

BS-Biological Sciences-Cell Molecular Biology- Emphasis: BA/BS-BSCI

Core Curriculum Courses

See the Core Curriculum Requirements (<https://coursecatalog.tamuc.edu/undergrad/core-curriculum-requirements/>) 42

Required Courses in the Major 33

BSC 1406	Introductory Biology I	4
BSC 1407	Introductory Biology II	4
BSC 303	Cell Biology	4
BSC 304	Genetics	4
BSC 305	General Physiology	4
BSC 306	Applied Microbiology	4
BSC 307	Ecology	3
BSC 401	Research Literature and Seminar	3
BSC 412	Fundamentals of Biostatistics	3

Required Support Courses 23

CHEM 1311	General and Quantitative Chemistry I *	
CHEM 1111	General and Quantitative Chemistry Laboratory I	1
CHEM 101	General Chemistry Tutorial I	1
CHEM 1312	General and Quantitative Chemistry II *	
CHEM 1112	General and Quantitative Chemistry Laboratory II	1
CHEM 102	General Chemistry Tutorial II	1
CHEM 2323	Organic Chemistry I	3
CHEM 2123	Organic Chemistry Laboratory I	1
CHEM 2325	Organic Chemistry II	3
CHEM 2125	Organic Chemistry Laboratory II	1
PHYS 1401	College Physics I	4
or PHYS 2425	University Physics I	
PHYS 1402	College Physics II	4
or PHYS 2426	University Physics II	
SOC 1301	Introduction to Sociology *	

Plus 6 sequential sch from:

MATH 1314	College Algebra *	
MATH 2312	Pre-Calculus *	
MATH 2413	Calculus I *	
MATH 2414	Calculus II *	
HHPH 331	Nutrition *	
or PSY 2301	Introduction to Psychology	

Advanced Courses Required - choose 25 or 26 sch from below 25

BSC 424	SEA-PHAGES I: Discovery of Bacteriophages	
CHEM 314	General Biochemistry	
BSC 431	Eukaryotic Cell Biology	
BSC 419	Gene Control	
BSC 430	Introductory Virology	

Plus 6 sch from:

BSC 493	SEA-PHAGES II: Molecular and Bioinformatics Techniques	
BSC 420	Immunology	
BSC 425	Fundamentals of Neuroscience	
BSC 427	Pharmacology	
BSC 414	Evolutionary Biology	

BSC 492		Developmental Biology	
Total Hours			123
* This course should be used to satisfy the Core Curriculum Requirements.			
First Year			
Fall	Hours	Spring	Hours
ENG 1301		3 ENG 1302	3
BSC 1406		4 BSC 1407	4
CHEM 1311		3 CHEM 1312	3
CHEM 1111		1 CHEM 1112	1
CHEM 101		1 CHEM 102	1
MATH 1314		3 MATH 2312	3
		Component Area	3
		15	18
Second Year			
Fall	Hours	Spring	Hours
HIST 1301		3 HIST 1302	3
SOC 1301		3 Creative Art	3
BSC 303		4 BSC 304	4
CHEM 2323		3 CHEM 2325	3
CHEM 2123		1 CHEM 2125	1
		14	14
Third Year			
Fall	Hours	Spring	Hours
PSCI 2305		3 PSCI 2306	3
Language Philosophy and Culture		3 HHPH 331 or PSY 2301	3
BSC 305		4 PHYS 1402	4
BSC 431		3 BSC 306	4
PHYS 1401		4	
		17	14
Fourth Year			
Fall	Hours	Spring	Hours
BSC 307		3 BSC 401	3
BSC 430		3 CHEM 314	3
BSC 419		3 BSC 420	3
BSC 424		3 BSC 425	3
BSC 489		1 BSC 412 or MATH 453	3
		13	15
Total Hours: 120			