

# BIOLOGY, B.S. - RESPIRATORY THERAPY OPTION

## Major in Biology, BS

Code	Title	Hours
CORE COURSES		12
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		
<b>Total Hours</b>		<b>12</b>

## Appendix 1. Foundations of Biology

Code	Title	Hours
Foundations of Biology C- or Higher		
BIOL 101	Foundations of Biology	4

## Concentration in Respiratory Therapy

Code	Title	Hours
<b>REQUIRED RESPIRATORY THERAPY COURSES</b>		
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

RESP 464	Clinical Practicum 3	10
RESP 495	Respiratory Care Research	2
<b>Total Hours</b>		<b>67</b>

## Req Related for Biology, BS

Code	Title	Hours
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For Biology Majors the G2 block of the Liberal Arts Core will be fulfilled by your required related coursework.

### 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
Organic Chemistry - Choose 1 of the following options 1-2:		4-8
Option 1. Organic Chemistry I and II		
CHEM 231	Organic Chemistry 1	
CHEM 232	Organic Chemistry 2	
Option 2. Short Course in Organic Chemistry		
CHEM 235	Organic Chemistry	
CHEM 326	Biochemistry 1	4

### MATHEMATICS FOR PRE-ATHL, RESP THER, OR PPOD

Calculus I or Honors Calculus - Choose 1 of the following:		4-5
MATH 161	Calculus 1	
MATH 163H	Honors Calculus 1	

### 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:		4-5
PHYS 131	Physics 1 with Algebra	
PHYS 231	Physics 1 with Calculus	

<b>Total Hours</b>		<b>24-30</b>
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