

# CHEMISTRY - BIOCHEMISTRY EMPHASIS REQUIREMENTS (BA/BS)

Code	Title	Units
<b>Major Requirements - 53 units</b>		
CHEM 102	GENERAL CHEMISTRY I	5
CHEM 104	GENERAL CHEMISTRY II	5
CHEM 184	INTRODUCTION TO CHEMISTRY	1
CHEM 251	ORGANIC CHEMISTRY	3
CHEM 260	INORGANIC CHEMISTRY	4
CHEM 261	ORGANIC CHEMISTRY LABORATORY	2
CHEM 352	QUANTITATIVE ANALYSIS	5
CHEM 370	PHYSICAL CHEMISTRY	3
CHEM 454	BIOCHEMISTRY OF MACROMOLECULES	3
CHEM 456	BIOCHEMISTRY OF METABOLISM AND SIGNALING	3
CHEM 458	ADVANCED BIOCHEMISTRY LABORATORY	2
CHEM 484	TOPICS IN CHEMISTRY	1
Select one of the following:		10
PHYSICS 180 & PHYSICS 181	PHYSICS FOR SCIENTISTS AND ENGINEERS I and PHYSICS FOR SCIENTISTS AND ENGINEERS II	
PHYSICS 140 & PHYSICS 141	PRINCIPLES OF PHYSICS I and PRINCIPLES OF PHYSICS II	
Select 6 units from the following (at least one course must come from Group A):		6
Group A:		
CHEM 262	ORGANIC CHEMISTRY LABORATORY	
CHEM 470	EXPERIMENTAL PHYSICAL CHEMISTRY	
CHEM 471	EXPERIMENTAL PHYSICAL CHEMISTRY	
CHEM 480	INSTRUMENTAL METHODS OF ANALYSIS	
CHEM 498R	INDEPENDENT STUDY - UNDERGRADUATE RESEARCH	
BIOLOGY 254	BIOTECHNOLOGY LABORATORY METHODS I	
BIOLOGY 311	MICROBIOLOGY	
BIOLOGY 345	ANIMAL PHYSIOLOGY	
BIOLOGY 364	BIOTECHNOLOGY LABORATORY METHODS II	
BIOLOGY 457	WILDLIFE ECOLOGY	
BIOLOGY 341	DEVELOPMENTAL BIOLOGY	
BIOLOGY 450	INTRODUCTORY ENTOMOLOGY	
Group B:		
CHEM 252	ORGANIC CHEMISTRY	
CHEM 371	PHYSICAL CHEMISTRY	
CHEM 455	ADVANCED ORGANIC CHEMISTRY	
BIOLOGY 363	MOLECULAR BIOLOGY	
BIOLOGY 412	IMMUNOLOGY	
BIOLOGY 442	ENVIRONMENTAL TOXICOLOGY	
BIOLOGY 446	ORGANIC EVOLUTION	

BIOLOGY 448	BIOINFORMATICS	
<b>Total Units</b>		<b>53</b>
<b>Code</b>	<b>Title</b>	<b>Units</b>
<b>Unique Requirements - 26 units</b>		
BIOLOGY 141	INTRODUCTORY BIOLOGY I	5
BIOLOGY 142	INTRODUCTORY BIOLOGY II	5
BIOLOGY 251	INTRODUCTION TO GENETICS	4
BIOLOGY 253	INTRODUCTION TO CELL BIOLOGY	3
MATH 253	CALCULUS AND ANALYTIC GEOMETRY I	5
MATH 254	CALCULUS AND ANALYTIC GEOMETRY II	4
<b>Total Units</b>		<b>26</b>

Milestones: (Periodic assessment test required)

Milestones: Major Field Exam and Exit Interview