

# ACADEMIC MAP

## Ecology Track - Biology Bachelor of Science



FINISH IN



### First Year

Fall		Hours
BIOL 1406	Biology I	4
CHEM 1411	General Chemistry I	4
ENGL 1301	Writing and Rhetoric I	3
UNIV 1101	University Seminar I	1
University Core Curriculum		3
<b>Hours</b>		<b>15</b>

### Spring

BIOL 1407	Biology II	4
CHEM 1412	General Chemistry II	4
ENGL 1302	Writing and Rhetoric II	3
UNIV 1102	University Seminar II	1
University Core Curriculum		3
<b>Hours</b>		<b>15</b>

### Summer

MATH 2413	Calculus I	4
University Core Curriculum		3
University Core Curriculum		3
<b>Hours</b>		<b>10</b>

### Second Year

#### Fall

BIOL 2416	Genetics	3-4
or BIOL 2421	or Microbiology	
or BIOL 2371	or Principles of Evolution	
CHEM 3411	Organic Chemistry I	4
University Core Curriculum		3
University Core Curriculum		3
<b>Hours</b>		<b>13-14</b>

#### Spring

BIOL 2416	Genetics	3-4
or BIOL 2421	or Microbiology	
or BIOL 2371	or Principles of Evolution	
CHEM 3412	Organic Chemistry II	4
BIOL 2300	Science Communication	3
University Core Curriculum		3
<b>Hours</b>		<b>13-14</b>

### Third Year

#### Fall

BIOL 2416	Genetics	3-4
or BIOL 2421	or Microbiology	
or BIOL 2371	or Principles of Evolution	
BIOL 3428	Principles of Ecology	4
BIOL Core Topical Area Requirement		4
Upper Level BIOL Electives		4
<b>Hours</b>		<b>15-16</b>

#### Spring

MATH 3342	Applied Probability and Statistics	3
BIOL Core Topical Area Requirement		4
Ecology CT Core Advanced Ecology		4
Upper Level BIOL Electives		4
<b>Hours</b>		<b>15</b>

### Fourth Year

#### Fall

BIOL Core Topical Requirement		4
Ecology CT Core Advanced Ecology		4
Upper Level BIOL Electives		4
<b>Hours</b>		<b>12</b>

#### Spring

Upper Level BIOL Electives		12-14
<b>Hours</b>		<b>12-14</b>
<b>Total Hours</b>		<b>120-125</b>

This is not an official degree plan. It is a guideline for planning your courses. To access a copy of this academic map please visit [tamucc.edu/academics/planning/academic-advising/](http://tamucc.edu/academics/planning/academic-advising/)



# CAREER MAP

## BIOLOGY - ECOLOGY TRACK

### *Bachelor of Science*



The biology program provides diverse training for careers in the biological sciences. The biology curriculum includes content courses required for teacher certification in life science, acceptance to post-graduate studies, and pre-professional studies in preparation for admission to professional schools.

Students will acquire content and skills to enter a variety of biology-related careers such as research, marine biology, wildlife and coastal management, environmental protection, laboratory technician, biotechnology industry, medical or environmental microbiology, technical writing, pharmaceutical sales, careers in the medical, dental, and allied health fields, and science education.

Field and laboratory courses emphasize the development of practical skills in using special materials and equipment. Focus is on enhancement of critical thinking skills, which will prepare the student for careers in the biological sciences as well as in other general areas of employment. The undergraduate biology degree has six tracks, fitting a wide variety of student interests and career goals. These tracks include: Cellular & Molecular Biology, Ecology, Integrative Biology, Marine Biology, Microbiology, Organismal Biology. The biology core provides students with a broad biological background and includes coursework in four key areas:

mathematics, the chemistry of life/cell biology, form and function, and organismal biology. In each of these areas students select one course from a list of appropriate courses, depending on their interests and choice of biology career track. The biology career track areas are: (A) Ecology, (B) Marine Biology, (C) Cell/Molecular Biology, (D) Microbiology, (E) Organismal Biology and (F) Integrative Biology.

## CONTACT INFORMATION

### Career Counselor:

Career and Professional Development Center  
UC 304 | 361.825.2628  
career.center@tamucc.edu

### Internship Coordinator:

Dr. Kim Withers  
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### Department Contact:

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kim.withers@tamucc.edu

## ADDITIONAL SOURCES OF INFORMATION

1. American Fisheries Society
2. Association for the Sciences of Limnology and Oceanography
3. Society for Marine Mammalogy

## STUDENT ORGANIZATIONS

- American Cetacean Society Student Coalition
- Pre-Veterinary Society
- SACNAS Chapter at Texas A&M University - Corpus Christi
- Pre-Dental Society
- American Medical Student Association
- Sea Turtle Club
- American Fisheries Society
- Indian Student Association
- Islander Green Team
- Health Sciences Association
- Student Council of Math and Science Teachers

## CAREER OPTIONS

- |                                                                    |                                   |
|--------------------------------------------------------------------|-----------------------------------|
| • Researcher                                                       | • Pharmaceutical Sales            |
| • Marine Biologist                                                 | • Laboratory Technician           |
| • Medical Microbiologist                                           | • Science Teacher                 |
| • Environmental Biologist                                          | • Wildlife and Coastal Management |
| • Professional School (Med school, dental school, optometry, etc.) |                                   |

## SKILLS/ATTRIBUTES

- Communication Skills
- Research
- Ability to use scientific equipment and organize and maintain accurate records
- Aptitude for scientific inquiry and problem solving
- Ability to organize, analyze and interpret scientific data
- Conduct and clearly explain scientific research
- Teamwork