

**Curriculum Sheet for 2019-2020 Catalog**

This Curriculum expires after six years.

Degree: **Bachelor of Science**

Major: **BIOLOGY**

Emphasis **Marine Biology**

**UNIVERSITY CORE CURRICULUM**

		<b><u>HR</u></b>	<b><u>PREREQUISITES</u></b>
_____	COMM 1311	<u>Foundation of Communication</u>	<u>3</u>
_____	ENGL 1302	<u>Writing and Rhetoric</u>	<u>3</u>
_____	See Catalog	<u>Language, Philosophy, Culture</u>	<u>3</u> Varies, see catalog for pre-requisites
_____	HIST 1301	<u>US History to 1865</u>	<u>3</u>
_____	HIST 1302	<u>US History Since 1865</u>	<u>3</u>
_____	POLS 2305	<u>US Government and Politics</u>	<u>3</u>
_____	POLS 2306	<u>State and Local Government</u>	<u>3</u>
_____	See Catalog	<u>Creative Arts</u>	<u>3</u>
_____	See Catalog	<u>Social and Behavioral Science</u>	<u>3</u>
_____	MATH 2413	<u>Calculus I</u>	<u>(3)</u> MATH 1314 & MATH 1316 or MATH 2312 or see catalog for placement criteria
_____	BIOL 1406	<u>Biology I</u>	<u>(3)</u> MATH 1314 or see catalog for placement criteria
_____	BIOL 1407	<u>Biology II</u>	<u>(3)</u> BIOL 1406
_____	CHEM 1411	<u>Gen. Chemistry I</u>	<u>(3)</u>
_____	CHEM 1412	<u>Gen. Chemistry II</u>	<u>(3)</u> CHEM 1411 and MATH 1314 or see catalog for placement criteria

**Note: Taking core curriculum courses other than those listed above will result in additional credit hours applying to your degree. Please consult your academic advisor for more details.**

**First-Year Seminars/ Professional Skills (2 credits required)**

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

**Biology Core**

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

**Math Requirement:**

**Choose one from the following:**

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

**Chemistry of Life/Cell Biology Requirement:**

**Choose one from the following:**

_____	BIOL 3403	<u>Molecular Biology (SP)</u>	<u>4</u> BIOL 2416 & BIOL 2421
_____	BIOL 3410	<u>Cell Biology (FL)</u>	<u>4</u> CHEM 3411 & BIOL 2416
_____	CHEM 4401	<u>Biochemistry I</u>	<u>4</u> CHEM 3412 & one year biology

**Form and Function Requirement:**

**Choose one from the following:**

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

**Organismal Requirement:**

**Choose one from the following:**

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

**Marine Biology Core Course:**

_____	BIOL 4436	<u>Marine Ecology (SP)</u>	<u>4</u> BIOL 3428
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**Marine Organisms Requirement:**

**Select one from the following:**

_____	BIOL 4319	<u>Marine Mammals (FL)</u>	<u>3</u> BIOL 1407
_____	BIOL 4429	<u>Marine Botany (FL)</u>	<u>4</u> BIOL 1407
_____	BIOL 4432	<u>Ichthyology (FL)</u>	<u>4</u> BIOL 1407 (BIOL 3414 is also recommended)
_____	BIOL 4444	<u>Estuarine Organisms (SP)</u>	<u>4</u> BIOL 3413

**Human Impacts Requirement:**

**Select one from the following:**

_____	BIOL 4328	<u>Fisheries</u>	<u>3</u> BIOL 1407
_____	BIOL 4302	<u>Coral Reef Conservation</u>	<u>3</u> BIOL 3428
_____	BIOL 4323	<u>Global Change Ecology (alt SP)</u>	<u>3</u> BIOL 3428

**MARINE BIOLOGY ELECTIVES: See elective list**

**18-21**

**University Requirements:**

Minimum Total Hours for degree: **120** Cumulative TAMUCC Minimum GPA: 2.00

Upper Division minimum total hours:  
Upper Division minimum residency hours:  
Upper Division minimum major residency hours:

45 Minimum Major GPA: 2.50  
36 Foreign Language Requirement: See catalog  
12 First Year Seminar Requirement: UCCP 1101/1102