### Undergraduate Major Map

**Catalog Year**: 2018  
**College / School**: Arts, Sciences & Education  
**Major**: Physics - BA  
**Track / Concentration**: Physics Education Major  
**Career Path**: Two Year Transfer

#### Fall Term 2018

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 Advisors - 305-348-2978. 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>Physics Education Concentration - Physics Upper Division</td>
<td>PHY 3106</td>
<td>Modern Physics</td>
<td>3</td>
<td>C+</td>
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<tr>
<td>Physics Education Concentration - Physics Upper Division</td>
<td>PHY 3513</td>
<td>Thermodynamics</td>
<td>3</td>
<td>C</td>
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<tr>
<td>Physics Upper Level Approved Electives</td>
<td>PHY 3802L</td>
<td>Intermed Phys Lab</td>
<td>3</td>
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<tr>
<td>Physics Education Concentration - Physics Education</td>
<td>SMT 3100</td>
<td>Know and Learn Math and Sci</td>
<td>3</td>
<td></td>
<td>Field hours. Fingerprint clearance required.</td>
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<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>1&amp;2 Combined: Inquiry Based Approaches and Lesson Design for Teaching Mathematics and Science. Fingerprint clearance required</td>
</tr>
</tbody>
</table>

**Term GPA**: 2.5  
**Term Hours**: 14  
**Cum GPA**: 2.5
Undergraduate Major Map

Spring Term 2019
SCE 4194 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 90 credits.

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

<table>
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<tr>
<th>Course Group</th>
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</thead>
<tbody>
<tr>
<td>Physics Education Concentration - Physics Upper Division</td>
<td>PHY 3107</td>
<td>Adv Modern Physics</td>
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<td>C+</td>
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<tr>
<td>Physics Education Concentration - Physics Education</td>
<td>SMT 4301</td>
<td>Class Interact Math and Sci</td>
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<tr>
<td>Physics Education Concentration - Physics Education</td>
<td>RED 4325</td>
<td>Subj Area Reading</td>
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<tr>
<td>Physics Upper Level Approved Electives</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Term GPA: 2.5  
Term Hours: 16  
Cum GPA: 2.5

Summer Term 2019
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

Use this Semester to catch up on coursework if necessary.

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<th>Critical Indicator</th>
<th>Course Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics Education Concentration - Physics Education</td>
<td>TSL 4324</td>
<td>ESOL Content Areas</td>
<td>3</td>
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<td>Field hours. Fingerprint clearance required. Program admission required</td>
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<tr>
<td>General Electives</td>
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<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Term GPA: 2.5  
Term Hours: 7  
Cum GPA: 2.5
Undergraduate Major Map

**Fall Term 2019**
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.

<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Physics Education Concentration - Physics Upper Division</td>
<td>PHY 4221</td>
<td>Intro Classical Mechanics</td>
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<tr>
<td>Physics Upper Level Approved Electives</td>
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<tr>
<td>Physics Education Concentration - Physics Education</td>
<td>SMT 4664</td>
<td>Prob Based Instr Math-Sci</td>
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<tr>
<td>Physics Education Concentration - Physics Upper Division</td>
<td>PHY 4821L</td>
<td>Adv Phys Lab</td>
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<tr>
<td>Physics Education Concentration - Physics Education</td>
<td>PHY 3018</td>
<td>Physics Research Methods</td>
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</tr>
</tbody>
</table>

**Spring Term 2020**
Student teaching is a full-time teaching experience and requires commitment during school hours along with preparation and grading time.

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Physics Education Concentration - Physics Education</td>
<td>SCE 4944</td>
<td>Student Teaching</td>
<td>6</td>
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</tbody>
</table>

**General Requirements**

Prerequisites for admission to the major:
BSC1010/BSC1010L ------ BSCX010/X010L or BSCX010C or BSCX040/X040L or PCBX011C
BSC 1011, BSC 1011L ------ BSCX011/X011L or BSCX011C or BSCX041/X041L
CHM1045/CHM1045L ------ CHMX045C or CHMX040 & CHMX041 or CHMX045/X045L
CHM1046/CHM1046L ------ CHMX046C or CHMX046/046L
MAC2311 ------ MACX311 or MACX281
MAC2312 ------ MACX312 or MACX282
MAC2313 ------ MACX313 or MACX283
PHY2048/2048L ------ PHYX048/X048L or PHYX048C
PHY2049/2049L ------ PHYX049/X049L or PHYX049C
Entering students must pass FTCE General Knowledge exam prior to being admitted.

*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 the 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 the 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

Grades: Students must earn a grade of "C" or higher in all courses required for the major.
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 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 (required for graduation)
6. Subject Area Exam in Physics Education (required for graduation)