

## BIOLOGY MAJOR WITH PRE-MEDICINE MAJOR

Four-year plan for students starting in even years

This is a suggested program guide. It is not to be interpreted as a contract. Changes may occur. Please see your program advisor before you register for courses. Updated 9/23

YEAR	FALL	SPRING
First Year	BENV100 Becoming a Scholar 3	Reading the Bible Competency 3
	Writing Well Competency 3	<b>CEM 122 General Inorganic Chemistry 2</b> 5
	<b>CEM 121 General Inorganic Chemistry 1</b> 5	<b>BIO 205 Invertebrate Zoology</b> 4
	<b>MAT 135 Calculus 1</b> 5	<b>MAT 136 Calculus 2</b> 5
	(or MAT 114 Pre-calculus – if needed) 4)	
	Total 15-16	Total 17
Second Year	Speaking and Listening Competency 3	Creative Expression Competency 3
	<b>BIO 230 Human Anatomy &amp; Physiology 1</b> 4	<b>BIO 231 Human Anatomy &amp; Physiology 2</b> 4
	<b>CEM 221 Organic Chemistry 1</b> 4	<b>CEM 222 Organic Chemistry 2</b> 4
	<b>PHY 211 Physics for Science/Engineering 1</b> 5	<b>PHY 212 Physics for Science/ Engineering 2</b> 5
	Total 16	Total 16
Third Year	Understanding Self and Society Competency 3	BENV200 Learning in Community 5
	<b>BIO 303 Genetics (offered even years only)*</b> 4	BENV300 Cross-cultural Experience 3
	<b>BIO 335 Cell Biology</b> 4	<b>BIO 135 Botany (typically offered odd years only)*</b> 4
	<b>CEM 326 Physical Chemistry 1 (offered even years only)*</b> 5	<b>CEM 341 Biochemistry (offered odd years only)*</b> 3
	Total 16	Total 15
Fourth Year	Living Well Competency 2-3	BENV400 Enduring Values Capstone 2
	Exploring the Past Competency 3	Religious Understanding Competency 3
	<b>BIO 330 General Ecology (offered odd years only)*</b> 4	<b>BIO 301 Microbiology</b> 4
	Electives 3-7	<b>BIO 315 Immunology (offered even years only)*</b> 3
		<b>CEM 230 Analytical Chemistry</b> 4
	Total 12-17	Total 16

\*Alternate year courses. Even/odd designation refers to calendar year (NOT to the year in which the academic year began).

**Boldface** print denotes major course requirement. A statistics class is also highly recommended. Other suggested elective courses include NTR225 Fundamentals of Nutrition and NTR340 Human Pathophysiology.

**Boldface and italics** print denotes the five extra courses added to the biology major for the pre-medicine major.

Total hours needed to complete graduation requirements are 124. (This includes 2 hours of Arts and Lecture credit.)

**Note:** This plan assumes that **Scientific Inquiry and Critical Analysis** competencies are met by the major. In general, competencies may be taken in any order. The exceptions are that Writing Well should be taken in the first year and Reading the Bible must be completed prior to taking the Religious Understanding competency. The timing of the remaining competencies is flexible and may be adjusted to accommodate desired elective courses.

**Introduction to Psychology** is often a prerequisite course required for further study in the medical field and should be taken for the Understanding Self and Society competency. **Introduction to Sociology** is also recommended.