

ACADEMIC MAP

Microbiology - 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
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
BIOL 2416 Genetics or BIOL 2421 or Microbiology or BIOL 2371 or Principles of Evolution	3-4
POLS 2305 U.S. Government and Politics	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	13-14

Spring

CHEM 3412 Organic Chemistry II	4
BIOL 2416 Genetics or BIOL 2421 or Microbiology or BIOL 2371 or Principles of Evolution	3-4
MATH 3342 Applied Probability and Statistics or BIOL 3325 or Biostatistics	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
Hours	13-14

Summer	Hours
POLS 2306 State and Local Government	3
Hours	3

Third Year

Fall	Hours
BIOL 3428 Principles of Ecology	4
BIOL 2416 Genetics or BIOL 2421 or Microbiology or BIOL 2371 or Principles of Evolution	3-4
PHYS 1401 General Physics I or PHYS 2425 or University Physics I	4
Biology Requirement	4
Hours	15-16

Spring

BIOL 2300 Science Communication	3
BIOL 4406 Immunology	4
BIOL 3403 Molecular Biology	4
ENGL 2316 Literature and Culture or ENGL 2332 or Literature of the Western World: From or ENGL 2333 the Classics to the Renaissance or PHIL 1301 or Literature of the Western World: From or PHIL 2306 the Enlightenment to the Present or SPAN 3307 or Introduction to Philosophy or SPAN 3308 or Introduction to Ethics or SPAN 3309 or Spanish Literature I or SPAN 3310 or Spanish Literature II or Spanish American Literature I or Spanish American Literature II	3
PHYS 1402 General Physics II or PHYS 2426 or University Physics II	4
Hours	18

Fourth Year

Fall	Hours
BIMS 4374 Medical Microbiology	3
CHEM 4401 Biochemistry I	4
BIOL 3410 Cell Biology	4
Biology Requirement	4
Hours	15
Spring	Hours
CHEM 4402 Biochemistry II	4
BIMS 3000:4999	4
BIOL 3000:4999	4
BIOL 3000:4999	4
Hours	16
Total Hours	127-130

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-Microbiology Track *Bachelor of Science*



This Microbiology track focuses on bacteria, viruses, fungi and protozoa. Many of these organisms are important to industry, agriculture, and health care. Students choosing this track will be preparing for careers in industrial, environmental, medical, public health, and agricultural laboratories, industrial quality control, health care professions, research, biotechnology, and microbiology-related sales. 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
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Internship Coordinator:

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Department Contact:

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

CAREER OPTIONS

- Pharmaceutical Sales
- Laboratory Technician
- Medical Microbiologist
- Science Teacher
- Clinical Microbiologist
- Public Health
- Industrial Microbiologist
- Environmental Biologist
- Researcher
- 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

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