## BACHELOR OF ARTS, MAJOR IN BIOLOGY

Code Title ..... Hours
Bachelor of Arts, Major in Biology
Core Curriculum
Component Area I (Communication) ..... 6
Component Area II (Mathematics) ..... 3
Component Area III (Life and Physical Science) (Courses for Science Majors) ..... 8
Component Area IV (Language, Philosophy, and Culture) ..... 3
Component Area V (Creative Arts) ..... 3
Component Area VI (U.S. History) ..... 6
Component Area VII (Political Science/Government) ..... 6
Component Area VIII (Social and Behavioral Sciences) ..... 3
Component Area IX (Component Area Option) ..... 4
Degree Specific Requirements
Select one of the following: ..... 3
BIOL 4374 Biostatistics
MATH 3379 Statistical Mthods In Practice
CHEM 1411 General Chemistry I ..... 4
CHEM 1412 General Chemistry II ..... 4
FOLG 1411 Beginning Foreign Language I ..... 4
FOLG 1412 Beginning Foreign Language II (must be from the same group) ..... 4
FOLG 2311 Intermediate Foreign Language ..... 3
FOLG 2312 Intermed Foreign Language II (must be from the same group) ..... 3
MATH 1410 Elementary Functions ..... 4
BIOL 1411 General Botany ..... 4
BIOL 1413 General Zoology ..... 4
BIOL 2440 Introductory Cell Biology ..... 4
BIOL 3409 General Ecology ..... 4
BIOL 3450 Introductory Genetics ..... 4
BIOL 3470 General Microbiology ..... 4
BIOL 4110 Undergraduate Seminar ..... 1
BIOL 4111 Undergraduate Seminar ..... 1
BIOL 4361 Introductory Evolutionary Bio ..... 3
Major
Advanced BIOL electives (Select four 3000-4000 level courses) ${ }^{1}$ ..... 14
Minor (required)Select any minor ${ }^{2}$18
Advanced General Electives
Any advanced (3000-4000 level) courses from any department needed to meet 120 hour and SHSU advanced hour requirements ${ }^{3}$ ..... 6
Total Hours ..... 120
1
Advanced Biology Electives should be selected according to specific areas of study as determined by the student and their academic advisor. Students who take BIOL 4080, BIOL 4394, or BIOL 4095 are allowed to apply only one of these courses to their Advanced Biology Electives requirement.
2 Recommended minor is Chemistry or Mathematics.
3 Students should use the elective and/or minor hours to meet the 42-advanced hour requirement for graduation.
Note:

This total reflects MATH 1314 satisfying the Core Curriculum requirement for Component Area II (Mathematics), BIOL 1411 and BIOL 1413 satisfying the Core Curriculum requirement for Component Area III (Life and Physical Science), and FOLG 2311 satisfying part ( 3 semester credit hours) of Component Area IV (Language, Philosophy, and Culture) .

## Teacher Certification in the Life Sciences

## Biology \& Biomedical Sciences Majors

Students may receive teacher certification in the Life Sciences for grades 8-12 by pairing a major in Biology (BS only as outlined above) with a Secondary Teacher Certification from the Department of Curriculum and Instruction. Students pursuing this degree combination should include BIOL 3492 as one of their advanced biology electives.

For students seeking a Secondary Teacher Certification in the Life Sciences, no grade below C in the science coursework in BIOL is accepted. The required education courses are:

| Code | Title | Hours |
| :--- | :--- | ---: |
| Course Requirements |  |  |
| CISE 3384 | The Teaching Profession | 3 |
| CISE 4364 | Mth Tch Secondary Schools | 3 |
| CISE 4378 | Content Literacy | 3 |
| CISE 4380 | Respon Of Pro Educator | 3 |
| CISE 4394 | Creatng Env For Lrng-Secondary | 3 |
| CISE 4396 | Std Tch Secondary Classroom | 3 |
| CISE 4397 | Std Tch Secondary Classroom | 3 |
| Total Hours |  | 3 |

First Year

| Fall | Hours Spring | Hours Summer |
| :--- | :---: | :---: |
| BIOL 1411 or $1413^{1}$ | 4 BIOL 1413 or $1411^{1}$ | 4 Component Area $V$ |
| CHEM 1411 | 4 CHEM 1412 | 4 |
| ENGL $1301^{2}$ | 3 ENGL $1302^{2}$ | 3 |
| FOLG 1411 | 4 FOLG 1412 | 4 |
|  | 15 | 15 |

Second Year

| Fall | Hours Spring | Hours Summer | Hours |
| :---: | :---: | :---: | :---: |
| BIOL 2440 | $\begin{aligned} & 4 \text { BIOL } 3409,3450 \text {, or } \\ & 3470 \end{aligned}$ | 4 General Elective | 3 |
| FOLG $2311{ }^{3}$ | 3 FOLG $2312^{3}$ | 3 |  |
| HIST $1301{ }^{4}$ | 3 HIST 1302 ${ }^{4}$ | 3 |  |
| MATH $1410^{5}$ | 4 POLS $2305{ }^{7}$ | 3 |  |
|  | 14 | 13 | 3 |
| Third Year |  |  |  |
| Fall | Hours Spring | Hours Summer | Hours |
| BIOL 3409, 3450, or 3470 | 4 Component Area VIII | 3 General Elective | 3 |
| BIOL 4374, MATH 3379, or STAT 3379 | 3 Biology Core | 4 |  |
| Minor Course | 3 BIOL 3409 |  |  |
| POLS $2306{ }^{7}$ | 3 BIOL 3450 |  |  |
| Statistics | BIOL 3470 |  |  |
|  | Biology Elective | 3 |  |
|  | Minor Course | 3 |  |
|  | 13 | 13 | 3 |

## Fourth Year

Fall
Hours Spring

## Hours

BIOL 4110
1 BIOL 4111
1

| BIOL 4361 | 3 Biology Electives (See, <br> Degree Works) | 8 |
| :--- | :---: | :---: |
| Biology Elective | 3 Minor Courses | 6 |
| Minor Courses | 6 | 13 |

Total Hours: 120
1
Satisfies Core Curriculum requirement for Component Area III (Life and Physical Science)
2 Satisfies Core Curriculum requirement for Component Area I (Communication)
3 Satisfies Core Curriculum requirement for Component Area IV Language, Philosophy, and Culture).
4 Satisfies Core Curriculum requirement for Component Area VI (U.S. History).
5 Satisfies Core Curriculum requirement for Component Area II (Mathematics) and one hour of Component Area IX (Component Area Option).
6 Satisfies three semester credit hours of the Core Curriculum requirement for Component Area IX (Component Area Option).
7 Satisfies Core Curriculum requirement for Component Area VII (Political Science/Government).

## Note:

This total reflects MATH 1314 satisfying the Core Curriculum requirement for Component Area II (Mathematics), BIOL 1411 and BIOL 1413 satisfying the Core Curriculum requirement for Component Area III (Life and Physical Science), and FOLG 2311 satisfying part (3 semester credit hours) of Component Area IV (Language, Philosophy, and Culture) .

