

ACADEMIC MAP

Cell/Molecular Biology Track, 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
HIST 1301 U.S. History to 1865 or HIST 1302 or U.S. History Since 1865 or HIST 2301 or Texas History	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
HIST 1301 U.S. History to 1865 or HIST 1302 or U.S. History Since 1865 or HIST 2301 or Texas History	3
Hours	15

Summer

MATH 2413 Calculus I	4
Hours	4

Second Year

Fall	Hours
CHEM 3411 Organic Chemistry I	4
POLS 2305 U.S. Government and Politics	3
BIOL 2416 Genetics	4
University Core Curriculum	6
Hours	17

Spring

CHEM 3412 Organic Chemistry II	4
BIOL 2421 Microbiology	4
BIOL 2300 Science Communication	3
POLS 2306 State and Local Government	3
ARTS 1301 Art and Society or ARTS 1303 or Art History Survey I or MEDA 1305 or Film and Culture or MUSI 1306 or Understanding and Enjoying Music or MUSI 1307 or Elements of Musical Style or THEA 1310 or Theatre Appreciation	3
Hours	17

Third Year

Fall	Hours
BIOL 3428 Principles of Ecology	4
BIOL 3410 Cell Biology	4
BIOL 2371 Principles of Evolution	3
Biology Requirement	4
Hours	15

Spring

CHEM 4401 Biochemistry I	4
BIOL 3403 Molecular Biology	4
MATH 3342 Applied Probability and Statistics or BIOL 3325 or Biostatistics	3
Hours	11

Fourth Year

Fall	Hours
BIOL 4340 Genomics, Proteomics and Bioinformatics	3
ECON 1301 Introduction to Economics or ECON 2301 or Macroeconomics Principles or ECON 2302 or Microeconomics Principles or PSYC 2301 or General Psychology or SOCI 1301 or Introduction to Sociology	3
ENGL 2316 Literature and Culture or ENGL 2332 or Literature of the Western World: From the Classics to the Renaissance or ENGL 2333 or Literature of the Western World: From the Enlightenment to the Present or PHIL 1301 or Introduction to Philosophy or PHIL 2306 or Introduction to Ethics or SPAN 3307 or Spanish Literature I or SPAN 3308 or Spanish Literature II or SPAN 3309 or Spanish American Literature I or SPAN 3310 or Spanish American Literature II	3
BIOL 3000:4999	4
BIOL 3000:4999	4
Hours	17

Spring

CHEM 4402 Biochemistry II	4
BIOL 3000:4999	4
BIOL 3000:4999	4
BIOL 3000:4999	4
Hours	16
Total Hours	127



CAREER MAP

Biology-Cell/Molecular Biology Track *Bachelor of Science*



The Cell/Molecular Biology track focuses on the chemical, cellular, and tissue levels of biological organization. Students choosing this track will be preparing for careers in biotechnology and healthcare professions, research laboratories, biological/pharmaceutical manufacturing and quality control, agricultural testing, and health- or biotechnology-related sales. This track also prepares students for graduate studies in biology, biotechnology and health-related sciences. 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.

CONTACT INFORMATION

Career Counselor:

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

Internship Coordinator:

Dr. Kim Withers
NRC 3205 | 361.825.5907
kim.withers@tamucc.edu

Department Contact:

Department of Life Sciences
NRC 3205 | 361.825.5907
kim.withers@tamucc.edu

CAREER OPTIONS

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

ADDITIONAL PROGRAM REQUIREMENTS

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

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