

BIOLOGY (B.S.) PRE-PHYSICAL THERAPY TRACK, PRE-PHYSICIAN ASSISTANT TRACK, PRE-NURSING TRACK

Other Requirements/Offerings

Earning at least a "C" or better in all required BIO/BIOL courses.

Major Requirements

Code	Title	Hours
BIO 111 & BIOL 111	GENERAL BIOLOGY and GENERAL BIOLOGY LAB	4
BIO 112 & BIOL 112	GENERAL BIOLOGY and GENERAL BIOLOGY LAB	4
BIO 200 & BIOL 200	Introduction to Cell Biology and INTRO TO CELL BIOLOGY LAB	4
BIO 209 & BIOL 209	Principles of Genetics and Principles of Genetics Lab	4
BIO 313 & BIOL 313	INTRODUCTION TO MICROBIOLOGY and INTRODUCTION TO MICROBIOLOGY L	4
BIO 390	SEMINAR IN BIOLOGY (w)	1
CHEM 141 & CHML 141	GENERAL CHEMISTRY I and GENERAL CHEMISTRY LAB	4
CHEM 142 & CHML 142	GENERAL CHEMISTRY II and GENERAL CHEMISTRY II LAB	4
CHEM 241 & CHML 241	ORGANIC CHEMISTRY I and ORGANIC CHEMISTRY I LAB	4
CHEM 242 & CHML 242	ORGANIC CHEMISTRY II and ORGANIC CHEMISTRY II LAB	4
MATH 111 or MATH 103	COLLEGE ALGEBRA or College Algebra with Corequisite Support	3
MATH 112	PLANE TRIGONOMETRY	3
MATH 241	CALCULUS I WITH LABORATORY	3
Statistics Elective		3
PHY 201 & PHYL 201	BASIC PHYSICS I and BASIC PHYSICS LAB I	4
PHY 202 & PHYL 202	BASIC PHYSICS II and BASIC PHYSICS LAB II	4
Total Hours		57

Concentration

Code	Title	Hours
BIO 114	Introduction to Marine & Environmental Sciences	3
BIO 234 & BIOL 234	HUMAN ANATOMY & PHYSIOLOGY I and HUMAN ANATOMY & PHYSIOLOGY LAB	4
BIO 235 & BIOL 235	HUMAN ANATOMY & PHYSIOLOGY II and HUMAN ANATOMY & PHYSIOLOGY LAB	4
BIO 393	INTRO TO MEDICAL TERMINOLOGY	3
BIO 395 & BIOL 395 or CHEM 431	Principles of Biochemistry and Principles of Biochemistry Lab or BIOCHEMISTRY I	4

Biology Elective		3
Biology Elective (300-400 Level)		4
PSY 201	GENERAL PSYCHOLOGY	3
PSY 214	DEVELOPMENTAL PSYCHOLOGY	3
PSY 216	ABNORMAL PSYCHOLOGY	3
SOC 214	INTRODUCTN TO SOCIOLOGY	3
Total Hours		37

Other Prerequisite Requirements

- Provide evidence of observation in a minimum of two physical therapy clinical departments or practices for a total of 40 hours (additional hours and sites recommended).

Clinical Training (2 Years)

- An additional two (2) years of clinical training is required for the M.S. degree in Physical Therapy at an accredited health professional school.

Curriculum Map

Course	Title	Hours
Freshman		
Fall		
BIO 111 & BIOL 111	GENERAL BIOLOGY and GENERAL BIOLOGY LAB	4
CHEM 141 & CHML 141	GENERAL CHEMISTRY I and GENERAL CHEMISTRY LAB	4
ENG 104 or ENG 103	COMPOSITION I or English Composition I with Co-requisite Support	3
MATH 111 or MATH 103	COLLEGE ALGEBRA or College Algebra with Corequisite Support	3
UNIV 100	UNIVERSITY SUCCESS	2
Hours		16
Spring		
BIO 112 & BIOL 112	GENERAL BIOLOGY and GENERAL BIOLOGY LAB	4
CHEM 142 & CHML 142	GENERAL CHEMISTRY II and GENERAL CHEMISTRY II LAB	4
ENG 105	COMPOSITION II	3
MATH 112	PLANE TRIGONOMETRY	3
Pathway Option		3
Hours		17
Sophomore		
Fall		
BIO 115 & BIOL 115	GENERAL ZOOLOGY and GENERAL ZOOLOGY LAB	4
CHEM 241 & CHML 241	ORGANIC CHEMISTRY I and ORGANIC CHEMISTRY I LAB	4
MATH 241	CALCULUS I WITH LABORATORY	3
Humanities & Fine Arts Option		3
Pathway Option		3
Hours		17
Spring		
CHEM 242 & CHML 242	ORGANIC CHEMISTRY II and ORGANIC CHEMISTRY II LAB	4
BIO 119 & BIOL 119	GENERAL BOTANY and GENERAL BOTANY LAB	4
UNIV 200	CIVIC ENGAGEMENT	1
Humanities & Fine Arts Option		3
Pathway Option		3
Hours		15

Junior		
Fall		
BIO 318 & BIOL 313	INTRODUCTORY GENETICS and INTRODUCTION TO MICROBIOLOGY L	4
BIO 390	SEMINAR IN BIOLOGY (W)	1
PHY 201 & PHYL 201	BASIC PHYSICS I and BASIC PHYSICS LAB I	4
PSY 201	GENERAL PSYCHOLOGY	3
Humanities & Fine Arts Option		3
Hours		15
Spring		
BIO 392	INDEPENDENT STUDY (S)	2
PHY 202 & PHYL 202	BASIC PHYSICS II and BASIC PHYSICS LAB II	4
Social & Behavioral Science Option		3
General Elective		3
Hours		12
Senior		
Fall		
BIO 234 & BIOL 234	HUMAN ANATOMY & PHYSIOLOGY I and HUMAN ANATOMY & PHYSIOLOGY LAB	4
BIO 313 & BIOL 313	INTRODUCTION TO MICROBIOLOGY and INTRODUCTION TO MICROBIOLOGY L	4
PSY 214	DEVELOPMENTAL PSYCHOLOGY	3
Biology Elective		4
Hours		15
Spring		
BIO 235 & BIOL 235	HUMAN ANATOMY & PHYSIOLOGY II and HUMAN ANATOMY & PHYSIOLOGY LAB	4
PSY 216	ABNORMAL PSYCHOLOGY	3
SOC 214	INTRODUCTN TO SOCIOLOGY	3
Statistics Elective		3
Hours		13
Total Hours		120

Notes:

- Candidates that transfer 12 or more hours of college credit are exempt from UNIV 100 UNIVERSITY SUCCESS; however, the student must take 2 hours of general electives to replace the UNIV course.
- Online Graduation Clearance (**to be completed during the graduating semester only**).

Notes:

- Students may not take Biology, Math, Chemistry, or Physics for a general elective.
- Laboratory courses must be taken during the same semester as lectures for biology, chemistry, and physics courses unless approved by the department chair.

Student Learning Outcomes

- Students will demonstrate the ability to analyze primary scientific literature, interpret results (including graphs, tables, and charts), evaluate, and summarize findings, and present their analysis in written or oral form.
- Students will be able to compare the biotic and abiotic factors that shape major ecosystems and assess how changes in these factors would alter the boundaries between these habitats.
- Students will be able to explain the biochemical processes that carry out transfer of biological information from DNA and how these

processes are regulated and illustrate the principles of genetics and epigenetics to explain heritable traits in a variety of organisms.

- Students will be able to apply understanding of principles of how molecular and cell assemblies, organs, and organisms develop structure and carry out functions.
- Students will demonstrate the ability to inventory and differentiate the major systems of the human body and describe their function.