

ACADEMIC MAP

Pre-Professional

Biomedical Sciences, Bachelor of Science



First Year			Third Year		
Fall			Fall		
BIOL 1406	Biology I	4	PHYS 1401	General Physics I	4
CHEM 1411	General Chemistry I	4	CHEM 4401	Biochemistry I	4
UNIV 1101	University Seminar I	1	Language, Philosophy & Culture Core Requirement (ENGL 2316, 2332, 2333)		
ENGL 1301	Writing and Rhetoric I	3	BIOL 3410	Cell Biology	4
MATH 2312	Precalculus	3	Hours		
Hours		15	15		
Spring			Spring		
BIOL 1407	Biology II	4	PHYS 1402	General Physics II	4
CHEM 1412	General Chemistry II	4	CHEM 4402	Biochemistry II	4
UNIV 1102	University Seminar II	1	or BIMS 3403 or Molecular Biology		
ENGL 1302	Writing and Rhetoric II	3	MATH 1442	Statistics for Life	3-4
MATH 2413	Calculus I	4	or MATH 3342 or Applied Probability and Statistics		
Hours		16	or BIOL 3325 or Biostatistics		
Summer			BIOL 4334	Biology and Ecology of Coral Reefs	3
HIST 1301	U.S. History to 1865	3	or BIOL 3345 or Cell Physiology		
HIST 1302	U.S. History Since 1865	3	Hours		
Hours		6	14-15		
Second Year			Summer		
Fall			Fall		
BIOL 2416	Genetics	4	BIMS 4327	Introduction to Toxicology	3
CHEM 3411	Organic Chemistry I	4	or BIOL 4304 or Biology of Viruses		
BIOL 2371	Principles of Evolution	3	Hours		
Creative Arts Core Requirement		3	3		
Hours		14	Fourth Year		
Spring			Fall		
BIOL 2421	Microbiology	4	BIOL 3430	Physiology	4
CHEM 3412	Organic Chemistry II	4	or BIMS 3401 or Pathophysiology		
PSYC 2301	General Psychology	3	BIMS 4311	Biology of Cancer	3
or SOCI 1301	or Introduction to Sociology		or BIMS 4374 or Medical Microbiology		
Hours		11	BIOL 4340	Genomics, Proteomics and Bioinformatics (or other BIMS/BIOL/CHEM elective)	3
Summer			BIMS 4335	Endocrinology	3-4
POLS 2305	U.S. Government and Politics	3	or BIOL 4408 or Microbial Diversity and Ecology		
POLS 2306	State and Local Government	3	or BIMS 4410 or Histology		
Hours		6	or BIMS 4375 or Mechanisms of Microbial Pathogenesis		
			Hours		
			13-14		
			Spring		
			BIMS 4323	Neurobiology (OR BIOL)	3
			BIMS 4406	Immunology	4
			BIOL or BIMS OR CHEM elective		
			BIOL 4085		
			Major Field Test in Biology		
			Hours		
			11		
			Total Hours		
			124-126		

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

Biomedical Sciences Pre-Professional Bachelor of Science



This option is designed for students who plan to continue their education in a professional school (e.g., medicine, dentistry, veterinary medicine, pharmacy, physical therapy, occupational therapy, physician assistant, etc.) or graduate school. The Biomedical Sciences Program prepares students for biomedical career opportunities including health services, research, forensic science, genetic engineering, biotechnology, bioinformatics, product sales, and services dealing with analysis, assessment and inspection. A few biomedical careers are available to a student with a baccalaureate degree, but most will require the student to complete post-baccalaureate course work or to earn a graduate degree.

CONTACT INFORMATION

Career Counselor:

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

Internship Coordinator:

Gregory Buck
TH 309D | 361.825.3717
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Department Contact:

Department of Life Sciences
TH 309D | 361.825.3717
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SKILLS/ATTRIBUTES

- Critical Evaluation of Literature
- Ability to Follow Protocols and Methodologies
- Collection and Analysis of Complex Data
- Understand Research Regulations in Biomedical Sciences
- Working Knowledge of Biological Sub-Discipline

STUDENT ORGANIZATIONS

- Alpha Epsilon Delta
- American Medical Student Association
- Coastal Bend Health Professionals Initiative
- Health Sciences Association
- Women in Healthcare
- SACNAS Chapter at TAMU-CC
- Pre-Dental Society

ADDITIONAL SOURCES OF INFORMATION

1. American Academy of Forensic Sciences
2. American Society of Clinical Laboratory Science- Careers in Forensics
3. National Association of Medical Examiners
4. American Institute of Biological Sciences
5. Association of Molecular Pathology
6. American Society of Microbiology
7. American Society of Cell Biology

ADDITIONAL PROGRAM REQUIREMENTS

After their sophomore year (60 semester hours), students must have (and maintain) a cumulative GPA of 2.50 or above in their course work, with no course work older than 5 years. No "D" or "F" grades will be accepted as credit within the biomedical sciences core or option courses. Students may take a maximum of 9 SCH as BIMS 4590 courses. A minimum cumulative grade-point average of 2.0 ("C") on a 4-point scale (4.0 = A) in all work taken and a minimum grade-point average of 2.25 in all courses in the major field of study taken at this University are required. The courses in the major field of study are defined for each major and can be found on the pages for that major. For teacher certification, grade point average requirements are higher. Refer to "Teacher Certification Programs" in the College of Science and Engineering.

CAREER OPTIONS

- Professional School (Med school, dental school, pharmacy school, optometry, veterinarian school, chiropractic school, etc.)
- Forensic Scientist
- Researcher
- Laboratory Technician
- Clinical Research Coordinator
- Pharmaceutical Sales
- Quality Control Analyst
- Biotechnology Technician