

# Biomedical Science

Bachelor of Science

## Pre-Dentistry Concentration

The Biomedical Science major is designed for highly motivated students who are considering a career in health science areas such as medicine, dentistry or veterinary medicine. The major focuses on those disciplines of the natural sciences and mathematics which will assist students in their preparation for matriculation into professional or graduate schools.

### Career Options:

- Medical or Dentistry Careers (with graduate training)
- Public Health Careers
- Academic Research in University Settings
- Research and Product Development in Medical Supply and Pharmaceutical Industries
- Laboratory Technology

### Major Requirements:

Life Science w/Lab	Organic Chemistry I w/Lab
Methods in Biology	Organic Chemistry II w/Lab
Cell Biology	Calculus I
Evolution	Elementary Statistics
Genetics	General Physics I w/Lab
Senior Seminar	General Physics II w/Lab
General Chemistry I w/Lab	
General Chemistry II w/Lab	

### Concentration Requirements:

#### Pre-Dentistry:

- Anatomy and Physiology I
- Anatomy and Physiology II
- Vertebrate Zoology
- Microbiology
- Biochemistry
- Histology

### Additional Information:

Additional coursework may be required for admission into a specific school's program and entry into professional school may require a specific number of hours in related volunteer work.

### Department Contact:

**John G. Temple, Ph.D.**  
Professor of Biology  
Biomedical Sciences Program Coordinator  
jgtemple@ncwc.edu  
252.985.5160



## General Education Requirements

<b>I. Interdisciplinary Requirements</b>	<b>Credits</b>	<b>IV. Humanities Courses</b>	<b>Credits</b>
Ethics	3	Religion	3
International Studies	3	English Composition	6
<hr/>		Literature	3
Total Hours	6	Art, Music or Entertainment/Theatre	3
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<b>II. Science Courses</b>	<b>Credits</b>	Total Hours	15
Mathematics	3	<b>TOTAL GENERAL EDUCATION HOURS</b>	<b>41</b>
Biology, including lab	4		
Physics, Earth Science or Chemistry, incl. lab	4		
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Total Hours	11		
<b>III. Social Science Courses</b>	<b>Credits</b>		
History, Political Science	3		
Communication, Economics, Geography or Criminal Justice	3		
Psychology or Sociology	3		
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Total Hours	9		

Unless otherwise specified, transferred credits may be used to fulfill the general requirements at the Registrar's discretion.

## Major Requirements

	Credits		Credits
BIO 101 Life Science	3	CHM 301 Organic Chemistry I	3
BIO 102 Life Science Lab	1	CHM 302 Organic Chemistry I Lab	1
BIO 123 Methods in Biology	2	CHM 311 Organic Chemistry II	3
BIO 200 Cell Biology	3	CHM 312 Organic Chemistry II Lab	1
BIO 222 Evolution	3	MAT 121 Calculus I	3
BIO 303 Genetics	4	MAT 213 Elementary Statistics	3
BIO 412 Senior Seminar	3	PHY 211 General Physics I	3
CHM 111 General Chemistry I	3	PHY 212 General Physics I Lab	1
CHM 112 General Chemistry I Lab	1	PHY 221 General Physics II	3
CHM 121 General Chemistry II	3	PHY 222 General Physics II Lab	1
CHM 122 General Chemistry II Lab	1		

## Concentration Requirements

Pre-Dentistry:	Credits		Credits
BIO 231 Anatomy and Physiology I	4	BIO 316 Microbiology	4
BIO 232 Anatomy and Physiology II	4	CHM 321 Biochemistry	3
BIO 314 Vertebrate Zoology	4	BIO 408 Histology	4

*A customized plan will be developed for each student.*

### General Graduation Guidelines:

Total of 120 semester hours, 39 of which must be numbered 300 or 400.

(Other programs may require coursework beyond 120 semester hours.)

At least 9 semester hours of courses designated as writing intensive.

A declared major.

A cumulative GPA average of C (2.00) and at least a C average in the graduation major.