*This program leads to a profession which requires an occupational license as defined under Texas Occupations Code 58.001 This requires that all applicants seeking to become licensed must undergo a criminal background check prior to licensure. Students in this program should check with the College of Education and P-16 Integration on the requirements for a criminal background check prior to student teaching.*

*The Department of Biology is committed to excellence in instruction, scholarly accomplishment, research, professional service, and student success. The Department provides a broad-based undergraduate education in Biology so as to give students the opportunity to pursue a career best-suited to their interests and abilities. Graduates are prepared to enter the workforce or continue their education in graduate or professional school. The Department provides rigorous pre-professional preparation for students seeking careers in biological sciences and health professions.*

*The Department also provides a service function to the University by providing a means for students to fulfill their science requirement. Non-majors receive instruction in scientific methods, a general overview of biology, new discoveries, and the importance of biology in society. An M.S. degree program provides the opportunity for advanced study, specialization, and research. The program prepares students for further graduate study at the doctorate level and for careers in the biological sciences and related disciplines.*

*The Department of Biology is committed to the discovery of new knowledge through research that is conveyed to professional and lay constituencies through publication and presentation and participation in policy decision-making.*

*The Department of Biology also engages the community through outreach programs, continuing education, educational leadership, and collaborations with local school districts and governmental agencies. Faculty members are also encouraged to take leadership roles in societies of their research specialties.*

## 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

MATH 2413 Calculus I (or MATH 2487 Honors) three-hour lecture

#### 030 - Life and Physical Science – 6 hours

*Choose one pair:*

PHYS 1401 General Physics I
PHYS 1402 General Physics II

PSCI 1421 Physical Science I
PSCI 1422 Physical Science II

#### 090 - Integrative and Experiential Learning – 3 hours

*Choose labs corresponding to Life and Physical Science section, and complete:*

CHEM 1111 General Chemistry I Lab

## B – MAJOR REQUIREMENTS – 60 HOURS (33 advanced)

### 1 – Life Sciences Foundation – 54 hours (27 advanced)

ASTR 1401 Introduction to Astronomy I
BIOL 1406 General Biology I (or BIOL 1487 Honors)
BIOL 1407 General Biology II (or BIOL 1488 Honors)
ENVR 1401 Introduction to Environmental Science I
BIOL 3301 Biological Evolution
BIOL 3330 Functions and Modeling
BIOL 4392 Research Methods in Science and Mathematics Classroom
BIOL 4400 Biological Communication (Capstone)
CHEM 1311 General Chemistry I
GEOG 2313 Principles of Geography Physics Elementary
GEOL 1403 Physical Geology
GEOL 3401 Geomorphology
GEOL 3405 Oceanography
MATE 3305 Fundamentals of Statistics and Probability
MATH 2413 Calculus I (or MATH 2487 Honors) one-hour lecture

PHIL 3317 Perspectives on Science and Mathematics

**2 – Life Science Electives – 6 hours (6 advanced)**

*Choose from:*

BIOL 3404 Conservation Biology
BIOL 3409 Ecology
BIOL 3413 Genetics
GEOL 4403 Sedimentology and Stratigraphy
GEOL 4302 Environmental Geology
PSCI 3310 Planter Earth and Its Place

**C – UTEACH CERTIFICATION – 21 HOURS (19 advanced)**

*Area of Certification: Life Science (4-8)*

UTCH 1101 Inquiry Approaches to Teaching
UTCH 1102 Inquiry-Based Lesson Design
UTCH 3301 Knowing and Learning in Mathematics and Science
UTCH 3302 Classroom Interactions
UTCH 3303 Project-Based Instruction
UTCH 4101 Apprentice Teaching Seminar
UTCH 4601 Apprentice Teaching
READ 4305 Disciplinary Literacy in Content Area Classrooms

## TOTAL CREDIT HOURS FOR GRADUATION – 123 HOURS
## TOTAL ADVANCED HOURS – 52 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:

### Progression requirements

Admission to the College of Education and P-16 Integration is required for participation in Apprentice Teaching and Seminar (UTCH 4101, 4601). Students unable to be admitted to UTCH 4601 and UTCH 4101 will be required to substitute 4 advanced hours, as recommended by advisor.

### Graduation requirements

1. Minimum GPA of 2.75 is required for graduation. BIOL 1406 (or BIOL 1487 Honors), BIOL 1407 (or BIOL 1488 Honors), CHEM 1311/1111, CHEM 1312/1112, UTCH 1101, UTCH 1102, UTCH 3301, UTCH 3302, UTCH 3303, UTCH 4101, UTCH 4601 with a grade of 'C' or better grade in all of these courses; and approval of UTeach portfolio are required for graduation.
2. In addition to the graduation requirements listed in the UTRGV 2018-2019 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.