

**BACHELOR OF SCIENCE IN BIOCHEMISTRY**  
**(PRE-MEDICAL, PRE-DENTAL, PRE-VET, OR PRE-PHARMACOLOGY EMPHASIS)**  
 (130 credit hours required)

NAME \_\_\_\_\_

DATE \_\_\_\_/\_\_\_\_/\_\_\_\_

**RELIGION CORE**

**DEVELOPING BIBLICAL FAITH/LIFESTYLE**

- BIBL-110 Message of the New Testament (3) ..... ( )
- BIBL-111 Message of the Old Testament (3)..... ( )
- THEO-230 Intro. to Theology (3)..... ( )
- THEO-231 Intro. to Christian Ethics (3)..... ( )
- RELG-200 Bibl/Theo Foundations for Benevolence (1) ( )
- Christian Service (2)\* ..... ( )

SUBTOTAL (15 hours) ..... \_\_\_\_\_

\*Christian Service is not a course; the credit hours are earned by a combination of class, group, and individual service learning experiences.

**GENERAL EDUCATION CORE**

**ACQUIRING FUNDAMENTAL ACADEMIC SKILLS**

- ENGL-105 (4) and ENGL-110 (3)..... ( ) ( )
- OR ENGL-106 (3) and ENGL-110 (3)
- OR ENGL-110 (3) [Depends on placement]

- CISS-101 Intro to Computer-Based Systems (3) ..... ( )
- GNST-101 Freshman Seminar: Gateway (2) ..... ( )

**EXPLORING THE HUMANITIES**

- HUMN-201 Foundations of Western Culture (3) ..... ( )
- Two of the following (6)**
- HUMN-202 Rise of Europe (3) ..... ( ) ( )
- HUMN-301 Foundations of Modern World (3)
- HUMN-302 Modern Western Culture (3)
- HIST-221 / 222 Western Civilization I, II (3) (3)
- ENGL-221 Western Lit: Ancient to Renaissance (3)
- ENGL-222 Western Lit: Enlightenment to Postmodern (3)

**One of the following (3)**

- ARTS-244 / 245 Art History I, II (3) (3) ..... ( )
- THEA-331 / 332 Survey of Drama Literature I, II (3) (3)
- MUHL-211 Music in Culture (3)
- PHIL-241 Introduction to Philosophy (3)

**UNDERSTANDING CONTEMPORARY SOCIETY**

- HIST-212 Recent American History & Government (3)
- OR
- POLS-200 Understanding Contemporary Politics (3).... ( )

**Two of the following (6)**

- PSYC-200 Understanding Human Behavior (3)..... ( ) ( )
- SOCI-200 Understanding Contemporary Society (3)
- ECON-200 Understanding Economic Issues (3)

**RESPECTING THE NATURAL WORLD**

- PHED-100 Healthy & Effective Lifestyles (1) ..... ( )

**SEEKING A GLOBAL PERSPECTIVE**

- ANTH-200 Global Perspectives Seminar (1)..... ( )
- GNST-250-253 Cross Cultural Experience (1-3)..... ( )
- LING-201 Intro Language and Culture (3)..... ( )

SUBTOTAL (35/41 hours) ..... \_\_\_\_\_

**SPECIALTY AREA\***

- CHEM-111 General Chemistry I (4) ..... ( )
- CHEM-112 General Chemistry II (4) ..... ( )
- CHEM-281 Organic Chemistry I (3) ..... ( )
- CHEM-282 Organic Chemistry II (3) ..... ( )
- CHEM-289 Organic Chemistry Lab (3) ..... ( )
- CHEM-321 Biochemistry I (3)..... ( )
- CHEM-322 Biochemistry II (3)..... ( )
- CHEM-323 Biochemistry III (3)..... ( )
- CHEM-329 Biochemistry Lab (3)..... ( )
- CHEM-351 Quantitative Analysis (4)..... ( )
- CHEM-431 Physical Chemistry I (3)..... ( )
- CHEM-439 Physical Chemistry Research (3) ..... ( )

SUBTOTAL (39 hours) ..... \_\_\_\_\_

**COLLATERAL REQUIREMENTS\***

- BIOL-109 Principles of Biology I (4) ..... ( )
- BIOL-242 Genetics (4) ..... ( )
- BIOL-285 Pre-professional Seminar (2)..... ( )
- BIOL-403 Molecular Biology (4) ..... ( )
- HSCI-495 Faith and Practice (3) ..... ( )
- PHYS-281 General Physics I (4)..... ( )
- PHYS-282 General Physics II (4)..... ( )
- MATH-144 Pre-calculus (4)\*\* ..... ( )
- MATH-261 Elem. Probability & Statistics (4)..... ( )
- MATH-271 Calculus I (4)..... ( )

Choose one elective from the following courses (2 – 4 hrs):

- BIOL-306 Comparative Vertebrate Anatomy (4)
- BIOL-351 Human Physiology (3)
- BIOL-405 Virus Biology (2)
- BIOL-431 Structural Histology (3)
- BIOL-432 Immunology (3)..... ( )

SUBTOTAL (39/41 hours) ..... \_\_\_\_\_

\*\*MATH-111/112 may substitute for MATH-144

**GENERAL ELECTIVES**

**(upper-level biology courses recommended)**

- \_\_\_\_\_ ( )
- \_\_\_\_\_ ( )
- \_\_\_\_\_ ( )

SUBTOTAL (0/2 hours) ..... \_\_\_\_\_

**ACADEMIC ASSESSMENT**

- GNST-400 Academic Assessment (0) ..... ( )

**\* Must earn a grade of B- or better to fulfill all specialty area and collateral requirements in this major.**

## SUGGESTED FOUR YEAR SEQUENCE OF STUDY FOR BACHELOR OF SCIENCE IN BIOCHEMISTRY (Pre-Medical, Pre-Dental, Pre-Vet, or Pre-Pharmacology)

(The two-hour Christian Service requirement is not listed, but is spread throughout the four years.)

### FRESHMAN YEAR

<u>Course</u>	<u>Hours</u>
College Writing/Workshop .....	3/4
Rhetoric and Research .....	3
General Chemistry .....	8
Message of New and Old Testament .....	6
Freshman Seminar: Gateway .....	2
Pre-Calculus* .....	4
Calculus I .....	4
Healthy Lifestyles .....	1
Intro to Computer-Based Systems .....	3
Total	34/35

### SOPHOMORE YEAR

<u>Course</u>	<u>Hours</u>
Bib/Theo Foundations of Benevolence .....	1
Intro. to Theology .....	3
Intro. to Christian Ethics .....	3
Organic Chemistry .....	9
General Physics .....	8
Principles of Biology I .....	4
Genetics .....	3
Biochemistry .....	3
Total	34

### JUNIOR YEAR

<u>Course</u>	<u>Hours</u>
Probability & Statistics .....	4
Pre-professional Seminar .....	2
Molecular Biology .....	4
Quantitative Analysis .....	4
Biology Elective .....	2/4
Global Perspectives Seminar .....	1
Cross-Cultural Experience .....	1/3
Contemporary Society Option 1 .....	3
Language and Culture .....	3
Biochemistry .....	9
Total	33/36

### SENIOR YEAR

<u>Course</u>	<u>Hours</u>
Foundations of Western Culture .....	3
Humanities Option .....	3
Physical Chemistry .....	3
Physical Chemistry Research .....	3
Faith and Practice (Capstone) .....	3
U S History/Politics Option .....	3
Contemporary Society Option 2 .....	3
Humanities Options .....	6
General Electives .....	2
Total	29

\*MATH-111/112 may be substituted.