This Curriculum expires August 2022

Degree: Bachelor of Science
Major: BIOLOGY
Emphasis: ORGANISMAL

**UNIVERSITY CORE CURRICULUM**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>PREREQUISITES</th>
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<td>ENGL 1301</td>
<td>Eng. Composition</td>
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<td>ENGL 1302</td>
<td>Eng. Composition</td>
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<tr>
<td>COMM 1315</td>
<td>Oral Communication</td>
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<tr>
<td>MATH 2413</td>
<td>Calculus</td>
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<tr>
<td>BIOL 1406</td>
<td>Biology I</td>
<td>4</td>
<td>MATH 1314, 1316 or MATH 2312</td>
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<tr>
<td>BIOL 1407</td>
<td>Biology II</td>
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<td>BIOL 1406</td>
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<tr>
<td>See Catalog</td>
<td>Language, Philosophy and Culture</td>
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<td>HIST 1301</td>
<td>US History I</td>
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<td>HIST 1302</td>
<td>US History II</td>
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<td>Creative Arts</td>
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<td>ECON 2301</td>
<td>Economics</td>
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<td>ECON 2302</td>
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<tr>
<td>CHEM 1411</td>
<td>Gen. Chemistry I</td>
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<td>MATH 1314 or see catalog for placement criteria</td>
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<td>CHEM 1412</td>
<td>Gen. Chemistry II</td>
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<td>Chem 1412</td>
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<td>CHEM 3411</td>
<td>Organic Chemistry I</td>
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<td>Chem 1412</td>
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<tr>
<td>CHEM 3412</td>
<td>Organic Chemistry II</td>
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<td>MATH 1314 and 1316, or MATH 2312, or placement beyond MATH 2312</td>
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<td>MATH 2413</td>
<td>Calculus</td>
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<td>UCCP 1101 &amp; UCCP 1102</td>
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<td>First-Year Seminar</td>
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<td>BIOL 2200</td>
<td>Professional Skills</td>
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<td>BIOL 2200, Sr. standing</td>
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Math requirement: Choose one from the following:

- MATH 1314: College Algebra
- MATH 2312: Precalculus
- MATH 2414: Calculus II
- MATH 3402: Applied Probability and Stats
- MATH 2413: Calculus

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

- BIOL 2403: Molecular Biology (SP)
- BIOL 3410: Cell Biology (FL)
- CHEM 4401: Biochemistry I

Form and Function requirement: Choose one from the following:

- BIOL 3425: Functional Anatomy (SP)
- BIOL 3430: Physiology (FL, SS)
- BIOL 3455: Plant Form and Function (all)

Organismal Biology requirement: Choose one from the following:

- BIOL 2472: Principles of Botany (SP)
- BIOL 3413: Invertebrate Zoology (FL, SS)
- BIOL 3414: Vertebrate Zoology (FL, SS)

**ORGANISMAL CLASSES: CHOOSE AN EMPHASIS: PLANT, ANIMAL, or BROAD**

**PLANT EMPHASIS**

- BIOL 2472: Principles of Botany (SP)
- BIOL 3455: Plant Form and Function (all)
- BIOL 3479: Plant Ecology
- BIOL 4422: Plant Taxonomy

Plant Emphasis Electives: 16-17

**ANIMAL EMPHASIS**

- BIOL 3413: Invertebrate Zoology (FL, SS)
- BIOL 3414: Vertebrate Biology (FL, SS)
- BIOL 4411: Animal Behavior (SP, SS)

Choose one from the FOLLOWING two courses:

- BIOL 3425: Functional Anatomy (SP)
- BIOL 3430: Physiology (FL, SS)

Animal Emphasis Electives: 16-17

**BROAD EMPHASIS**

- BIOL 2472: Principles of Botany (SP)
- BIOL 3413: Invertebrate Zoology (FL, SS)
- BIOL 3414: Vertebrate Biology (FL, SS)

Choose one from the FOLLOWING three courses:

- BIOL 3479: Plant Ecology
- BIOL 4411: Animal Behavior (SP, SS)
- BIOL 4422: Plant Taxonomy

Broad Emphasis Electives: 16-17

**University Requirements**

- Minimum Total Hours for degree: 120
- Upper Division minimum total hours: 45
- Upper Division minimum residency hours: 36
- Cumulative TAMU-CC minimum g.p.a.: 2
- Foreign Language Requirement: see catalog

Minimum Major grade point average (g.p.a.): 2.25

Computer Literacy: BIOL 1406, BIOL 3428

First Year Seminar Requirement: UCCP 1101/1102

Form and Function requirement: Choose one from the following:

- BIOL 3479: Plant Ecology
- BIOL 4411: Animal Behavior (SP, SS)

Organismal Biology requirement: Choose one from the following:

- BIOL 2472: Principles of Botany (SP)
- BIOL 3413: Invertebrate Zoology (FL, SS)
- BIOL 3414: Vertebrate Zoology (FL, SS)
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<tr>
<th>COURSE</th>
<th>PRE-REQ</th>
<th>HOURS</th>
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<tbody>
<tr>
<td>BIOL 2472 Principles of Botany</td>
<td>*If not used elsewhere for degree</td>
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<tr>
<td>BIOL 3300 Animal Nutrition</td>
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<tr>
<td>BIOL 3345 Cell Physiology</td>
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<tr>
<td>BIOL 3403 Molecular Biology</td>
<td>*If not used elsewhere for degree</td>
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<tr>
<td>BIOL 3410 Cell Biology</td>
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<tr>
<td>BIOL 3413 Invert. Zoology</td>
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<tr>
<td>BIOL 3414 Vert. Zoology</td>
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<tr>
<td>BIOL 3425 Functional Anatomy</td>
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<tr>
<td>BIOL 3430 Physiology</td>
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<tr>
<td>BIOL 3455 Plant Form &amp; Function</td>
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<td>BIOL 3479 Plant Ecology</td>
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<tr>
<td>BIOL 4299 Directed Independent Research</td>
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<td>BIOL 4301 Embryology</td>
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<td>BIOL 4302 Coral Reef Conservation</td>
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<td>BIOL 4304 Biology of Viruses</td>
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<td>BIOL 4319 Marine Mammals</td>
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<td>BIOL 4323 Global Change Ecology</td>
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<td>BIOL 4326 Toxic &amp; Therapeutic Plants</td>
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<td>BIOL 4340 Genomics, Proteomics, &amp; Bioinformatics</td>
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<td>BIOL 4350 Research &amp; Design</td>
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<td>BIOL 4370 Mariculture</td>
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<td>BIOL 4371 Population Genetics</td>
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<tr>
<td>BIOL 4396 Directed Independent Study</td>
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<td>BIOL 4405 Limnology</td>
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<td>BIOL 4406 Immunology</td>
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<td>BIOL 4407 Biology of the Fungi</td>
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<td>BIOL 4408 Microbial Diversity &amp; Ecology</td>
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<tr>
<td>BIOL 4409 Field &amp; Sampling Techniques</td>
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<tr>
<td>BIOL 4411 Animal Behavior</td>
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<td>BIOL 4422 Plant Taxonomy</td>
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<td>BIOL 4425 Ornithology</td>
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<td>BIOL 4428 Fisheries</td>
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<td>BIOL 4429 Marine Botany</td>
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<td>BIOL 4431 Mammology</td>
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<td>BIOL 4444 Estuarine Organisms</td>
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<td>BIOL 4446 Tropical Ecos &amp; Conserv</td>
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<td>BIMS 3401 Pathophysiology</td>
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<td>BIMS 3411 Biology of Cancer</td>
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<td>BIMS 3423 Neurobiology</td>
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<td>BIMS 3427 Intro to Toxicology</td>
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<td>BIMS 3430 Biological Basis of Aging</td>
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<td>BIMS 3433 Medical Entomology</td>
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<td>BIMS 3434 Human Genetics</td>
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<td>BIMS 3474 Medical Microbiology</td>
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<td>BIMS 3475 Mechanisms of Microbial Pathogenesis</td>
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<tr>
<td>BIOL 4590 Selected Topics</td>
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*Electives With Faculty Mentor Approval