CATALOG YEAR 2024-2025

ACADEMIC MAP

Biology, BS - Grades 7-12
Life Science Education Concentration
Teaching Certification

TEXAS A&M UNIVERSITY CORPUS CHRISTI | FINISH IN 4

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
Social and Behavioral Sciences Core Requirement		3
	Hours	**15**

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
MATH 2413	Calculus I	4
	Hours	**16**

Second Year

Fall		
BIOL 2371 or BIOL 2416 or BIOL 2421	Principles of Evolution or Genetics or Microbiology	3-4
CHEM 3411	Organic Chemistry I	4
ENGL 2316 or ENGL 2332 or ENGL 2333	Literature and Culture or Literature of the Western World: From the Classics to the Renaissance or Literature of the Western World: From the Enlightenment to the Present	3
EDUC 2211	Foundations of Education	2
Creative Arts Core Requirement		3
American History Core Requirement		3
	Hours	**18-19**

Spring		
BIOL 2371 or BIOL 2416 or BIOL 2421	Principles of Evolution or Genetics or Microbiology	3-4
BIOL 2401	Anatomy and Physiology I	4
BIOL 2371 or BIOL 2416 or BIOL 2421	Principles of Evolution or Genetics or Microbiology	3-4
SPED 3310	Individual Differences in Schools and Communities	3
American History Core Requirement		3
	Hours	**16-18**

Third Year

Fall		
ENGL 3301	Technical and Professional Writing	3
SMTE 4270	Science Education Topics I	2
Organismal Animal Requirement		4
Organismal Plant Requirement		4
READ 3353 or READ 3352	Content Area Reading for Secondary Students or Content Area Reading for Elementary Students	3
EDUC 3211	Culturally and Linguistically Responsive Teaching	2
	Hours	**18**

Spring		
BIOL 3428	Principles of Ecology	4
Chemistry of Life/Cell Biology Requirement		4
SMTE 4320	Secondary Science Laboratory Techniques	3
SMTE 4217	Secondary Approaches to the Life Sciences	2
BIEM 4357	Methods of Teaching English as a Second Language	3
	Hours	**16**

Summer		
Upper Division Elective		3
POLS 2305	U.S. Government and Politics	3
POLS 2306	State and Local Government	3
	Hours	**9**

Fourth Year

Fall		
EDUC 4305	Seminar I	3
IDET 3210	Design and Development of Technology-Integrated Learning Environments	2
	Hours	**5**

Spring		
EDUC 4694	Clinical Teaching	6
EDUC 4395	Seminar II	3
	Hours	**9**
	Total Hours	**122-125**

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/

CAREER MAP

Life Science Education Concentration 7-12 – Biology

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

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Department Contact:
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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

STUDENT ORGANIZATIONS

- American Cetacean Society Student Coalition
- Pre-Veterinary Society
- SACNAS Chapter at TAMU-CC
- Pre-Dental Society
- American Medical Student Association
- Sea Turtle Club
- American Fisheries Society
- Islander Green Team
- Health Sciences Association
- Student Council of Math and Science Teachers

ADDITIONAL SOURCES OF INFORMATION

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

CAREER OPTIONS

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