# **BIOLOGY, B.S. - RESPIRATORY THERAPY OPTION**

Major in Biology, BS			
Code	Title	Hours	
CORE COURSES (C- or higher required)			
Foundation	s 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**

(	Code	Title	Hours
F	oundations of E	Biology C- or Higher	4
	BIOL 101	Foundations of Biology	

## **Concentration in Respiratory Therapy**

concentration in recopilatory rinerapy				
Code	Title	Hours		
REQUIRED RESPI	RATORY 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				
Student 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		

### RESPIRATORY THERAPY PROFESSIONAL PHASE II

Clinical Practice 1

Clinical Practicum 1

Pharmacology

Infectious Diseases

Non-Infectious Diseases

**RESP 422** 

**RESP 423** 

**RESP 424** 

RESP 425 RESP 460

**RESP 461** 

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.

Neonatology for the Respiratory Therapist

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
Total Hours	67	

## Req Related for Biology, BS

**Code** Title Hours
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 Chemist	ry - Choose 1 of the following options 1-2:	4-8
Option 1. Orga	nic Chemistry I and II	
CHEM 231	Organic Chemistry 1	
CHEM 232	Organic Chemistry 2	
Option 2. Shor	t Course in Organic Chemistry	
CHEM 235	Organic Chemistry	
CHEM 326	Biochemistry 1	4
MATHEMATICS F	OR PRE-ATHL, RESP THER, OR PPOD	
Calculus I or Hon	ors Calculus - Choose 1 of the following:	4-5
MATH 161	Calculus 1	
MATH 163H	Honors Calculus 1	
DHACICE		

#### **PHYSICS**

2

2

2

2

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 4-5 following:

<b>Total Hours</b>		24-30
PHYS 231	Physics 1 with Calculus	
PHYS 131	Physics 1 with Algebra	