

ACADEMIC MAP

Cell/Molecular Biology Track Biology, Bachelor of Science



First Year		Hours		Third Year		Hours	
Fall				Fall			
BIOL 1406	Biology I	4		BIOL 3428	Principles of Ecology	4	
CHEM 1411	General Chemistry I	4		BIOL 3410	Cell Biology	4	
ENGL 1301	Writing and Rhetoric I	3		BIOL 2371	Principles of Evolution	3	
UNIV 1101	University Seminar I	1		Biology Requirement		4	
HIST 1301	U.S. History to 1865	3		Hours		15	
or HIST 1302	or U.S. History Since 1865			Spring			
or HIST 2301	or Texas History			CHEM 4401	Biochemistry I	4	
Hours		15		BIOL 3403	Molecular Biology	4	
Spring				MATH 3342	Applied Probability and Statistics	3	
BIOL 1407	Biology II	4		or BIOL 3325	or Biostatistics		
CHEM 1412	General Chemistry II	4		Hours		11	
ENGL 1302	Writing and Rhetoric II	3		Fourth Year			
UNIV 1102	University Seminar II	1		Fall			
HIST 1301	U.S. History to 1865	3		BIOL 4340	Genomics, Proteomics and Bioinformatics	3	
or HIST 1302	or U.S. History Since 1865			ECON 1301	Introduction to Economics	3	
or HIST 2301	or Texas History			or ECON 2301	or Macroeconomics Principles		
Hours		15		or ECON 2302	or Microeconomics Principles		
Summer				or PSYC 2301	or General Psychology		
MATH 2413	Calculus I	4		or SOCI 1301	or Introduction to Sociology		
Hours		4		ENGL 2316	Literature and Culture	3	
Second Year				or ENGL 2332	or Literature of the Western World: From the Classics to the Renaissance		
Fall				or ENGL 2333	or Literature of the Western World: From the Enlightenment to the Present		
CHEM 3411	Organic Chemistry I	4		or PHIL 1301	or Introduction to Philosophy		
POLS 2305	U.S. Government and Politics	3		or PHIL 2306	or Introduction to Ethics		
BIOL 2416	Genetics	4		or SPAN 3307	or Spanish Literature I		
University Core Curriculum		6		or SPAN 3308	or Spanish Literature II		
Hours		17		or SPAN 3309	or Spanish American Literature I		
Spring				or SPAN 3310	or Spanish American Literature II		
CHEM 3412	Organic Chemistry II	4		BIOL 3000:4999		4	
BIOL 2421	Microbiology	4		BIOL 3000:4999		4	
BIOL 2300	Science Communication	3		Hours		17	
POLS 2306	State and Local Government	3		Spring			
ARTS 1301	Art and Society	3		CHEM 4402	Biochemistry II	4	
or ARTS 1303	or Art History Survey I			BIOL 3000:4999		4	
or MEDA 1305	or Film and Culture			BIOL 3000:4999		4	
or MUSI 1306	or Understanding and Enjoying Music			BIOL 3000:4999		4	
or MUSI 1307	or Elements of Musical Style			Hours		16	
or THEA 1310	or Theatre Appreciation			Total Hours			
Hours		17		127			

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

BIOLOGY - CELL/MOLECULAR BIOLOGY 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

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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

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|--|-----------------------------------|
| • 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