# University of the Incarnate Word

# Bachelor of Science in Biology

School of Mathematics, Science and Engineering

## PROGRAM OVERVIEW

Both the Bachelor of Arts (B.A.) and the Bachelor of Science (B.S.) in Biology at the School of Mathematics, Science and Engineering are designed to ready students for a variety of professions in education, biomedical research, careers in business, nonprofit agencies and government, and for graduate programs in science, health professions or medical school.

The B.S. in Biology is the traditional Biology degree for students who intend to apply to professional, health professions and graduate schools. Courses in immunology, virology, medical microbiology and bioethics help ensure they are well prepared.

The B.S. is a 120-hour program that incorporates a broad range of disciplines including evolution, cellular and molecular biology, genetics, topics in animal and human physiology, microbiology and ecology.

Students can expect a rigorous and dynamic program with extensive lab and hands-on learning. Courses like anatomy and physiology, ecology, cell biology and molecular genetics cover a broad scope of study and ensure students a comprehensive education. UIW Honors students also have an opportunity for advanced research.

The Biology department provides supportive coursework for a variety of health professional majors and offers courses that fulfill the core curriculum requirement of laboratory science for students in all majors.

# **ADMISSION REQUIREMENTS**

The requirements for admission to the B.S. in Biology program are the same as the requirements for admission to the University of the Incarnate Word.

#### **CONTACT**

UIW Admissions (210) 829-6005 admission@uiwtx.edu





# B.S. in Biology

# **FRESHMAN YEAR**

#### Fall

ENGL 1311: Composition I (3 hours)

RELS Core Course 1305, 1315, 1325, 1335

(3 hours)

BIOL 1402: Biology for Majors I and Lab (4 hours)

CHEM 1301: Chemical Principles I (3 hours)

CHEM 1101: Chemical Principles I Lab (1 hours)

FYES 1211: First Year Experience Seminar (2 hours)

**Total Hours: 16** 

#### Spring

ENGL 1312: Composition II (3 hours)

BIOL 1403: Biology for Majors II and lab (4 hours)

CHEM 1302: Chemical Principles II (3 hours)

CHEM 1102: Chemical Principles II lab (1 hour)

PHIL 1381: Intro to Philosophy (3 hours)

PEHP Activity Course (1 hour)

Total Hours: 15

## **SOPHOMORE YEAR**

#### Fall

ENGL 2310: World Literature (3 hours)

MATH 2303 or 2312 (3 hours)

CHEM 2311 Organic Chemistry I (3 hours)

CHEM 2111 Organic Chemistry I Lab (1 hours)

BIOL 2321: Anatomy and Physiology I (3 hours)

BIOL 2121: Anatomy and Physiology I Lab (1 hour)

Total: 14 Hours

#### Spring

Modern Language I (3 hours)

Social Science (3 hours)

CHEM 2312: Organic Chemistry II (3 hours)

CHEM 2112: Organic Chemistry II Lab (1 hour)

BIOL 2322: Anatomy and Physiology II (3 hours)

BIOL 2122: Anatomy and Physiology II Lab (1 hour)

History (3 hours)

Total Hours: 17

# **JUNIOR YEAR**

#### Fall

Modern Language II (3 hours)

PHYS 1301 or 2305 Physics I (3 hours)

PHYS 1101 or 2105 Physics I Lab (1 hours)

BIOL 3311: Cell Biology (3 hours)

BIOL 3442: Ecology and Lab (4 hours)

#### Spring

PHYS 1301 or 2305 Physics I (3 hours)

PHYS 1101 or 2105 Physics I Lab (1 hours)

BIOL 3361: Genetics (3 hours)

BIOL 3202: Research Methods-Cell/Molecular

Genetics (2 hours)

BIOL Elective (3000-4000 if needed) (4 hours)

BIOL Elective (3000-4000 if needed) (3 hours)

Total Hours: 16

## **SENIOR YEAR**

## Fall

UIW Upper Level Religion or Philosophy (3 hours)

BIOL Elective (3000-4000) (4 hours)

BIOL Elective (3000-4000) (4 hours)

General Elective (3000-4000 if needed) (3 hours)

**Total Hours: 14** 

**Total Hours: 14** 

#### Spring

Fine Arts Elective (3 hours)

BIOL Elective (3000-4000) (4 hours)

BIOL Elective (3000-4000) (4 hours)

General Elective (3 hours if needed)

Total Hours: 14

A minimum of 120 hours are needed to complete the B.S. in Biology.

