Undergraduate Major Map

Catalog Year: 2017
College / School: Arts, Sciences & Education
Major: Biological Sciences - BS
Track / Concentration: Biology Education Major
Career Path: Two Year Transfer

**Fall Term 2017**

Students in the major must pass all four parts (English Language Skills, Essay, Reading Comprehension, & Mathematics) of the FTCE General Knowledge Test prior to admission into the degree program. If student has not passed exam prior to admission to FIU, then student will be required to take and pass all portions of the General Knowledge test prior to the end of this term. All students must pass the GK Exam by the time they reach 72 credit hours in their program of study. Please see Secondary Education Advisor - 305-348-2768.

Students should begin preparations for the Professional Education exam, which must be passed prior to completion of 90 credits.

<table>
<thead>
<tr>
<th>Course Group</th>
<th>Course Required</th>
<th>Course Description</th>
<th>Credit Hours</th>
<th>Critical Indicator</th>
<th>Course Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology Core Courses</td>
<td>PCB 3043</td>
<td>Ecology</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Additional Courses</td>
<td>SMT 3100</td>
<td>Know and Learn Math and Sci</td>
<td>3</td>
<td>C+</td>
<td></td>
</tr>
<tr>
<td>Biology Core Courses</td>
<td>PCB 3063</td>
<td>Genetics</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology Laboratories</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>Upper Division Lab</td>
</tr>
<tr>
<td>Additional Lower Division Course</td>
<td>SMT 2044</td>
<td>STEP 1&amp;2 Lesson Math and Sci</td>
<td>2</td>
<td></td>
<td>(Combined Step 1&amp;2: Inquiry-Based Approaches...) Field hours. Fingerprint clearance required.</td>
</tr>
<tr>
<td>Biology Electives</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Undergraduate Major Map

### Spring Term 2018

**Term Hours:** 15

SCE4194 and TSL 4324 may be used to satisfy the Global Learning requirement. See endnotes.

Students are required to take and pass the Professional Education exam prior to end of this term.

Students should begin preparations to take the Subject Area exam by the end of next semester.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Biology Education</td>
<td>SCE 4194</td>
<td>Pers in Sci and Math Ed</td>
<td>3</td>
<td>C+</td>
<td></td>
</tr>
<tr>
<td>Biology Core Courses</td>
<td>PCB 4023</td>
<td>Cell Biology</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Biology Distribution - Ecology</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology Distribution - Organismal Diversity</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology Education</td>
<td>SMT 4301</td>
<td>Class Interact Math and Sci</td>
<td>3</td>
<td></td>
<td>Field hours. Fingerprint clearance required. Prerequisite: SMT 3100</td>
</tr>
</tbody>
</table>

### Summer Term 2018

**Term Hours:** 9

Apply for Student Teaching through Office of Clinical Experiences by June 1st.

Complete any pending FTCE exams this term:
1. FTCE Professional Educator Exam
2. FTCE Subject Area Exam

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</tr>
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<tbody>
<tr>
<td>Biology Education</td>
<td>RED 4325</td>
<td>Subj Area Reading</td>
<td>3</td>
<td></td>
<td>Field hours. Fingerprint clearance required.</td>
</tr>
<tr>
<td>Biology Education</td>
<td>TSL 4324</td>
<td>ESOL Content Areas</td>
<td>3</td>
<td></td>
<td>Field hours. Fingerprint clearance required. Prerequisite: Program Admission</td>
</tr>
<tr>
<td>Biology Core Courses</td>
<td>PCB 4674</td>
<td>Evolution</td>
<td>3</td>
<td></td>
<td>Prerequisites: PCB3063 and PCB3043</td>
</tr>
</tbody>
</table>
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**Fall Term 2018**
Apply for Spring Graduation.

Minimum cumulative FIU GPA of a 2.5 and successful completion of all coursework and FTCE exams required PRIOR to placement in Student Teaching.

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<thead>
<tr>
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<tbody>
<tr>
<td>Biology Education</td>
<td>SMT 4664</td>
<td>Prob Based Instr Math-Sci</td>
<td>3</td>
<td>B</td>
<td>Field hours. Fingerprint clearance required.</td>
</tr>
<tr>
<td>Biology Core Courses</td>
<td>BSC 4931</td>
<td>Senior Seminar</td>
<td>1</td>
<td></td>
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</tr>
<tr>
<td>Biology Distribution</td>
<td>BSC 3910</td>
<td>Biology Research Methods</td>
<td>3</td>
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<td>Research Methods in Biological Sciences</td>
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<tr>
<td>Biology Distribution</td>
<td>CHM 2211</td>
<td>Physiology/Biochemistry</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology Education</td>
<td>BSC 1010</td>
<td>Biology Research Methods</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Electives</td>
<td>CHM 2210</td>
<td>Biology Research Methods</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Spring Term 2019**
Student teaching is a full-time teaching experience and requires commitment during school hours along with preparation and grading time.

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</thead>
<tbody>
<tr>
<td>Biology Education</td>
<td>SCE 4944</td>
<td>Student Teaching</td>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**General Requirements**

Prerequisite Courses:

BSC 1010, BSC 1010L ------- BSCX010/X010L or BSCX010C or BSCX040/X040L or PCBX011C
BSC 1011, BSC 1011L ------- BSCX011/X011L or BSCX011C or BSCX041/X041L
CHM 1045, CHM 1045L ------- CHMX045/X045L or CHMX045C or CHMX040 and CHMX041
CHM 1046, CHM 1046L ------- CHMX046/X046L or CHMX046C
CHM 2210, CHM 2210L ------- CHMX210/X210L or CHMX210C
CHM 2211, CHM 2211L ------- CHMX211/X211L or CHMX211C
PHY 2048, PHY 2048L ------- PHYX048/X048L or PHY053/X053L
Undergraduate Major Map

PHY 2049, PHY 2049L -------- PHYX049/X049L or PHY054/X054L

MAC 2311  -------- MACX311 or MACX233 or MACX253 or MACX081 or MACX241

MAC 2312  -------- MACX312 or MACX282

STA 2122, STA 3123  -------- MACX234 or STAX023 or STAX024 or STAX321

*Critical Indicator is the minimum grade indicated in specific courses to demonstrate proficiency and progress in major. Earning less than the minimum grade is a trigger for a conversation with advisor.*

GENERAL UNIVERSITY REQUIREMENTS

Transfer students are assumed to have completed an Associates of Arts Degree from a Florida Public Institution or satisfied completed 60 credits and the University Core Curriculum Requirements.

In addition, the following courses are required of incoming transfer students:
Global Learning Requirement for Transfers: Transfers entering FIU Fall 2011 or later are required to take two Global Learning courses.

Those who meet University Core Curriculum Requirements prior to entering FIU
- Two Global Learning Discipline Specific Courses (One of the two may be a Global Learning Foundation Course chosen in consultation with your advisor)

Those who do not meet University Core Curriculum Requirements prior to entering FIU
- One Global Learning Foundation Course (from the University Core Curriculum)
- One Global Learning Discipline Specific Course

Transfer courses may not be used to meet the FIU Global Learning Requirement. For a list of Global learning courses: http://goglobal.fiu.edu

College of Arts, Sciences & Education: Selected Requirements

Foreign Language Requirement: Students must demonstrate competency in a foreign language or in American Sign Language at the level of the second semester of a college language sequence. You may be able to satisfy this requirement with AP, CLEP Exam, or other credit. Contact your advisor.

Grades: Students must earn a grade of “C” or higher in all courses required for the major. A grade of “C-” or lower is not acceptable in any required course.

This document only lists SELECTED requirements. See your Panther Degree Audit for a full list of CASE and major requirements at http://my.fiu.edu.

College of Arts, Sciences & Education: BS in Biological Sciences specific requirements

1. Complete 5 required Biology courses
2. Complete Ecology course
3. Complete Organismal Diversity course
4. Complete Physiology/Biochemistry course
5. Complete Structure/Development course
6. Complete 2 3000-4000 Level Division Biology labs (1 unit each)
Undergraduate Major Map

College of Arts, Sciences & Education: BS in Biology (Biology Education) specific requirements

Admission Requirement:
1. GPA 2.5 minimum
2. Pass all four sections of the General Knowledge Test (Reading Comprehension, English Language Skills, Mathematics and Essay).

Graduation Requirement:
1. Have an overall GPA of 2.5 or higher
2. Successfully demonstrate all the Florida Educator Accomplish Practices at the pre-professional level. This is done throughout your coursework in the College of Education.
3. Pass the FTCE General Knowledge, Professional Educator and Subject Area exams prior to graduation. Note: At FIU, the Professional Educator and Subject Area exams must be passed prior to Student Teaching.

Testing Requirement:
1. General Knowledge Exam - English Language
2. General Knowledge Exam - Reading
3. General Knowledge Exam - Essay
4. General Knowledge Exam - Math
5. Professional Education Exam
6. Subject Area Exam in Biology Education