BSHS - PRE-PHARMACY TRACK

Students enrolled in the Pre-Pharmacy Track must complete the coursework listed under curriculum requirements to earn the BSHS degree through the School of Nursing and Health Studies (SONHS). Students should meet with an academic advisor in the Office of Student Services (OSS) (http://www.miami.edu/sonhs/index.php/sonhs/office_of_student_services/) to discuss any questions related to their degree requirements.

Curriculum Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Areas of Proficiency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 105</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 106</td>
<td>English Composition II</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics &amp; Computer Science</td>
<td></td>
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<tr>
<td>Calculus: MTH 141, MTH 161, or MTH 171</td>
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<tr>
<td>Computer Science: 1 CSC or BTE course</td>
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<td>3</td>
</tr>
<tr>
<td>Statistics: HCS 202 or other approved statistics course</td>
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<tr>
<td>Areas of Knowledge</td>
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</tr>
<tr>
<td>Arts &amp; Humanities</td>
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<td>9</td>
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<tr>
<td>People &amp; Society</td>
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<tr>
<td>Science, Technology, Engineering, and Mathematics (STEM)*</td>
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<tr>
<td>Major</td>
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<tr>
<td>BIL 150 &amp; BIL 151</td>
<td>General Biology and General Biology Laboratory</td>
<td>5</td>
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<tr>
<td>BIL 160 &amp; BIL 161</td>
<td>Evolution and Biodiversity and Evolution and Biodiversity Laboratory</td>
<td>5</td>
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<tr>
<td>BIL 250</td>
<td>Genetics</td>
<td>3</td>
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<tr>
<td>BIL 255</td>
<td>Cellular and Molecular Biology</td>
<td>3</td>
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<tr>
<td>BMB 401</td>
<td>Biochemistry for the Biomedical Sciences</td>
<td>4</td>
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<tr>
<td>BPH 306</td>
<td>Principles of Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>COS 211</td>
<td>Public Speaking</td>
<td>3</td>
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<tr>
<td>HCS 212 &amp; HCS 213</td>
<td>Human Anatomy and Human Anatomy Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>HCS 215 &amp; HCS 216</td>
<td>Principles of Systemic Physiology and Principles of Systemic Physiology Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>ECO 211</td>
<td>Principles of Microeconomics</td>
<td>3</td>
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<tr>
<td>ECO 212</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
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<tr>
<td>Elective**</td>
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<tr>
<td>Microbiology:</td>
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<tr>
<td>MIC 301 &amp; MIC 304</td>
<td>Introduction to Microbes and the Immune System and Introduction to Microbes and the Immune System (Lab)</td>
<td>5</td>
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<tr>
<td>Choose one physics option below:</td>
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<td>10-11</td>
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<tr>
<td>College Physics:</td>
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<tr>
<td>PHY 101 &amp; PHY 106</td>
<td>College Physics I and College Physics Laboratory I</td>
<td></td>
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<tr>
<td>PHY 102 &amp; PHY 108</td>
<td>College Physics II and College Physics Laboratory II</td>
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<tr>
<td>University Physics for the Life Sciences:</td>
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<tr>
<td>PHY 201 &amp; PHY 106</td>
<td>University Physics I for the Sciences and College Physics Laboratory I</td>
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<tr>
<td>PHY 202 &amp; PHY 108</td>
<td>University Physics II for the Sciences and College Physics Laboratory II</td>
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<tr>
<td>University Physics:</td>
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<tr>
<td>PHY 221</td>
<td>University Physics I</td>
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### Sample Plan of Study

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Freshman Year</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Fall</strong></td>
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<td></td>
</tr>
<tr>
<td>BIL 150 &amp; BIL 151</td>
<td>General Biology and General Biology Laboratory</td>
<td>5</td>
</tr>
<tr>
<td>ECO 211</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ENG 105</td>
<td>English Composition I</td>
<td>3</td>
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<tr>
<td>MTH 107</td>
<td>Precalculus Mathematics I</td>
<td>3</td>
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<tr>
<td>UMX 100</td>
<td>The University of Miami Experience</td>
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<tr>
<td><strong>Chemistry for the Biosciences:</strong></td>
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<td>16</td>
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<tr>
<td>CHM 121 &amp; CHM 113</td>
<td>Principles of Chemistry and Chemistry Laboratory</td>
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<tr>
<td>CHM 221 &amp; CHM 205</td>
<td>Introduction to Structure and Dynamics and Chemical Dynamics Laboratory</td>
<td></td>
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<tr>
<td>CHM 222 &amp; CHM 206</td>
<td>Organic Reactions and Synthesis and Organic Reactions and Synthesis Laboratory</td>
<td></td>
</tr>
<tr>
<td><strong>Minor</strong>*</td>
<td>* Students who complete the Chemistry for the Biosciences sequence automatically fulfill the requirements for a minor in chemistry; no additional coursework would be required to complete this requirement.</td>
<td>0</td>
</tr>
<tr>
<td><strong>Advanced Writing and Communication Skills</strong>**</td>
<td>Students must take at least five designated writing-intensive courses to complete this requirement; unless students choose to take additional credits to complete this requirement, it is highly recommended students select courses that are designated as writing-intensive and will double count toward this area and their other requirements.</td>
<td>0</td>
</tr>
<tr>
<td><strong>Electives</strong>***</td>
<td>* Students can create plans of study that accounts for their ENG and MTH placement scores and incorporates their major, minor, and cognate interests. Students should feel empowered to use the information listed in the Academic Bulletin and the Student Handbook (<a href="http://www.miami.edu/sonhs/index.php/sonhs/current_students/student_handbooks/">http://www.miami.edu/sonhs/index.php/sonhs/current_students/student_handbooks/</a>) to take charge of their education, pursue their own academic interests, and create their own, unique plans of study.</td>
<td>12-11</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td>* The sample plan of study listed below is based on the following ENG and MTH placement information and major, minor, and cognate selections:</td>
<td>120</td>
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</tbody>
</table>

- **ENG placement:** ENG 105
- **MTH placement:** MTH 107
- **Major(s):** Health Science, Pre-Pharmacy Track
- **Minor(s):** Chemistry
- **Cognates**
  - Art & Humanities: American Literature (RAU = English)
  - People & Society: Abnormal Psychology (RAU = Psychology)
  - Science, Technology, Engineering, and Mathematics (STEM): Health Science major (RAU = Nursing & Health Studies)
### BSHS - Pre-Pharmacy Track

#### Elective
- Credit Hours: 3

#### Spring
- **BIL 160 & BIL 161**
  - Evolution and Biodiversity
  - Evolution and Biodiversity Laboratory
  - Credit Hours: 5

- **ECO 212**
  - Principles of Macroeconomics
  - Credit Hours: 3

- **ENG 106**
  - English Composition II
  - Credit Hours: 3

- **MTH 108**
  - Precalculus Mathematics II
  - Credit Hours: 3

- **PSY 110**
  - Introduction to Psychology (counts for People & Society cognate)
  - Credit Hours: 3

  **Credit Hours**
  - Total: 17

### Sophomore Year

#### Fall
- **BIL 250**
  - Genetics
  - Credit Hours: 3

- **CHM 121 & CHM 113**
  - Principles of Chemistry
  - Credit Hours: 5

- **MTH 161**
  - Calculus I
  - Credit Hours: 4

- **PSY 240**
  - Abnormal Psychology (counts for People & Society cognate)
  - Credit Hours: 3

  **Credit Hours**
  - Total: 15

#### Spring
- **BIL 255**
  - Cellular and Molecular Biology
  - Credit Hours: 3

- **CHM 221 & CHM 205**
  - Introduction to Structure and Dynamics
  - Credit Hours: 5

- **ENG 214**
  - American Literature II (W; counts for Arts & Humanities cognate)
  - Credit Hours: 3

- **HCS 202**
  - Introductory Statistics in Health Care
  - Credit Hours: 3

  **Credit Hours**
  - Total: 14

### Junior Year

#### Fall
- **BPH 306**
  - Principles of Nutrition
  - Credit Hours: 3

- **CHM 222 & CHM 206**
  - Organic Reactions and Synthesis
  - Credit Hours: 6

- **ENG 389**
  - The Sixties: Literature, History, and Culture of the 1960s (W; counts for Arts & Humanities cognate)
  - Credit Hours: 3

- **PHY 101 & PHY 106**
  - College Physics I
  - Credit Hours: 5

  **Credit Hours**
  - Total: 17

#### Spring
- **BMB 401**
  - Biochemistry for the Biomedical Sciences
  - Credit Hours: 4

- **PHY 102 & PHY 108**
  - College Physics II
  - Credit Hours: 5

- **PSY 260**
  - Personality Psychology (counts for People & Society cognate)
  - Credit Hours: 3

  **Major Elective (*)**
  - Credit Hours: 3

  **Credit Hours**
  - Total: 15

### Senior Year

#### Fall
- **COS 211**
  - Public Speaking
  - Credit Hours: 3

- **ENG 260**
  - African-American Literature (W; counts for Arts & Humanities cognate)
  - Credit Hours: 3

- **HCS 212 & HCS 213**
  - Human Anatomy
  - Credit Hours: 4

  **Elective (W)**
  - Credit Hours: 3

  **Credit Hours**
  - Total: 13

#### Spring
- **CSC 115**
  - Introduction to Python for Arts & Humanities
  - Credit Hours: 3
HCS 215 Principles of Systemic Physiology 4
HCS 216 and Principles of Systemic Physiology Laboratory 4
MIC 301 Introduction to Microbes and the Immune System 3
Elective (W) 3

Credit Hours 13
Total Credit Hours 121

W Course is designated as writing-intensive
* Students may fulfill this requirement by taking any BIL, BPH, or HCS course for at least 3 credits at the 200 level or above (except for BPH 202, HCS 202, and NUR 202)

Mission
The Mission of the School of Nursing and Health Studies is to educate students and support faculty committed to excellence in the art and science of nursing and health studies through creating and disseminating health knowledge and developing culturally competent leaders to provide safe service to our community, the nation and the world. The University of Miami School of Nursing and Health Studies offers courses leading to the degree of Bachelor of Science in Health Science. Baccalaureate education provides the foundation for further education in specialized health professional fields. Pre-professional tracks include Pre-physical therapy, Pre-pharmacy, Pre-medicine, Pre-occupational therapy, Health Science/Health Management and Policy, and Health Science General.

Goals
Student Learning Outcomes
- Students will be able to demonstrate advanced knowledge in human anatomy.
- Students will be able to demonstrate knowledge of statistical analyses.
- Students will demonstrate knowledge related to the importance of nutrition in human health and well-being.