

Undergraduate Major Map

Catalog Year: 2021
College / School: Arts, Sciences & Education
Major: Chemistry - BA
Track / Concentration: Chemical Education Major
Career Path: Four Year Freshman

<p>Fall Term 2021</p> <p>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.</p> <p>Math placement is based on your Math Placement Score and classes are to be selected in consultation with an advisor. Pre-Calculus math sequence is MAC1105 and MAC 1147 or MAC 1105, MAC1140 and MAC1114</p> <p>Minimum cumulative FIU GPA of 2.5 required for admission into and graduation from Secondary Education Teacher Preparation Programs.</p> <p>Students should begin preparations to take all four parts (English Language Skills, Essay, Reading Comprehension, & Mathematics) of the Florida Teacher Certification Exam (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 305-348-2978</p>				<p>Term Hours: 13 Cum GPA: 2.5</p>	
Course Group	Course Required	Course Description	Credit Hours	Course Notes	
General Chemistry	CHM 1045	Gen Chemistry I	3	Also satisfies UCC Natural Science Group 1 course. (1) See endnotes	
General Chemistry	CHM 1045L	Gen Chem Lab I	1	Also satisfies UCC Natural Science Group 1 course. (1) See endnotes	
UCC Communication	ENC 1101	Writing and Rhetoric I	3	Satisfies UCC Communication course 1. (1) See endnotes	
UCC First Year Experience	SLS 1501	First Year Exper	1	Satisfies UCC First Year Experience course. (1) See endnotes	
Chemistry Math	MAC 2311	Calculus I	4	Also satisfies UCC Mathematics Group 1 course. (1) See endnote	
Additional Lower Division Cour	SMT 2661	STEP 1 Teach Math and Sci	1	Field hours. Fingerprint clearance required.	

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Spring Term 2022 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 - 305-348-2978.					Term Hours: 15 Cum GPA: 2.5
Course Group	Course Required	Course Description	Credit Hours	Course Notes	
General Chemistry	CHM 1046	Gen Chemistry II	3		
General Chemistry	CHM 1046L	Gen Chem Lab II	1		
UCC Communication	ENC 1102	Writing and Rhetoric II	3	Satisfies UCC Communication course 2. (1) See endnotes	
Chemistry Math	MAC 2312	Calculus II	4	Also satisfies UCC Mathematics Group 2 course. (1) See endnotes	
UCC Arts			3	May satisfy Gordon Rule with Writing (GRW) and/or Global Learning (GL) requirements. Please speak with your advisor.	
Additional Lower Division Cour	SMT 2662	STEP 2 Lesson Math and Sci	1	Field hours. Fingerprint clearance required.	

Summer Term 2022 Students should complete at least 9 credit hours of Summer Coursework throughout their FIU career. Students should begin preparing for the FTCE: General Knowledge (GK) Exam, as planned with their assigned advisor. Students must purchase a Taskstream Account to complete their Program Portfolio electronically. They must also maintain an average cumulative GPA of a 2.5, with a minimum of a 2.0 in all Education coursework.					Term Hours: 7 Cum GPA: 2.5
Course Group	Course Required	Course Description	Credit Hours	Course Notes	
Intro to Analytical Chemistry	CHM 3120	Intro Analyt Chem	3		
Intro to Analytical Chemistry	CHM 3120L	Intr Analyt Chm Lab	1		
UCC Humanities Group One			3	May satisfy Gordon Rule with Writing (GRW) and/or Global Learning (GL) requirements. Please speak with your advisor.	

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Fall Term 2022 Students should begin preparing for the FTCE: General Knowledge (GK) Exam, as planned with their assigned advisor. Students must purchase a Taskstream Account to complete their Program Portfolio electronically. They must also maintain an average cumulative GPA of a 2.5, with a minimum of a 2.0 in all Education coursework.					Term Hours: 15 Cum GPA: 2.5
Course Group	Course Required	Course Description	Credit Hours	Course Notes	
Organic Chemistry	CHM 2210	Organic Chem I	4		
Organic Chemistry	CHM 2210L	Org Chem Lab I	1		
General Biology	BSC 2010	General Biology I	3		
General Biology	BSC 2010L	Gen Biology Lab I	1		
UCC Social Science Group One			3	May satisfy Gordon Rule with Writing (GRW) and/or Global Learning (GL) requirements. Please speak with your advisor. (8) POS 2041 or AMH 2020 recommended if Civic Literacy requirement is not met.	
Education Requirements	SMT 3100	Know and Learn Math and Sci	3		

Spring Term 2023 Students should begin preparing for the FTCE: General Knowledge (GK) Exam, as planned with their assigned advisor. Students must purchase a Taskstream Account to complete their Program Portfolio electronically. They must also maintain an average cumulative GPA of a 2.5, with a minimum of a 2.0 in all Education coursework.					Term Hours: 14 Cum GPA: 2.5
Course Group	Course Required	Course Description	Credit Hours	Course Notes	
Cognate Area Courses	BSC 2011	General Biology II	3	Also satisfies UCC Natural Science Group 2 course. (1) See endnotes	
Cognate Area Courses	BSC 2011L	Gen Biology Lab II	1	Also satisfies UCC Natural Science Group 2 lab. (1) See endnotes	
UCC Humanities - Group Two			3	May satisfy Gordon Rule with Writing (GRW) and/or Global Learning (GL) requirements. Please speak with your advisor.	
Education Requirements	SMT 4301	Class Interact Math and Sci	3		
Organic Chemistry	CHM 2211	Organic Chem II	3		
Organic Chemistry	CHM 2211L	Organic Chem Lab II	1		

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<p>Summer Term 2023 Students should complete at least 9 credit hours of Summer Coursework throughout their FIU career. Students must pass all sections of the FTCE: General Knowledge (GK) Exam by the end of the semester that they complete 72 credits. After passing this exam, they must apply for Program Admission with their assigned advisor located in ZEB 210. Students must purchase a Taskstream Account to complete their Program Portfolio electronically. They must also maintain an average cumulative GPA of a 2.5, with a minimum of a 2.0 in all Education coursework.</p>				<p>Term Hours: 5 Cum GPA: 2.5</p>
Course Group	Course Required	Course Description	Credit Hours	Course Notes
Physics Sequence	PHY 2048L	General Phys Lab I	1	
Physics Sequence			4	PHY2048 or PHY2053

<p>Fall Term 2023 Students must pass all sections of the FTCE: General Knowledge (GK) Exam by the end of the semester that they complete 72 credits. After passing this exam, they must apply for Program Admission with their assigned advisor located in ZEB 210. In addition, students should complete Milestone #1 electronically, using their Taskstream account: https://w.taskstream.com/ts/chang28/ProgramMilestones . If TSL 3080 or TSL 4081 course is taken in this semester, it will satisfy the Global Learning (GL) Discipline Specific requirement. They must also maintain an average cumulative GPA of a 2.5, with a minimum of a 2.0 in all Education coursework.</p>				<p>Term Hours: 14 Cum GPA: 2.5</p>
Course Group	Course Required	Course Description	Credit Hours	Course Notes
UCC Social Science Group Two			3	May satisfy Gordon Rule with Writing (GRW) and/or Global Learning (GL) requirements. Please speak with your advisor.
Physics Sequence	PHY 2049L	General Phys Lab II	1	
Education Requirements	RED 4325	Subj Area Reading	3	Field hours. Fingerprint clearance required.
Physics Sequence			4	PHY2049 or PHY2054
Education Requirements			3	CHM 3XXX Research Methods in Chemistry

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Spring Term 2024 Students should begin preparing for the FTCE: Professional Education Test and/or Subject Area Exam as planned with their assigned advisor				Term Hours: 13 Cum GPA: 2.5
Course Group	Course Required	Course Description	Credit Hours	Course Notes
Fundamentals of Physical Chemistry	CHM 3400	Fund.Phys.Chm	3	
Fundamentals of Physical Chemistry	CHM 3400L	Fund.Phys.Chm. Lab	1	
Education Requirements	SCE 4194	Pers in Sci and Math Ed	3	Field hours. Fingerprint clearance required.
Restricted Electives - Lecture			3	
General Electives			3	See advisor.

Summer Term 2024 Summer enrollment is encouraged, but not applicable for all students. This may be determined after meeting with their assigned advisor. Students should apply for Student Teaching through the Office of Clinical Experiences by June 1st, or when specified by the Clinical Experience Office and/or their assigned advisor. In addition, they should have passed the FTCE: Professional Education Test and/or Subject Area Exam as planned with their assigned advisor. Students must continue to maintain an average cumulative GPA of a 2.5, with a minimum of a 2.0 in all Education coursework.				Term Hours: 6 Cum GPA: 2.5
Course Group	Course Required	Course Description	Credit Hours	Course Notes
Education Requirements	TSL 4324	ESOL Content Areas	3	Field Hours. Fingerprint clearance required
General Electives			3	

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Fall Term 2024 Students MUST have ALL required coursework completed and ALL FTCE Education Exams passed prior to placement in Student Teaching. Students must continue to maintain an average cumulative GPA of a 2.5, with a minimum of a C in all Education coursework.					Term Hours: 12 Cum GPA: 2.5
Course Group	Course Required	Course Description	Credit Hours	Course Notes	
Biological Chemistry I	CHM 4304	Biol Chemistry I	3		
Biological Chemistry I	CHM 4304L	Biol Chem I Lab	1		
Senior Seminar	CHM 4930	Senior Seminar	1		
Restricted Electives - Lecture			3		
Restricted Electives - Labs			1		
Education Requirements	SMT 4664	Prob Based Instr Math-Sci	3	Field hours. Fingerprint clearance required.	

Spring Term 2025 Student teaching is a full-time teaching experience and requires commitment during school hours along with preparation and grading time. Students should apply for Graduation by the first week of classes, or as communicated by their advisor. Students must continue to maintain an average cumulative GPA of a 2.5, with a minimum of a C in all Education coursework.					Term Hours: 6 Cum GPA: 2.5
Course Group	Course Required	Course Description	Credit Hours	Course Notes	
Education Requirements	SCE 4944	Student Teaching	6		

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.

(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

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(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.

(8) Postsecondary Civic Literacy (CL): Students must demonstrate understanding of American Civics via completed course work or test credit. Consult with an advisor to determine the best option for satisfying this requirement.

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 PDA for a full list of CASE and major requirements at my.fiu.edu. College of Arts, Sciences & Education:

BA in Chemistry Chemical Education specific requirements

1. Restricted electives: 2 lecture courses; 1 of them with the lab with a minimum grade of "C." Also, must take BSC 1011 & BSC 1011L
2. Students are required to take a nationally-normed chemistry examination in their last semester before graduation.

Admission Requirement:

1. GPA 2.5 minimum
2. Pass all sections of General Knowledge Test(Reading, English, 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 & Subject Area exams prior to graduation.

Note: At FIU, all FTCE exams must be passed prior to Student Teaching. Testing Requirement:

1. FTCE General Knowledge Test(English Language, Reading, Essay, Math)
2. FTCE Professional Education Exam
3. FTCE Subject Area Exam in Chemistry