

Undergraduate Major Map

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

Fall Term 2017

The major map should be used as a general guide. Please make sure to meet regularly with your academic advisor and use your Panther Degree Audit to track your requirements. Also make sure to refer to the Major Map Endnotes for more specific information.

Math placement is based on ALEKS scores and classes are to be selected in consultation with an advisor. If student cannot be placed into MAC 2311, student should be placed into MAC 1147 if possible.

Minimum cumulative FIU GPA of 2.5 required for admission into and graduation from Secondary Education Teacher Preparation Programs.

Students should begin preparations to take all four parts (English Language Skills, Essay, Reading Comprehension, & Mathematics) of the FTCE General Knowledge Test prior to earning 30 credits.

Term GPA: 2.5
Term Hours: 17
Cum GPA: 2.5

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Biology Prerequisites	BSC 1010	General Biology I	3	B	Also satisfies Natural Science Group 1 course. (1) See endnotes
Biology Prerequisites	BSC 1010L	Gen Biology Lab I	1		Also satisfies Natural Science Group 1 course. (1) See endnotes
UCC Communication	ENC 1101	Writing and Rhetoric I	3		Course satisfies UCC Communication requirement.
Biology Prerequisites	MAC 2311	Calculus I	4	B	Also satisfies UCC Mathematics Group One course.
UCC First Year Experience	SLS 1501	First Year Exper	1		
Biology Prerequisites	CHM 1045	Gen Chemistry I	3	C	Also satisfies UCC Natural Science Group One course.
Biology Prerequisites	CHM 1045L	Gen Chem Lab I	1		Also satisfies UCC Natural Science Group One lab. Corequisite: CHM1045.
Additional Lower Division Cour	SMT 2661	STEP 1 Teach Math and Sci	1		Field hours. Fingerprint clearance required.

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Students in the major must pass all four parts (English Language Skills, Essay, Reading Comprehension, & Mathematics) of the FTCE General Knowledge Test prior to earning 30 credits. The passing of the FTCE General Knowledge Test is a requirement for admission into the degree program. Please see Secondary Education Advisor - 305-348-2768.

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

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Biology Prerequisites	BSC 1011	General Biology II	3	B	Also satisfies UCC Natural Science Group Two course.
Biology Prerequisites	BSC 1011L	Gen Biology Lab II	1	C	Also satisfies UCC Natural Science Group Two lab. Corequisite: BSC1011.
UCC Communication	ENC 1102	Writing and Rhetoric II	3		Satisfies UCC Communication course 2. (1) See endnotes
Biology Prerequisites	CHM 1046	Gen Chemistry II	3		Also satisfies UCC Natural Science Group 2 course. (1) See endnotes
Biology Prerequisites	CHM 1046L	Gen Chem Lab II	1		Also satisfies UCC Natural Science Group 2 course. (1) See endnotes
Biology Prerequisites	MAC 2312	Calculus II	4	B	or (STA 3111 AND STA 3112) or (STA 2122 AND 3123). Also satisfies UCC Mathematics Group 2 course. (1) See endnote
Additional Lower Division Cour	SMT 2662	STEP 2 Lesson Math and Sci	1		Field hours. Fingerprint clearance required.

Summer Term 2018

Students are required to select 2 Gordon Rule With Writing (GRW) courses from the UCC.

Term GPA: 2.5
Term Hours: 6
Cum GPA: 2.5

Use this Semester to catch up on coursework and/or to meet your Summer Hours Requirement if necessary.

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
UCC Humanities Group One			3		May satisfy Gordon Rule with Writing (GRW) and/or Global Learning (GL) requirement. Please speak with your advisor.
UCC Social Science Group One			3		May satisfy Gordon Rule with Writing (GRW) and/or Global Learning (GL) requirement. Please speak with your advisor.

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Minimum cumulative FIU GPA of 2.5 required for admission into and graduation from Secondary Education Teacher Preparation Programs.

Passing scores on all areas of FTCE General Knowledge Test required prior to completion of term:

1. English Language Skills
2. Essay
3. Reading Comprehension
4. Mathematics

Students are required to select 2 Gordon Rule With Writing (GRW) courses from the UCC.

Term GPA: 2.5
Term Hours: 13
Cum GPA: 2.5

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Biology Prerequisites	CHM 2210	Organic Chem I	4	C	Prerequisite: CHM1045 with lab, and CHM1046 with lab
Biology Prerequisites	CHM 2210L	Org Chem Lab I	1		Corequisite: CHM2210
Biology Education	SMT 3100	Know and Learn Math and Sci	3	C+	
Biology Prerequisites	PHY 2048L	General Phys Lab I	1		Also satisfies UCC Natural Science Group One lab.
Biology Prerequisites			4		PHY2048 or PHY2053. Also satisfies UCC Natural Science Group One course.

Spring Term 2019

Students are required to select 2 Gordon Rule With Writing (GRW) courses from the UCC.

Term GPA: 2.5
Term Hours: 15
Cum GPA: 2.5

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Biology Prerequisites			4		PHY2049 or PHY2054. Also satisfies UCC Natural Science Group Two course.
Biology Education	SCE 4194	Pers in Sci and Math Ed	3	C+	
Biology Prerequisites	PHY 2049L	General Phys Lab II	1		Also satisfies UCC Natural Science Group Two lab.
Biology Prerequisites	CHM 2211	Organic Chem II	3		
Biology Prerequisites	CHM 2211L	Organic Chem Lab II	1		
UCC Arts			3		May satisfy Gordon Rule with Writing (GRW) and/or Global Learning (GL) requirement. Please speak with your advisor.

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Summer Term 2019

Students are required to select 2 Gordon Rule With Writing (GRW) courses from the UCC.

Use this Semester to catch up on coursework and/or to meet your Summer Hours Requirement if necessary.

May use TSL 4324 to satisfy the Global Learning requirement. (2) See endnotes.

Term GPA: 2.5
Term Hours: 6
Cum GPA: 2.5

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
UCC Social Science Group Two			3		DEP2000 is recommended. May satisfy Gordon Rule with Writing (GRW) and/or Global Learning (GL) requirement. Please speak with your advisor.
Biology Education	TSL 4324	ESOL Content Areas	3		Field hours. Fingerprint clearance required.

Fall Term 2019

Minimum cumulative FIU GPA of 2.5 required for admission into and graduation from Secondary Education Teacher Preparation Programs.

Students should begin preparations for the Professional Education exam, required prior to earning 90 credits.

Term GPA: 2.5
Term Hours: 13
Cum GPA: 2.5

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Biology Education	BSC 3910	Biology Research Methods	3		Research Methods in Biological Sciences
Biology Laboratories			1		Upper Division Lab
Biology Distribution - Physiology/Biochemistry			3		Field hours. Fingerprint clearance required.
Biology Core Courses	PCB 3043	Ecology	3		
UCC Humanities - Group Two			3		May satisfy Gordon Rule with Writing (GRW) and/or Global Learning (GL) requirement. Please speak with your advisor.

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Spring Term 2020

May use SCE 4194 to satisfy the Global Learning requirement. (2) See endnotes.

Students are required to take and pass the Professional Education exam prior to earning 90 credits.

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

Term GPA: 2.5
Term Hours: 12
Cum GPA: 2.5

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Biology Core Courses	PCB 4023	Cell Biology	3	C	
Biology Distribution - Organismal Diversity			3		
Biology Core Courses	PCB 3063	Genetics	3	C+	Prerequisite: BSC1010
Biology Education	SMT 4301	Class Interact Math and Sci	3		Field hours. Fingerprint clearance required.

Summer Term 2020

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 or to meet your Summer Hours Requirement if necessary.

Term GPA: 2.5
Term Hours: 3
Cum GPA: 2.5

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Biology Education	RED 4325	Subj Area Reading	3		Field hours. Fingerprint clearance required.

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Fall Term 2020

Apply for Spring graduation.

Term GPA: 2.5
Term Hours: 13
Cum GPA: 2.5

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

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Biology Education	SMT 4664	Prob Based Instr Math-Sci	3	B	Field hours. Fingerprint clearance required.
Biology Core Courses	BSC 4931	Senior Seminar	1		
Biology Distribution - Structure/Development			3		
Biology Distribution - Ecology			3		
Biology Core Courses	PCB 4674	Evolution	3		

Spring Term 2021

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

Term GPA: 2.5
Term Hours: 6
Cum GPA: 2.5

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Biology Education	SCE 4944	Student Teaching	6		

Summer Term 2021

Use this semester to catch up on coursework and/or satisfy the 9 credits summer requirement (if needed). (3) See endnotes

General Requirements

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

See your Panther Degree Audit (PDA) for a real-time update on your academic career progress and additional information on University and major requirements at <http://my.fiu.edu>.

(1) UCC: Students must meet the University Core Curriculum (UCC) requirements. For a full list of UCC courses, see <http://undergrad.fiu.edu/advising/curriculum.html> or speak with your advisor. UCC courses must be taken for a letter grade and may not be taken at other institutions without permission from the Dean of Undergraduate Education.

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(2) Global Learning: Freshmen entering FIU Summer B 2010 or later must take at least two Global Learning (GL) designated courses at FIU. See <http://goglobal.fiu.edu>. Courses must be:

- 1 GL foundation course (from the University Core Curriculum), which must be taken within the first 60 credits.
- 1 GL discipline-specific course (3000/4000 level)

(3) Summer Hours Requirement: All students entering FIU or any university within the State University System (SUS) of Florida with fewer than 60 credit hours are required to earn at least nine credit hours prior to graduation by attending one or more summer terms at a university in the SUS.

(4) Gordon Rule: All Gordon Rule courses (i.e., English Composition, Humanities with Writing, and Quantitative Reasoning) must be completed with a minimum grade of "C." This requirement must be fulfilled within the first 60 credits.

(5) Foreign Language Requirement for Graduation (FLENT/FLEX): A student who did not complete two years of the same foreign language in high school or at a post-secondary institution must successfully complete 8-10 credit hours of instruction in one foreign language prior to graduation. Exceptions include appropriate CLEP, AP, IB, TOEFL, or transfer credit. Contact your advisor for more information.

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 P.D.A. for full list of CASE & 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)

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

1. GPA 2.5 minimum
2. Pass all 4 sections of General Knowledge Test(Reading Comprehension, English Language Skills, Mathematics & Essay).

Graduation Requirement:

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

Testing Requirement:

1. FTCE General Knowledge Test(English Language, Reading, Essay, Math)

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2. FTCE Professional Education Exam
3. FTCE Subject Area Exam in Biology