A – GENERAL EDUCATION CORE – 42 HOURS
   Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education core requirements.

   Required

020 - Mathematics – 3 hours
   Choose one:
   MATH 1342 Elementary Statistical Methods (or MATH 1387 Honors)
   MATH 1343 Introduction to Biostatistics (or MATH 1388 Honors)

030 - Life and Physical Sciences – 6 hours
   CHEM 1311 General Chemistry I
   CHEM 1312 General Chemistry II

040 - Language, Philosophy and Culture – 3 hours
   Choose from:
   PHIL 1301 Introduction to Philosophy (or PHIL 1387 Honors)
   PHIL 1366 Philosophy and History of Science and Technology

090 - Integrative and Experiential Learning – 2 hours
   CHEM 1111 General Chemistry I Lab
   CHEM 1112 General Chemistry II Lab

B – MAJOR REQUIREMENTS – 58 HOURS (24 advanced minimum)

1 – Biology Core – 42 hours (18 advanced)
   BIOL 1406 General Biology I (or BIOL 1487 Honors)
   BIOL 1407 General Biology II (or BIOL 1488 Honors)
   BIOL 3301 Biological Evolution
   BIOL 3409 Ecology
   BIOL 3413 Genetics
   BIOL 4400 Biological Communication (Capstone)
   CHEM 2323 Organic Chemistry I
   CHEM 2123 Organic Chemistry I Lab
   CHEM 2325 Organic Chemistry II
   CHEM 2125 Organic Chemistry II Lab
   CHEM 3303 Biochemistry
   PHYS 1401 General Physics I
   PHYS 1402 General Physics II

2 – Biology Electives – 16 hours (6 advanced minimum)

   a – Cell/Molecular Course
   Choose at least one:
   BIOL 3401 General Microbiology
   BIOL 3403 Medical Microbiology and Immunology
   BIOL 3412 Cell Biology
   BIOL 3415 Molecular Biology
   BIOL 4313 Endocrinology
   BIOL 4330 Molecular Evolution
   BIOL 4333 Immunology
   BIOL 4361 Neuroscience I: Cellular and Molecular
   BIOL 4413 General Virology
   BIOL 4417 Bacterial Genetics
   BIOL 4418 Electron Microscopy
BIOL 4421 Biotechnology

**b – Developmental/Morphology**

*Choose at least one:*
- BIOL 2428 Comparative Vertebrate Anatomy
- BIOL 3405 Histology
- BIOL 3406 Developmental Mechanisms
- BIOL 3407 Comparative Embryology
- BIOL 3408 Plant Morphology
- BIOL 4420 Plant Anatomy

**c – Organismal/Environmental**

*Choose at least one:*
- BIOL 3404 Conservation Biology
- BIOL 3414 Invertebrate Zoology
- BIOL 4316 Environmental Toxicology
- BIOL 4318 Ethnobotany
- BIOL 4319 Medical Entomology
- BIOL 4388 Global Change Ecology
- BIOL 4402 Marine Zoology
- BIOL 4403 Introduction to Remote Sensing Technology
- BIOL 4404 Ichthyology
- BIOL 4407 Animal Parasitology
- BIOL 4408 Plant Pathology
- BIOL 4409 Herpetology
- BIOL 4410 Marine Botany
- BIOL 4412 Ornithology
- BIOL 4414 Plant Taxonomy
- BIOL 4415 Entomology
- BIOL 4416 Mammalogy
- BIOL 4419 Aquatic Entomology
- BIOL 4424 Microbial Ecology
- BIOL 4426 Marine Ecology
- BIOL 4427 Marine Animal Field Studies
- BIOL 4432 Animal Behavior

**d – Physiology**

*Choose at least one:*
- BIOL 1322 Human Nutrition
- BIOL 2401 Anatomy and Physiology I
- BIOL 2402 Anatomy and Physiology II
- BIOL 3310 Neurobiology
- BIOL 3345 Animal Nutrition
- BIOL 3411 Mammalian Physiology
- BIOL 4317 Disease Epidemiology
- BIOL 4362 Neuroscience II: System, Developmental, and Disorders
- BIOL 4405 Plant Physiology
- BIOL 4411 Ecological Physiology of Animals
- BIOL 4422 Neurobiology Methods

**C – SUPPORT COURSES – 6 HOURS**
- PSYC 2301 General Psychology
- SOCI 1301 Introduction to Sociology

**D – FREE ELECTIVES – 14 HOURS (8 advanced minimum)**

*Pre-medical/Pre-dental/Pre-optometry/Pre-veterinary students are strongly encouraged to take CHEM 2325/CHEM 2125 Organic Chemistry II, CHEM 3303 Biochemistry, and PHYS 1402 General Physics II.*
TOTAL CREDIT HOURS FOR GRADUATION – 120 HOURS
TOTAL ADVANCED HOURS – 42 HOURS

ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:

Admission requirements
Admission requirements to this program: BIOL 1406 (or BIOL 1487 Honors), BIOL 1407 (or BIOL 1488 Honors), and CHEM 1311/CHEM 1111 with a ‘C’ or better grade in all of these courses and Department approval.

Graduation requirements
In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.