

Degree: **Bachelor of Science**
 Major: **BIOLOGY**
 Emphasis: **CELLULAR/MOLECULAR**

UNIVERSITY CORE CURRICULUM

SCH PREREQUISITES

_____	COMM 1311	Foundation of Communication
_____	ENGL 1302	Writing and Rhetoric
_____	See Catalog	Language, Philosophy, Culture
_____	HIST 1301	US History to 1865
_____	HIST 1302	US History Since 1865
_____	POLS 2305	US Government and Politics
_____	POLS 2306	State and Local Government
_____	See Catalog	Creative Arts
_____	See Catalog	Social and Behavioral Science
_____	MATH 2413	Calculus I
_____	BIOL 1406	Gen Biology I
_____	BIOL 1407	Gen Biology II
_____	CHEM 1411	Gen. Chemistry I
_____	CHEM 1412	Gen. Chemistry II

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(3)	MATH 1314 and MATH 1316 or 2312 or placement
(3)	MATH 1314 or placement beyond
(3)	BIOL1406
(3)	
(3)	CHEM 1411 & MATH 1314 or placement beyond
27	

First-Year Seminars/ Professional Skills

Choose UCCP 1101 & UCCP 1102 or BIOL 2200

_____	UCCP 1101 & UCCP 1102	<u>First-Year Seminar</u>	2
_____	BIOL 2200	<u>Professional Skills</u>	2

Biology Core

_____	BIOL 1406	<u>Biology I</u>	4	MATH 1314 or see catalog for placement criteria
_____	BIOL 1407	<u>Biology II</u>	4	BIOL 1406
_____	BIOL 2416	<u>Genetics</u>	4	BIOL 1406 w "C", BIOL 1407, CHEM 1411, & CHEM 1412
_____	BIOL 2421	<u>Microbiology</u>	4	BIOL 1406 w "C", BIOL 1407, CHEM 1411, & CHEM 1412
_____	BIOL 2371	Principles of Evolution	3	BIOL 1407
_____	BIOL 3428	Principles of Ecology	4	BIOL 1407, CHEM 1411, BIOL 2200 or UCCP1101/1102, & pre/co-req MATH 2413
_____	CHEM 1411	Gen. Chemistry I	4	
_____	CHEM 1412	Gen. Chemistry II	4	Chem 1411 & MATH 1314 or placement beyond
_____	*CHEM 3411	Organic Chemistry I	4	Chem 1411
_____	*CHEM 3412	Organic Chemistry II	4	Chem 3411
_____	MATH 2413	Calculus I	4	MATH 1314 and MATH 1316 or 2312
_____	*BIOL 4292	Senior Presentation	2	BIOL 2200 or UCCP 1101/1102 & senior standing

Math requirement: Choose one from the following:

_____	MATH 1314	<u>College Algebra</u>	3	College Ready
_____	MATH 1316	<u>Trigonometry</u>	3	MATH 1314 or see catalog for placement criteria
_____	MATH 2312	<u>Precalculus</u>	3	MATH 1314 or see catalog for placement criteria
_____	MATH 2414	<u>Calculus II</u>	4	MATH 2413
_____	MATH 3342	<u>Applied Probability and Stats</u>	3	MATH 2413

Chemistry of Life/Cell Biology requirement: Choose one from the following:

_____	BIOL3403	<u>Molecular Biology (SP)</u>	4	BIOL 2416, BIOL 2421
_____	BIOL 3410	<u>Cell Biology (FL)</u>	4	BIOL 2416, CHEM 3411
_____	CHEM 4401	<u>Biochemistry I</u>	4	CHEM 3412

Form and Function requirement: Choose one from the following:

_____	BIOL 3425	<u>Functional Anatomy (SP)</u>	4	BIOL 1407
_____	BIOL 3430	<u>Physiology (FL)</u>	4	BIOL 1407
_____	BIOL 3455	<u>Plant Form and Function (even SP)</u>	4	BIOL 1407

Organismal Biology requirement: Choose one from the following:

_____	BIOL 2472	<u>Principles of Botany (odd SP)</u>	4	BIOL 1407 & CHEM 1411
_____	BIOL 3413	<u>Invertebrate Zoology (FL)</u>	4	BIOL 1407
_____	BIOL 3414	<u>Vertebrate Zoology (SP)</u>	4	BIOL 1407

CELLULAR/MOLECULAR CORE CLASSES: (15 sem hours)

_____	BIOL 3403	<u>Molecular Biology (SP)</u>	4	BIOL 2416 & BIOL 2421
_____	BIOL 3410	<u>Cell Biology (FL)</u>	4	CHEM 3411 & BIOL 2416
_____	BIOL 4340	<u>Genomics, Proteomics, Bioinformatics (FL)</u>	3	BIOL 2416 & (BIOL 3410 or CHEM 4401)
_____	CHEM 4401	<u>Biochemistry I</u>	4	CHEM 3412 & one year biology
_____	CHEM 4402	<u>Biochemistry II</u>	4	CHEM 4401

CELLULAR/MOLECULAR ELECTIVES: See elective list

15-16

University Requirements

Minimum Total Hours for degree:	120	Minimum Major grade point average (GPA.):	2.5
*Upper Division minimum total hours:	45		
*Upper Division minimum residency hours:	36		
*Upper Division minimum major residency hrs:	12		
Cumulative TAMU-CC minimum g.p.a.:	2	First Year Seminar Requirement: UCCP 1101/1102	
Foreign Language Requirement:	see catalog		