

BACHELOR OF SCIENCE- BIOLOGICAL SCIENCES

Ecology/Microbiology/Aquatic/Marine Specialization
2019-2020 Degree Plans

| University Core Requirements (43* Hours) | UHCL Course Title | TCCNS* | CODE |
|--|--|-----------|------|
| Communications (6 hours): | WRIT 1301—Composition I (<i>Grade must be “C-” or better</i>) | ENGL 1301 | 010 |
| | WRIT 1302—Composition II (<i>Grade must be “C-” or better</i>) | ENGL 1302 | 010 |
| Mathematics (4* hours): | MATH 2413—Calculus I (<i>Grade must be “C-” or better</i>) | MATH 2413 | 020 |
| Three (3) hours of Calculus will count toward the University Core and one (1) hour will count toward the Major | | | |
| Life and Physical Sciences (6 hours): | CHEM 1311—General Chemistry I (<i>lecture, Grade must be “C” or better</i>) | CHEM 1311 | 030 |
| | CHEM 1312—General Chemistry II (<i>lecture, Grade must be “C” or better</i>) | CHEM 1312 | 030 |
| Language, Philosophy, and Culture (3 hours): | Choose ONE course from the core approved list | | 040 |
| Creative Arts (3 hours): | Choose ONE course from the core approved list | | 050 |
| U.S. History (6 hours): | HIST 1301—U.S. History I | HIST 1301 | 060 |
| | HIST 1302—U.S. History II | HIST 1302 | 060 |
| Government/Political Science (6 hours): | POLS 2305—Federal Government | GOVT 2305 | 070 |
| | POLS 2306—Texas Government | GOVT 2306 | 070 |
| Social/Behavioral Science (3 hours): | Choose ONE course from the core approved list | | 080 |
| Component Area Option (6 hours): | COMM 1315—Public Speaking | SPCH 1315 | 090 |
| | PSYC 1100—Learning Frameworks | PSYC 1100 | 090 |
| | CHEM 1111—Lab General Chemistry I (<i>Grade must be “C” or better</i>) | CHEM 1111 | 090 |
| | CHEM 1112—Lab for General Chemistry II (<i>Grade must be “C” or better</i>) | CHEM 1112 | 090 |

Major Requirements (44 hours)

UHCL Course Title

Required minimum grade is “C-” in the following classes:

STAT 3308—Computational Statistics

WRIT 3315—Advanced Technical Writing

Required minimum grade for all remaining Major Requirements is “C”. Grades of “C-” and below are not accepted.

BIOL 1306/1106—Biology for Science Majors I & Lab I

BIOL 1306/1106 030/090

BIOL 1307/1107—Biology for Science Majors II & Lab II

BIOL 1307/1107 030/090

BIOL 3341/3141—Molecular Genetics & Lab

BIOL 4311—Ecology

BIOL 4278—Seminar in Biology

BIOL 4341/4242—Biochemistry I and Lab

PHYS 1301/1101—College Physics I and Lab

PHYS 1301/1101 030/090

PHYS 1302/1102—College Physics II and Lab

PHYS 1302/1102 030/090

CHEM 2323/2123—Organic Chemistry I and Lab

CHEM 2323/2123

CHEM 2325/2125—Organic Chemistry II and Lab

CHEM 2325/2125

Specialization Requirements (23 - 24 hours)

UHCL Course Title

Required minimum grade for Specialization Requirements is “C”. Grades of “C-” and below are not accepted.

BIOL 2321/2121—Microbiology for Science Majors & Lab

BIOL 2321/2121

BIOL 3313/3113 or BIOL 2428 or BIOL 4313/4113
Plant Anatomy & Lab, Vertebrate Zoology (includes lab)
or Biology of Fishes & Lab

BIOL 3333—Environmental Biology

BIOL 4323—Field Biology

BIOL 4344 or 4343—Comparative Animal Physiology or Plant Physiology

Choose two of the following (6 hours): BIOL 3311, 4325, 4314, 4334, 4349

Specialization Electives (10 hours)

Elective hours required depend on two classes chosen in Specialization Requirements above.

Required minimum grade is "C-" for all Specialization Electives

Choose from BIOL 4327, 3335, 4305, 4361, 4347, 4253, 4391, 4189, 4289, 4389 or other courses from list above

General Degree Requirements

- Students must complete at least 120 semester credit hours. A minimum of 45 hours of the 120 semester hours must be advanced (3000-4000 level) course work according to the requirements of the respective major.
- Students must complete the University Core Curriculum requirements (refer to Core Curriculum Requirements in the UHCL Catalog).
- Students must fulfill the statutory requirements of the Texas State Education Code, including the following:
 - Six hours of U.S. History (three hours may be Texas History).
 - Six hours of Constitutions of the United States and Texas.
- Students must demonstrate writing proficiency by completing nine hours of lower-level (1000-2000 level) and upper-level (3000-4000 level) English composition course credit with a minimum grade of "C-" or better. Some majors may require higher grades in English composition.
- Students must complete at least 25% of the credit hours required for the degree (i.e., 30 semester credit hours for a 120 credit hour program) through instruction offered by UHCL to fulfill the Southern Association of Colleges and Schools (SACS) residency requirements.
- Students must complete the final 30 semester hours of 3000 and 4000 level course work in residence at UHCL.
- Students must complete a minimum of 12 semester credit hours of upper-level (3000-4000 level) coursework in the major in residence at UHCL.
- Students must have a cumulative GPA of 2.000 on course work completed at UHCL with grades of "C" or better on at least 30 hours of resident upper-level work. Grades of "C-" or below cannot be applied toward the 30 hours of resident upper-level work.