BIOLOGY, B.S. - RESPIRATORY THERAPY OPTION

Major in Biology, BS

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<td><strong>12</strong></td>
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**CORE COURSES**

- Foundations of Biology - See Appendix 1
- BIOL 362 Cell and Developmental Biology
- BIOL 364 Foundations of Genetics & Molecular Biology

**Option in Respiratory Therapy** - See separate block

**Total Hours**

12

**Appendix 1. Foundations of Biology**

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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td></td>
<td>Foundations of Biology C- or Higher</td>
<td>4</td>
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<tr>
<td>BIOL 101</td>
<td>Foundations of Biology</td>
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**Concentration in Respiratory Therapy**

**REQUIRED RESPIRATORY THERAPY COURSES**

- BIOL 257 Introduction to Allied Health Professions | 1 |
- BIOL 254 Human Anatomy & Physiology I (C- minimum) | 4 |
- BIOL 255 Human Anatomy & Physiology II (C- minimum) | 4 |
- BIOL 361 Microbiology (C- minimum) | 4 |

**RESPIRATORY THERAPY PROFESSIONAL PHASE I**

After completion of the Phase I coursework, the student may graduate with a B.S. degree in Biology, Respiratory Therapy; however, the graduate must complete the Phase II coursework in order to be employed and certified as a respiratory therapist.

- RESP 410 Acute Cardiopulmonary Care | 2 |
- RESP 411 Respiratory Care Techniques 1 | 2 |
- RESP 412 Principles of Aerosol & Gas Therapy | 3 |
- RESP 413 Respiratory Assessment & Therapeutics | 4 |
- RESP 414 Respiratory Care Techniques 2 | 3 |
- RESP 419 Respiratory Care in Alternate Sites | 2 |
- RESP 420 Arterial Blood Gas Analysis | 3 |
- RESP 421 Physiology of Mechanical Ventilation | 2 |
- RESP 422 Pharmacology | 2 |
- RESP 423 Infectious Diseases | 2 |
- RESP 424 Non-Infectious Diseases | 2 |
- RESP 425 Neonatology for the Respiratory Therapist | 2 |
- RESP 460 Clinical Practice 1 | 1 |
- RESP 461 Clinical Practicum 1 | 2 |

**RESPIRATORY THERAPY PROFESSIONAL PHASE II**

Following completion of Phase II coursework, the student will receive a respiratory therapy certificate, which will permit them to seek employment as a respiratory therapist and qualifies them to take the certification exam.

- RESP 415 Technical Aspects of Mechanical Ventilation | 3 |
- RESP 417 Respiratory Care Techniques 3 | 3 |
- RESP 462 Clinical Practice 2 | 1 |
- RESP 463 Clinical Practicum 2 | 3 |

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<tr>
<td>RESP 464</td>
<td>Clinical Practicum 3</td>
<td>10</td>
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<tr>
<td>RESP 495</td>
<td>Respiratory Care Research</td>
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**Total Hours**

67

**Req Related for Biology, BS**

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<td>For Biology Majors the G2 block of the Liberal Arts Core will be fulfilled by your required related coursework.</td>
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**CHEMISTRY**

A C- or higher in CHEM 111 and 112 is a pre-requisite for CHEM 235. A C- or higher in CHEM 231 is a pre-requisite for CHEM 232. Students interested in graduate or professional school should take CHEM 231 and 232.

- CHEM 111 Introductory Chemistry 1 | 4 |
- CHEM 112 Introductory Chemistry 2 | 4 |

**Mathematics for Pre-Athl, Resp Ther, Or Ppod**

Calculus I or Honors Calculus - Choose 1 of the following:

- MATH 161 Calculus 1 | 4 |
- MATH 163H Honors Calculus 1 | 5 |

**Physics**

Students who might be interested in attending graduate or professional school after completing their professional phase should also take PHYS 132 or 232.

Physics 1 with Algebra or Calculus (C- minimum) - Choose 1 of the following:

- PHYS 131 Physics 1 with Algebra | 4-5 |
- PHYS 231 Physics 1 with Calculus | 5 |

**Total Hours**

24-30