

# Texas A&M University-Corpus Christi

## Curriculum Sheet for 2019-2020 Catalog

This Curriculum **EXPIRES** Degree:  
August 2026 Major:  
Emphasis:

**Bachelor of Science**  
**Biomedical Sciences**  
**Pre-Professional**

**IMPORTANT NOTE: After sophomore year, students must have & Maintain a cum GPA of 2.5 or above, with no course older than 5 years old. No "D" will be accepted as credit within the Biomedical Sciences core or option courses.**

### UNIVERSITY CORE CURRICULUM

COMM 1311  
ENGL 1302  
See Catalog  
HIST 1301  
HIST 1302  
POLS 2305  
POLS 2306  
See Catalog  
PSYC 2301  
MATH 2413 or MATH 1442  
BIOL 1406  
BIOL 1407  
CHEM 1411  
CHEM 1412

Foundation of Communication  
Writing and Rhetoric  
Language, Philosophy & Culture  
US History to 1865  
US History Since 1865  
US Government and Politics  
State and Local Government  
Creative Arts  
General Psychology  
Calculus I or Statistics for Life  
Biology I  
Biology II  
General Chemistry I  
General Chemistry II

Communication  
Communication  
Language, Philosophy, and Culture  
American History  
American History  
Government/Political Science  
Government/Political Science  
Creative Arts  
Social and Behavioral Science  
Mathematics  
Life and Physical Sciences  
Life and Physical Sciences  
Component Area Option  
Component Area Option

### SCH PREREQUISITES

3  
3  
3 ENGL 1302  
3  
3  
3  
3  
3  
3  
(3) See catalog for pre-requisite cours  
(3)  
(3)  
(3)  
(3)

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

### FIRST-YEAR SEMINARS/ PROFESSIONAL SKILLS

UCCP 1101 & UCCP 1102 or  
BIMS 2200

First-Year Seminar 2  
Professional Skills 2 BIMS (pre-pro & forensics ONLY)

### BIOMEDICAL SCIENCES CORE-MAJOR

BIOL 1406  
BIOL 1407  
BIOL 2416  
BIOL 2421  
CHEM 1411  
CHEM 1412  
\*CHEM 3411

Biology I  
Biology II  
Genetics  
Microbiology  
General Chemistry I  
General Chemistry II  
Organic Chemistry I

\*Life and Physical Sciences Core Course  
\*Life and Physical Sciences Core Course  
\*Component area Option Core Course  
\*Component area Option Core Course

[SAT scores of 520 (math), 500 (reading) or ACT 21 (math, English, and Reading)] OR [completion of MATH 1314 (or equivalent) OR completion of Pre-calculus in high school]  
4  
4 BIOL 1406  
BIOL 1406 w/ Grade "C" or higher, BIOL 1407, CHEM 1412  
4 BIOL 1406 w/ Grade "C" or higher, BIOL 1407, CHEM 1412  
4  
4 CHEM 1411 and MATH 1314 or ~  
4 CHEM 1411

### PRE-PROFESSIONAL REQUIRED CLASSES- CONCENTRATION

\*CHEM 3412  
MATH 2413  
or MATH 1442  
49 credits from Pre-Professional-Elective List  
BIOL 4085

Organic Chemistry II  
Calculus I  
MAJOR FIELD TEST

4  
4  
49  
Major Field Test in Biology

4 CHEM 3411  
MATH 2312, or MATH 1314 and MATH 1316  
MATH 0300, or placement beyond MATH 0300  
See page 2 - Pre-professional elective list for choices  
Senior standing

### University, College and Major Requirements

Minimum Total Hours for degree: 120  
\*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.: 2.5

No Science or Math older than 5 years old  
Foreign Language-see catalog  
Minimum Science grade of "C"  
**MINIMUM GPA: 2.5**

## Curriculum Sheet for 2019-2020 Catalog

### ELECTIVE LIST FOR BIOMEDICAL SCIENCES - PRE-PROFESSIONAL EMPHASIS MAJORS

<u>Pre-Professional Electives List</u>		<u>SCH</u>	<u>Pre-requisite (PRE-REQS)</u>
BIMS 2171	<u>Medical Terminology FL-SP</u>	<u>1</u>	BIOL 1407
*BIMS 3300	<u>Animal Nutrition SP</u>	<u>3</u>	BIOL 1407, CHEM 3411 and (pre or co-req) CHEM 3412
*BIMS 3301	<u>Intro to Animal Science FL</u>	<u>3</u>	
*BIMS 3401	<u>Pathophysiology FL</u>	<u>4</u>	CHEM 1411 and BIOL 1407 or BIOL 2401
*BIMS 3403	<u>Molecular Biology SP</u>	<u>4</u>	BIOL 2416 and BIOL 2421
*BIMS 4170	<u>Biomedical Seminar</u>	<u>1</u>	BIOL 1407
*BIMS 4295	<u>Biomedical Practicum FL SP</u>	<u>2</u>	BIOL 1407 and INSTRUCTOR PERMISSION
*BIMS 4296	<u>Clinical Research SP</u>	<u>2</u>	BIOL 1407 and INSTRUCTOR PERMISSION
*BIMS 4299	<u>Directed Ind. Research (1-2hrs repeated 4hrs max)</u>		Junior class standing, BIOL 1407 and CHEM 1412
*BIMS 4311	<u>Biology of Cancer FL (EVEN YRS)</u>	<u>3</u>	BIOL 2416 ( <b>BIOL 3410 strongly recommended</b> )
*BIMS 4323	<u>Neurobiology SP</u>	<u>3</u>	BIOL 2416
*BIMS 4327	<u>Intro to Toxicology SS</u>	<u>3</u>	BIOL 1407 and CHEM 1412
*BIMS 4330	<u>Biological Basis of Aging</u>	<u>3</u>	BIOL 1407 and CHEM 3411
*BIMS 4331	<u>Health Disparities FL-SP</u>	<u>3</u>	BIOL 1407
*BIMS 4333	<u>Medical Entomology</u>	<u>3</u>	BIOL 1407
*BIMS 4334	<u>Human Genetics</u>	<u>3</u>	BIOL 2416 and CHEM 3412
*BIMS 4335	<u>Endocrinology FL (ODD YRS)</u>	<u>3</u>	BIMS or BIOL 2200, BIOL 2416 and CHEM 3412
*BIMS 4374	<u>Medical Microbiology FL</u>	<u>3</u>	BIOL 2421
*BIMS 4375	<u>Mech of Microbial Pathogenesis SS (EVEN YRS)</u>	<u>3</u>	BIOL 2421
*BIMS 4396	<u>Directed Ind. Study (1-3 hrs repeate 6hrs max)</u>		BIOL 1407 and CHEM 1412 and consent of instuctor
*BIMS 4406	<u>Immunology SP</u>	<u>4</u>	BIOL 2421 (BIOL 3410 or 3345 recommended)
*BIMS 4410	<u>Histology FL (EVEN YRS)</u>	<u>4</u>	BIOL 2402 or BIOL3425
*BIMS 4590	<u>Selected Topics (1-5 HRS)</u>		PERMISSION OF FACULTY INSTRUCTOR/MENTOR
*BIOL 3345	<u>Cell Physiology</u>	<u>3</u>	BIOL or BIMS 2200, BIOL 3410
*BIOL 3410	<u>Cell Biology FL</u>	<u>4</u>	BIOL 2416 and CHEM 3411
*BIOL 3425	<u>Functional Anatomy SP</u>	<u>4</u>	BIOL 1407
*BIOL 3430	<u>Physiology FL</u>	<u>4</u>	BIOL 1407
*BIOL 4301	<u>Embryology FL</u>	<u>3</u>	BIOL 2416
*BIOL 4304	<u>Biology of Viruses SP (ODD YRS)</u>	<u>3</u>	BIOL 2416, BIOL 2421 and CHEM 1411
*BIOL 4340	<u>Geonomics,Proteomics,&amp; Bio FL</u>	<u>3</u>	BIOL 2416 and either BIOL 3410 or CHEM 4401
*BIOL 4350	<u>Research &amp; Design (1-3 SCH)</u>	-	CONSENT OF INSTRUCTOR
*BIOL 4407	<u>Biology of the Fungi SP (EVEN YRS)</u>	<u>4</u>	BIOL 2421
*BIOL 4408	<u>Microbial Diversity &amp; Ecology FL</u>	<u>4</u>	BIOL 2421 or CONSENT OF INSTRUCTOR
*BIOL 4433	<u>Parasitology SP</u>	<u>4</u>	BIOL 2421 or CONSENT OF INSTRUCTOR
*BIOL 4435	<u>Biological Microtechniques SS (EVEN YRS)</u>	<u>4</u>	BIOL 1407 and CHEM 3411
*CHEM 4320	<u>Drugs,Toxins,Natural Prod Chem FL-SP</u>	<u>3</u>	CHEM 4401
*CHEM 4401	<u>Biochemistry I FL-SP-SS</u>	<u>4</u>	CHEM 3412 and one year majors biology
*CHEM 4402	<u>Biochemistry II FL-SP</u>	<u>4</u>	CHEM 4401
PHYS 1401	<u>General Physics I FL-SP-SS</u>	<u>4</u>	MATH 1314 or placement beyond MATH 1314
PHYS 1402	<u>General Physics II FL-SP-SS</u>	<u>4</u>	PHYS 1401 or PHYS 2425 and MATH 1314 or ~
MATH 2413	<u>Calculus I (if not counted in core)</u>	<u>4</u>	MATH 2312 or MATH 1314 plus MATH 1316
*MATH 3342	<u>Applied Probability &amp; Statistics</u> (only if not using MATH 1442)	<u>3</u>	MATH 2413