# Health Science Emphasis

## HUMAN BIOLOGY Major

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supporting Courses</strong></td>
<td></td>
<td>41-44</td>
</tr>
<tr>
<td>BIOLOGY 201 &amp; BIOLOGY 202</td>
<td>Principles of Biology: Cellular and Molecular Processes and Principles of Biology Lab: Cellular and Molecular Processes</td>
<td></td>
</tr>
<tr>
<td>CHEM 211 &amp; CHEM 213</td>
<td>Principles of Chemistry I and Principles of Chemistry I Laboratory</td>
<td></td>
</tr>
<tr>
<td>CHEM 212 &amp; CHEM 214</td>
<td>Principles of Chemistry II and Principles of Chemistry II Laboratory</td>
<td></td>
</tr>
<tr>
<td>ENG COMP 105</td>
<td>English Composition II: Composition and Rhetoric</td>
<td></td>
</tr>
<tr>
<td>HUM BIOL 204</td>
<td>Anatomy and Physiology</td>
<td></td>
</tr>
<tr>
<td>HUM BIOL 207</td>
<td>Laboratory Safety</td>
<td></td>
</tr>
<tr>
<td>MATH 260</td>
<td>Introductory Statistics</td>
<td></td>
</tr>
</tbody>
</table>

Choose one of the following courses:
- MATH 104: Elementary Functions: Algebra and Trigonometry
- MATH 202: Calculus and Analytic Geometry I
- MATH 203: Calculus and Analytic Geometry II

Choose one of the following options:
- PHYSICS 103 & PHYSICS 104: Fundamentals of Physics I and Fundamentals of Physics II
- PHYSICS 201 & PHYSICS 202: Principles of Physics I and Principles of Physics II

Choose one of the following 3 options:
- COMM 133: Fundamentals of Public Address
- or COMM 166: Fundamentals of Interpersonal Communication

OR

Any literature course, e.g., ENGLISH 104 Introduction to Literature

OR

One year of any college-level foreign language

### Upper-Level Courses

Choose three of the following courses:
- BIOLOGY 303: Genetics
- or HUM BIOL 310: Human Genetics
- BIOLOGY 307: Cell Biology
- HUM BIOL 402: Human Physiology
- NUT SCI 300: Human Nutrition

### Required Courses

- BIOLOGY 302: Principles of Microbiology
- CHEM 302: Organic Chemistry I
  & CHEM 304: and Organic Chemistry Laboratory I
- CHEM 303: Organic Chemistry II
  & CHEM 305: and Organic Chemistry Laboratory II
- CHEM 330: Biochemistry

### Health Science Electives (choose 8 credits):

Minimum of two upper-level laboratory courses.

- BIOLOGY 304: Genetics Laboratory
- BIOLOGY 308: Cell Biology Laboratory
- BIOLOGY 340: Comparative Anatomy of Vertebrates
- BIOLOGY 402: Advanced Microbiology
### Health Science Emphasis

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOLOGY/CHEM 408</td>
<td>Molecular Biology Laboratory</td>
</tr>
<tr>
<td>BIOLOGY 411</td>
<td>Developmental Biology Laboratory</td>
</tr>
<tr>
<td>CHEM 331</td>
<td>Biochemistry Laboratory</td>
</tr>
<tr>
<td>HUM BIOL 341</td>
<td>Human Anatomy Laboratory</td>
</tr>
<tr>
<td>HUM BIOL 351</td>
<td>Kinesiology</td>
</tr>
<tr>
<td>HUM BIOL 361</td>
<td>Human Physiology Lab - Exercise and Metabolism</td>
</tr>
<tr>
<td>HUM BIOL 403</td>
<td>Human Physiology Laboratory</td>
</tr>
<tr>
<td>HUM BIOL 423</td>
<td>Immunology Lab</td>
</tr>
<tr>
<td>HUM BIOL 427</td>
<td>Cancer Biology Laboratory</td>
</tr>
</tbody>
</table>

**Additional Upper-Level Electives**

- any additional upper-level HUM BIOL course(s)
- BIOLOGY 303 Genetics
- BIOLOGY 304 Genetics Laboratory
- BIOLOGY 307 Cell Biology
- BIOLOGY 308 Cell Biology Laboratory
- BIOLOGY 309 Evolutionary Biology
- BIOLOGY 340 Comparative Anatomy of Vertebrates
- BIOLOGY 345 Animal Behavior
- BIOLOGY 346 Comparative Physiology
- BIOLOGY 402 Advanced Microbiology
- BIOLOGY/ CHEM 407 Molecular Biology
- BIOLOGY/ CHEM 408 Molecular Biology Laboratory
- BIOLOGY 410/CHEM 408 Developmental Biology
- BIOLOGY 411 Developmental Biology Laboratory
- CHEM 331 Biochemistry Laboratory
- HIMT 330 Healthcare I: Terminology & Body Systems
- NUT SCI 300 Human Nutrition
- NUT SCI 327 Nutritional Biochemistry
- NUT SCI 350 Life Cycle Nutrition
- NUT SCI 427 Advanced Nutrition and Metabolism
- NUT SCI 486 Medical Nutrition Therapy II

**Maximum of ONE Psychology course**

- PSYCH 308 Physiological Psychology
- PSYCH 435 Abnormal Psychology
- PSYCH 450 Health Psychology

**Total Credits** 73-77

1. It is highly recommended that as freshmen, pre-medical and pre-dental students take BIOLOGY 201, BIOLOGY 202 and CHEM 211, CHEM 212, CHEM 213, CHEM 214 and consult and adviser.
2. Satisfied with an ACT English score of 32 or higher.
3. BIOLOGY 340 and BIOLOGY 402 are 4 credits each, all other courses in this list are 1 credit.