# Biology, B.S. *major*
# Medical Sciences Field Of Emphasis

Required Credits: 76
Required GPA: 2.25

**I REQUIRED BIOLOGY CORE COURSES**

COMPLETE THE FOLLOWING COURSES:

- BIOL 1211 Introductory Biology I (4 credits)
- BIOL 1212 Introductory Biology II (4 credits)
- BIOL 2360 Genetics (4 credits)
- BIOL 2610 General Ecology (3 credits)

**II REQUIRED MEDICAL SCIENCES CORE COURSES**

COMPLETE THE FOLLOWING COURSES:

- BIOL 3250 Comparative Vertebrate Anatomy (4 credits)
- BIOL 3260 Medical Physiology (4 credits)
- BIOL 3580 Immunology (4 credits)
- BIOL 3710 Microbiology (4 credits)

**III CAPSTONE EXPERIENCE**

This requirement may be completed in one of the following ways: A OR B

A.
COMPLETE A TWO-SEMESTER, 4 CREDIT RESEARCH COURSE (2 CREDITS PER SEMESTER)--ADVANCED LABORATORY PROJECTS IN
BIOLOGY (BIOL 4894 AND BIOL 4895) OR ADVANCED FIELD PROJECTS IN BIOLOGY (BIOL 4896 AND BIOL 4897)

B.
COMPLETE SOME OTHER CAPSTONE EXPERIENCE APPROVED BY
YOUR BIOLOGY ACADEMIC ADVISOR AND THE DEPARTMENT

**IV REQUIRED MEDICAL SCIENCES ELECTIVES**

SELECT 12 CREDITS OF ELECTIVES FROM THE FOLLOWING:

- BIOL 2110 Human Anatomy and Physiology (5 credits)
- BIOL 3380 Molecular Genetics: Theory and Practice (4 credits)
- BIOL 3590 Cell Biology (4 credits)
- BIOL 4210 Parasitology (4 credits)
- BIOL 4270 Histology (4 credits)
- BIOL 4360 Developmental and Tumor Biology (4 credits)
- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4471 Biochemistry Laboratory I (1 credit)

**V REQUIRED COURSES IN RELATED FIELDS**

A. SELECT 1 OF THE FOLLOWING GROUPS:

*GROUP 1:*

- CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)

*GROUP 2:*

- CHEM 1111 General Chemistry I (4 credits)
- CHEM 1112 General Chemistry II (4 credits)

B. SELECT 1 OF THE FOLLOWING COURSES:

- STAT 2610 Applied Statistics (4 credits)
- PSY 3401 Basic Statistics for Research (4 credits)

C. SELECT 1 OF THE FOLLOWING GROUPS:

*GROUP 1:*

- PHYS 2101 Physics I (5 credits)
- PHYS 2102 Physics II (5 credits)

*GROUP 2:*

- PHYS 1101 General Physics I (4 credits)
- PHYS 1102 General Physics II (4 credits)

D. COMPLETE THE FOLLOWING 4 COURSES:

- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)