

Undergraduate Major Map

Catalog Year 2021
College / School Arts, Sciences & Education
Major Chemistry - BA
Track / Concentration Environmental Chemistry
Career Path Two Year Transfer

Fall Term 2021 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. 2 year map is based on completion of all required lower division pre-requisite courses Consult with your advisor to find out how many upper division elective credits you need. College of Arts, Sciences & Education requires a minimum of 45 credits of upper division (3000-4000 level) courses. NOTE: Students may earn a Certificate in Environmental Studies (offered by the Department of Earth and Environment), by taking the appropriate environmental studies courses.				Term Hours: 14
Course Group	Course Required	Course Description	Credit Hours	Course Notes
Intro to Analytical Chemistry	CHM 3120	Intro Analyt Chem	3	Prerequisite: CHM 1046 and CHM 1046L
Intro to Analytical Chemistry	CHM 3120L	Intr Analyt Chm Lab	1	
3000-4000 Level Electives			3	
3000-4000 Level Electives			3	Global Learning Discipline Specific Course Recommended. See End notes
Biological Chemistry I	CHM 4304	Biol Chemistry I	3	Prerequisites: CHM 2211 and CHM 2211L
Biological Chemistry I	CHM 4304L	Biol Chem I Lab	1	Prerequisite or corequisite: CHM4304

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Spring Term 2022				Term Hours: 13
Course Group	Course Required	Course Description	Credit Hours	Course Notes
Cognate Area Courses			3	Choose from List 1 (Cognate Area Courses): An environmentally-related course. See Academic Advisor, PDA, or University Catalog for course options.
3000-4000 Level Electives			3	Global Learning Discipline Specific Course Recommended. See End notes
3000-4000 Level Electives			3	Consult with Academic Advisor. If not already completed, take a Discipline Specific GL course
Fundamentals of Physical Chemistry	CHM 3400	Fund.Phys.Chm	3	Prerequisite: CHM3120,CHM3120L,MAC2311,and MAC2312, (PHY2048, PHY2048L, PHY2049, PHY2049L) or (PHY2053, PHY2048L, PHY2054, PHY2049L), Corequisite: CHM3400L.
Fundamentals of Physical Chemistry	CHM 3400L	Fund.Phys.Chm. Lab	1	Prerequisite or corequisite: CHM3400

Summer Term 2022				Term Hours: 7
Use this Semester to catch up on coursework if necessary.				
Course Group	Course Required	Course Description	Credit Hours	Course Notes
3000-4000 Level Electives			3	Consult with Academic Advisor. If not already completed, take a Discipline Specific GL course
3000-4000 Level Electives			3	Consult with Academic Advisor. If not already completed, take a Discipline Specific GL course
General Electives			1	Could be lab, internship, or research credit. Consult with Academic Advisor

Fall Term 2022				Term Hours: 13
Apply for Spring Graduation				
Course Group	Course Required	Course Description	Credit Hours	Course Notes
Restricted Electives	CHM 4130	Instrument Analysis	3	Prerequisite: (CHM3120, CHM3120L, CHM2211, CHM2211L, (CHM3410 or CHM3400), (PHY2048, PHY2048L, PHY2049, PHY2049L) or (PHY2053, PHY2048L, PHY2054, PHY2049L)
Restricted Electives	CHM 4130L	Instr Analysis Lab	1	Prerequisite or corequisite: CHM4130.
Restricted Electives			3	List 2 lecture course. See Academic Advisor, PDA, or Catalog for list of options
Chemistry 4000/5000 Level			3	One senior level chemistry elective (CHM4XXX/CHM5XXX)** which is environmentallyrelated. May NOT use CHM4910L or CHM4911L and MUST be Environmentally related
3000-4000 Level Electives			3	Consult with Academic Advisor. If not already completed, take a Discipline Specific GL course

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Spring Term 2023 Students are required to take a nationally-normed chemistry examination in their last semester before graduation. Please contact the chemistry department for more information.				Term Hours: 13
Course Group	Course Required	Course Description	Credit Hours	Course Notes
Senior Seminar	CHM 4930	Senior Seminar	1	Can only be completed in last semester of program with advisor permission
General Electives			3	Consult with Academic Advisor. If not already completed, take a Discipline Specific GL course
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Summer Term 2023 Use this Semester to catch up on coursework if necessary.			
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General Requirements

Prerequisite Courses:

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 PHYX053/X053L

PHY 2049, PHY 2049L ----- PHYX049/X049L or PHYX054/X054L

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

MAC 2312 ----- MACX312 or MACX282

BSC 2010, BSC 2010L

BSC 2011, BSC 2011L

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.

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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>

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.

The Civic Literacy requirement is a statewide mandate that applies to undergraduate students initially entering a Florida State University System (SUS) and/or Florida College System (FCS) institution in the 2018-19 academic year and thereafter. <https://transfer.fiu.edu/transfer-101/graduation-requirements/>

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.

University Core Requirement/GRW: All students entering FIU or any university within the State University System (SUS) of Florida with fewer than 60 credit hours should meet with their academic advisor to discuss possible additional university requirements.

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 specific requirements:

Upper Division Credit Requirement: The College of Arts, Sciences & Education requires completion of 45 credits upper division (3000 and 4000 level). Besides the upper division credits for the major, students will need to take some upper division electives. We recommend checking your degree audit and coordinating with your assigned advisor.

This concentration is intended for students who desire a comprehensive background in chemistry but with an interest in applying their expertise in chemistry to environmentally-related careers and issues.

Environmental Chemistry Concentration

- o Cognate Area Courses: An environmentally related course
- o Restricted Electives: CHM 4130/4130L and one other lecture course
- o Senior level chemistry elective must be environmentally related.

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Check PDA for eligible Cognate Area Courses and appropriate Restricted Electives.