN 101 Principles of Economics: Micro, 3 credits |
|           | 2. ECN 102 Principles of Economics: Macro, 3 credits |
|           | 3. ECN 201 Microeconomic Analysis, 3 credits |
|           | 4. ECN 202 Macroeconomic Analysis, 3 credits |
|           | 5. Any other two (2) economics courses |

The total credit hours for the minor are 18 credits.

| Film/Video | Group A: Minors must choose TWO of the following: |
|           | • TDF 120 History of Film: The Silent Period and the Transition to Sound, 3 credits |
|           | • TDF 121 History of Film: The Classic Era 1940-1960 and Beyond 1960-1990, 3 credits |
|           | • TDF 220 The Catholic Imagination of Four American Filmmakers, 3 cr. |
|           | • TDF 226 Analyzing Film, 3 credits |

|           | Group B: Required Courses |
|           | • TDF 322 Film Theory, 3 credits |
|           | • TDF 328 Film/Video Production, 3 credits |

| Electives | Choose TWO electives in consultation with an advisor. One must be at 300-level or above. |
| **Finance** | Required courses  
| | 1. ACC 203 Financial Accounting, 3 credits  
| | 2. ECN 101 Principles of Economics: Micro, 3 credits  
| | 3. ECN 102 Principles of Economics: Macro, 3 credits  
| | 4. FIN 207 Managerial Finance I, 3 credits  
| | 5. FIN 218 Financial Markets and Institutions, 3 credits  
| | 6. FIN 317 Investments, 3 credits  
| | 7. Finance Elective - to be selected from:  
| | FIN 211, 308, 320, 325, 417, 419, 420, 440, 445, or any other 400-level Finance course except FIN 450 or FIN 490 |
| **Foreign Language Studies** | A minor is fulfilled by the successful completion of 18 credits/semester hours of course work in the target language, in a progressive sequence beginning at a level determined by the department to be appropriate for each individual student. An online placement test is required for incoming freshmen interested in pursuing the study of French, Italian or Spanish and should be completed prior to Freshman Orientation. |
| | French  
| | German  
| | Italian  
| | Spanish |
| **History** | Requires at least six courses for a total of 18 credit hours.  
| | 1. American History, two courses  
| | (1) Pre-1877 & (1) Post-1877  
| | 2. European History, two courses  
| | (1) Pre-1715 & (1) Post-1715  
| | 3. History Elective, two courses  
| | (HIS 100 Thinking and Writing about History & (1) course in Non-Western History are encouraged but not required.) |
| **Labor-Mgmt Relations - Certificate** | Required Courses:  
| | 1. MGT 101 Principles of Business Management, 3 credits  
| | 2. FIN 310 Operations Management I, 3 credits  
| | 3. ECN 101 Prin. of Economics: Micro OR ENC 102 Prin. of Economics: Macro  
| | 4. ECN 321 Labor-Management Relations, 3 credits  
| | 5. ECN 322 Collective Bargaining, 3 credits  
| | 6. LBR 386 Labor Law, 3 credits (MGT 101 and ECN 101 or 102 are recommended entry-level courses, suitable for freshman and sophomores)  
| | 7. Three elective courses  
| | Elective courses may include offerings in business, economics, psychology, sociology, labor-management relations, and related fields as approved by the program director. Generally, courses must be taken in the undergraduate school. Labor-management relations courses may be taken in the School of Continuing Education or the summer school. Internships are available through the program and may be arranged with employers, labor unions, or government agencies. |
The Minor requires 18 credit hours distributed in the following manner:

1. Five courses (3 credits each) for a total of 15 credit hours in two or more of the following areas: Anthropology, English, Foreign Language Studies, Global Studies, History, Political Science, Secondary Education, Sociology, Spanish, and/or Theology;
   - APG 321 Latin America: Mexico and Central America
   - APG 322 Latin America: South America
   - APG 470 Latin American Anthropology
   - EDU 470 Selected Topics in Education
   - EDU 471 Gender, Race, Ethnicity & Class Issues in Education
   - ENG 441 Studies in Literature (e.g. The Neighborhood in Latino Literature; and Contemporary Caribbean Transnational Literature)
   - ENG 241 Introduction to Latinx Literature
   - HIS 215 Diversity of Latin American Religious History
   - HIS 230 Early and Colonial Latin American History
   - HIS 231 Modern Latin American History
   - LAS 460 Tutorial 1-4 credits
   - LAS 480 Senior Capstone Seminar
   - LAS 481 Senior Capstone Project
   - LAS 495 Independent Study 1-3 credits
   - PSC 336 Latin American Politics
   - PSC 416 Race and Politics in the Americas
   - PSC 456 Model Organization of American States
   - PSC 470 Special Topics (e.g. Politics of Resource Extraction)
   - PSC 484 Seminar on Latin America
   - PSC 485 Seminar on American Politics
   - SOC 305 Race and Ethnic Relations
   - SOC 354 Immigration
   - SOC 355 Comparative Race and Inequality
   - SOC 470 Special Topics (e.g. Latino Experience, Latin American Society)
   - SPN 205 - Spanish for Heritage Speakers
   - SPN 212 Hispanic Civilizations
   - SPN 310 Spanish Phonetics
   - SPN 321 Survey of Spanish-American Literature
   - SPN 322 Survey of Spanish-American Literature 3 credits
   - SPN 370 Special Topics in Hispanic Studies
   - SPN 401 Spanish Literature of the Golden Age: The Renaissance
   - SPN 402 Spanish Literature of the Golden Age: 17th Century Spain on the Stage
   - SPN 406 Contemporary Spanish Prose
   - SPN 407 Twentieth-Century Spanish Drama
   - SPN 408 Contemporary Spanish- American Novel
   - SPN 417 Spanish-American Literature
   - SPN 418 Spanish-American Novel
   - SPN 450 Internship in Hispanic Studies
   - SPN 490 Independent Study

2. One senior capstone course (3 credits) from the following two options: LAS 480 Senior Capstone Seminar, or LAS 481 Senior Capstone Project.
### Latin American and Latina/o Studies (LALS) (continued)

3. Students will also pursue one of two Tracks in LALS.

   **Track 1 – Latin American Studies** focuses primarily on the region of Latin America and the Caribbean through demographic, cultural, linguistic, political, literary, sociological, historical, anthropological, theological, religious, economic, philosophical, artistic, ecological, and other related study. This track has a language requirement, which is normally fulfilled by taking at least two SPN courses (SPN 212 or higher).

   **Track 2 – Latina/o Studies** focuses primarily on those of Latina/o descent in the U.S. by its demographic, cultural, linguistic, political, literary, sociological, anthropological, historical, theological, religious, economic, philosophical, artistic, ecological, and other related study. This track has no language requirement, although such study is encouraged.

### Mathematics

1. One of the following courses:
   - MTH 131 Calculus and Analytical Geometry I OR MTH 109 Calculus I
2. One of the following courses:
   - MTH 132 Calculus and Analytical Geometry II OR MTH 110 Calculus II
3. MTH 290 Foundations of Higher Mathematics, 3 credits
4. Any three (3) math courses numbered 200 or higher with at least one numbered 300 or higher

### Music

*All students must declare a minor during the second semester of the sophomore year, unless otherwise approved by the department chairperson.*

1. **Required Courses (11 credit hours)**
   - MSC 201 Theory I, 3 credits
   - MSC 201L Theory I Lab, 1 credit
   - MSC 202 Theory II, 3 credits
   - MSC 202L Theory II Lab, 1 credit
   - MSC 210 Music Appreciation, 3 credits
2. **Selected Courses (6 credit hours)** - 3 credits (1 course) at the 300-400 level & 3 credits (1 course) at the 200, 300, or 400 level.
   - MSC 214, MSC 215, MSC 216, MSC 217, MSC 218, MSC 220, MSC 223, MSC 224, MSC 225, MSC 226, MSC 227, MSC 301, MSC 302, MSC 303, MSC 304, MSC 312, MSC 320, MSC 321, MSC 322, MSC 328

**Other Requirements for the Minor**

3. Participation in an appropriate performance organization is expected of all music minors for a minimum of three semesters.
4. Private study of the same instrument or voice for a minimum of three semesters. There is an additional fee for these lessons. “Jury” will be expected for each of these semesters.

It is recommended that music minors perform in student performance hours during semesters of private study of instrument or voice.

### Neuroscience – Certificate

*For Biology majors*

1. All requirements from the major, including BIO 360 Neurobiology, and **two** of the following:
   - BIO 201 Comparative Anatomy
   - BIO 205 Human Anatomy
   - BIO 215 Histology and Cytology
   - BIO 308 Modern Genetics
2. The following psychology courses are required
   PSY 100 Introduction to Psychology
   PSY 201 Research Design & Statistical Analysis I
   PSY 202 Research Design & Statistical Analysis II

3. One of the following three course sequences is required
   PSY 303 Animal Learning and Cognition, PSY Psychology of Abnormal Behavior, PSY 402 Research in Animal Learning and Cognition
   PSY 303 Animal Learning and Cognition OR PSY 324 - Psychology of Abnormal Behavior AND PSY 315 - Human Neuropsychology AND PSY 405 - Research in Neuropsychology
   PSY 303 Animal Learning and Cognition OR PSY 324 - Psychology of Abnormal Behavior AND PSY 326 – Biopsychology AND PSY 426 - Experimental Biopsychology

4. A Neuroscience Capstone course during senior year:
   BIO 474 Neuroscience Capstone OR PSY 474 Neuroscience Capstone

For Psychology majors
1. All requirements for the major, including at least one psychology course from the following:
   PSY 316 Cognitive Psychology, PSY 325 Health Psychology OR PSY 482 Drugs and Behavior

2. One of the following three course sequences is required:
   PSY 303 Animal Learning and Cognition, PSY Psychology of Abnormal Behavior, PSY 402 Research in Animal Learning and Cognition
   PSY 303 Animal Learning and Cognition OR PSY 324 - Psychology of Abnormal Behavior AND PSY 315 - Human Neuropsychology AND PSY 405 - Research in Neuropsychology
   PSY 303 Animal Learning and Cognition OR PSY 324 - Psychology of Abnormal Behavior AND PSY 326 – Biopsychology AND PSY 426 - Experimental Biopsychology

3. The following biology courses are required:
   a. BIO 103 General Biology I
   b. BIO 104 General Biology II
   c. BIO 200 Cell Biology and Molecular Genetics
   d. BIO 360 Neurobiology

4. Two Biology Course from the following are required:
   BIO 201 Comparative Anatomy
   BIO 205 Human Anatomy
   BIO 215 Histology and Cytology
<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 308 Modern Genetics</td>
</tr>
<tr>
<td>BIO 310 Evolution</td>
</tr>
<tr>
<td>BIO 320 Developmental Biology</td>
</tr>
<tr>
<td>BIO 330 Comparative Biomechanics</td>
</tr>
<tr>
<td>BIO 350 Animal Behavior</td>
</tr>
<tr>
<td>BIO 405 Physiology</td>
</tr>
<tr>
<td>BIO 410 Electron Microscopy</td>
</tr>
<tr>
<td>BIO 417 Immunology</td>
</tr>
<tr>
<td>5. A Neuroscience Capstone course during senior year:</td>
</tr>
<tr>
<td>BIO 474 Neuroscience Capstone OR PSY 474 Neuroscience Capstone</td>
</tr>
</tbody>
</table>

**Philosophy**

18 credits (six courses) of philosophy are required.
Of the 18 credits (six courses), nine credits (three courses) must be at the 300-level or above.
* Either: PHL 101 Logic OR PHL 315 Symbolic Logic
* Remaining Courses – any 5 electives in the department

**Political Science**

1. PSC 101 Politics, 3 credits
2. Any five courses chosen from departmental offerings, two of which must be at 300 or 400 level.

**Public Administration - Certificate**

Public Administration Core
- PSC 211 Public Administration
- PSC 318 American Public Policy
- PSC 419 Public Program Evaluation
- PSC 450 Political Science Internship

Additional Courses
- PSC 201 American Government and Politics
- ACC 203 Financial Accounting
- ECN 101 Prin. of Econ. Micro OR ECN 102 Principles of Econ. Macro
- PHL 301 Ethics, Moral Leadership, and the Common Good

**Public & Community Services**

*Requires a total of 18 credit hours (six courses) distributed as follows:
PSP 101 Introduction to Service in Democratic Communities, 3 credits
PSP 202 Foundations of Organizational Service, 3 credits
PSP 303 Community Organization, 3 credits
PSP 302 Diversity, Community and Service 3 credits
  - Additional Course Options for fulfilling this requirement are the same as those for the major.
Any PSP course at, or above, the 300-level
PSP 480 – 002 PSP Minor Capstone (Spring semester senior year), 3 credits

**Public & Community Service – Health**

Requirements include the following:
PSP 101 Introduction to Service in Democratic Communities, 3 credits*
  *Service component may be in a community health setting.*
PSP 202 Foundations of Organizational Service, 3 credits
  *Students may take HPM 101 instead of PSP 202
PSP 303 Community Organizing, 3 credits
## Public & Community Service – Health (continued)

- PHL 309 Biomedical Ethics, 3 credits
  *Maybe used to fulfill College ethics core curriculum requirements.*
- PSP 491 Independent Study: Community Health, 3 credits
- PSP 480 – 002 PSP Minor Capstone (Spring semester senior year), 3 credits

## Sociology

**Required Courses:**
1. SOC 101 Introductory Sociology, 3 credits
2. SOC 209 Social Research Methods, 3 credits
3. Students who minor in Sociology may take SOC 480 Senior Capstone as one of their sociology electives.

## Studio Art

### Concentrations in:
- Ceramics
- Digital imaging
- Drawing
- Painting
- Photography
- Printmaking
- Sculpture

**1. Three foundation courses:**
   - ART 101 Visual Design I (2D) **OR** ART 102 Visual Design II (3D)
   *Note: ART 101 and ART 102 are not sequential*
   - ART 111 Drawing I
   - ARH 106 Art History Survey

**2. One introductory studio elective**

**3. Three courses in one of the following concentrations: ceramics, digital imaging, drawing (beyond ART 111), painting, photography, printmaking, or sculpture**

## Systems Science

1. EPS 115 Concepts of Systems Science, 3 credits
2. EPS 222 Elements of Systems Modeling, 1 credit
3. EPS 303 Systems Approach to Complex Problem Solving, 3 credits
4. Any three (3) credit course offered in computer programming (from approved list)
5. Any three (3) courses totaling nine (9) credits from those listed under Engineering-Physics-Systems

## Theatre

**Required Courses:**
1. TDF 202 History of Theatrical Production
2. Choose: TDF 109 Introduction to Acting OR TDF 210 Theatrical Design
3. TDF 108 Script Analysis
4. Plus three electives in theatre, chosen in consultation with the student’s advisor for a total of six courses (2 or more at the 300-level or above) plus two crew experiences worth ½ credit each.

**Production Participation**

*Required to achieve a minimum of two crew experiences, both of which must be earned on a main stage production. It is the responsibility of each student to accomplish the appropriate number of crew requirements regardless of when they matriculate as a major or minor. Admission into the minor requires a 2.0 GPA.*

## Theology

**Six (6) Required Theology Courses:**
- THL 200 Foundations of Theology **OR** THL 240 Theology of St. Thomas
- THL 210 Biblical Theology **OR** THL 220 New Testament: Literature & Theology

Three (3) theology electives, one of which must be a 400-level course
- THL 480 Major seminar OR THL 481 Major Seminar
| **Women's Studies** | Complete six (6) courses including the following:  
1. WMS 101 Introduction to Women's Studies  
2. WMS 489 Capstone Seminar in Women's Studies  
3. Four electives courses approved for women's studies credit of which no more than two may be in the humanities:  
   WMS 224, WMS 260, WMS 320, WMS 323, WMS 325, WMS 326,  
   WMS 334, WMS 369, WMS 352, WMS 354, WMS 376, WMS 441, 470 (special topics), WMS 490 (independent study);  
   and no more than two may be in the natural and social sciences:  
   WMS 127, WMS 225, WMS 226, WMS 301, WMS 305, WMS 313, WMS 318, WMS 324, WMS 325, WMS 334, WMS 347, WMS 380, WMS 451, WMS 470 (selected topics)  
   WMS 489, and WMS 490 (independent study).  
Because women's studies is interdisciplinary, most women’s studies courses (with the exception of Intro (101) Capstone (489) and Independent Study (490)) are cross-listed in at least one other department or program. The director of the Women's Studies Program will be responsible for verifying student compliance with the requirements of the minor. Students are encouraged to consult with the director of WMS with any questions.  |
| **Writing** | 1. Twelve hours (4 courses) in writing:  
   ENG 161 Introduction to Journalism  
   ENG 175 Introduction to Literature  
   ENG 204 Literary Journalism  
   ENG 285 Introduction to Creative Writing  
   ENG 301 Intermediate Writing  
   ENG 380 Creative Writing in Fiction  
   ENG 381 Creative Writing in Poetry  
   ENG 385 Advanced Writing  
   ENG 442 The Prose Poem  
   ENG 488 Poetry Capstone  
   ENG 489 Fiction Capstone  
   TDF 405 Principles of Playwriting  
   ART 108 Introduction to Desktop Publishing  
2. Six hours (2 courses) in English Literature level 200 or above |