This Curriculum expires after six years.

**Curriculum Sheet for 2019-2020 Catalog**

Degree: **Bachelor of Science**
Major: **BIOLOGY**
Emphasis **LIFE SCIENCE EDUCATION**
**7-12 Teaching Certification**

| | | | | SCH | PREREQUISITES |
|---|---|---|---|---|---|
| **UNIVERSITY CORE CURRICULUM** | | | | | |
| | COMM 1311 | Foundation of Communication | Communication | 3 | |
| | ENGL 1302 | Writing and Rhetoric | Communication | 3 | |
| | See Catalog | Cert Must take ENGL literature | Language, Philosophy, and Culture | 3 | |
| | HIST 1301 | US History to 1865 | American History | 3 | |
| | HIST 1302 | US History Since 1865 | American History | 3 | |
| | POLS 2305 | US Government and Politics | Government/Political Science | 3 | |
| | POLS 2306 | State and Local Government | Government/Political Science | 3 | |
| | See Catalog | | Creative Arts | 3 | |
| Must take | PSYC 2301 | General Psychology | Social and Behavioral Science | 3 | |
| | MATH 2413 | Calculus I | Mathematics | 3 | MATH 1314 & MATH 1316 or 2312 |
| | BIOL 1406 | Biology I | Life and Physical Sciences | (3) | |
| | BIOL 1407 | Biology II | Life and Physical Sciences | (3) | |
| Must take | CHEM 1411 | Gen. Chemistry I | Compontent Area Option | (3) | |
| Must take | CHEM 1412 | Gen. Chemistry II | Compontent Area Option | (3) | |
| **Life Science Certification Support Field** | | | | | |
| | 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 |
| | ENGL Elective | **See Catalog** | | 3 | |
| **Biology Teaching Core** | | | | | |
| | BIOL 1406 | Biology I | *Life and Physical Sciences Core Course | 4 | MATH 1314 or see catalog for placement criteria |
| | BIOL 1407 | Biology II | *Life and Physical Sciences Core Course | 4 | BIOL 1406 |
| | BIOL 2371 | Principles of Evolution | | 4 | BIOL 1407 |
| | BIOL 2401 | Anatomy and Physiology I | | 4 | |
| | BIOL 2416 | Genetics | | 4 | BIOL 1406 w "C", 1407, CHEM 1411, 1412 |
| | BIOL 2421 | Microbiology | | 4 | BIOL 1406 w "C", 1407, CHEM 1411, 1412 |
| | *BIOL 3428 | Principles of Ecology | | 4 | BIOL 1407, BIOL 2200 or UCCP 1101/1102, CHEM 1411 & co/pre-requisite MATH 2413 |
| | *SMTE 4270 | Science Education Topics I (SP) | | 4 | |
| | *SMTE 4217 | Secondary Approaches to Life Science (FL) | | 3 | BIOL1407, CHEM1412, & EDUC 3311 |
| | *SMTE 4320 | Secondary Science Lab Techniques (FL) | | 3 | BIOL 1407, CHEM 1412, & EDUC 3311 |
| **Chemistry of Life/Cell Biology Requirement- Choose one from the following:** | | | | 4 | |
| | *BIOL 3403 | Molecular Biology (SP) | | 4 | BIOL 2416 & 2421 |
| | *BIOL 3410 | Cell Biology (FL) | | 4 | BIOL 2416 & CHEM 3411 |
| **Organismal Animal Requirement- Choose one from the following:** | | | | | |
| | *BIOL 3413 | Invertebrate Zoology (FL) | | 4 | Biol 1407 |
| | *BIOL 3414 | Vertebrate Biology (SP) | | 4 | Biol 1407 |
| **Organismal Plant Requirement- Choose one from the following:** | | | | | |
| | BIOL 2472 | Principles of Botany (SP) | | | BIOL 1407 & CHEM 1411 |
| | *BIOL 4422 | Plant Taxonomy (SP) | | | |
| **PROFESSIONAL DEVELOPMENT** | | | | | |
| **Preliminary Courses:** | | | | | |
| | *READ 3353 | Content Area Reading for Secondary Students | | 3 | n/a |
| | *EDUC 3311 | School & Society | | 3 | Interview with Dept of Teacher Ed faculty |
| **Field Base Semester:** | | | | | |
| | *EDUC 4606 | Planning, Teaching, Assessment & Tech: Grades 7-12 | | 6 | |
| | *EDUC 4322 | Instructional Design for Special Populations: Grades 7-12 | | 3 | See College of Education for Admisssion to Teacher Education/Field Based Program. See handout provided by College of Education. |
| **Clinical Teaching Semester:** | | | | | |
| | *EDUC 4312 | Classroom Management: Grades 7-12 | | 3 | |
| | *EDUC 4993 | Student Teaching: Grades 7-12 | | 9 | |

**2.75 MAJOR GPA REQUIRED**

**TSI Scores:**

| | | |
|---|---|---|
| **Reading** | *(minimum 250)* | |
| **Math** | *(minimum 230)* | Certification: TExES #160 |
| **Writing** | *(minimum 240)* | Exams: TExES # 138 Life Science |

**University Requirements**

| | | |
|---|---|---|
| Minimum Total Hours for degree: | 120 | Minimum Major grade point average (GPA): 2.75 |
| *Upper Division minimum total hours: | 45 | |
| *Upper Division minimum residency hours: | 36 | Computer Literacy : BIOL1406 |
| *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 | |