

Undergraduate Major Map

Catalog Year 2017
College / School Arts, Sciences & Education
Major Chemistry - BA
Track / Concentration Environmental Chemistry
Career Path Four Year Freshman

Fall Term 2017

Term Hours: 15
Cum GPA: 2

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. Pre-Calculus math sequence is MAC1105 and MAC 1147 or MAC 1105, MAC1140 and MAC1114

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Common Prerequisites	CHM 1045	Gen Chemistry I	3	B	Also satisfies UCC Natural Science Group 1 course. (1) See endnotes
Common Prerequisites	CHM 1045L	Gen Chem Lab I	1	B	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
UCC Arts			3		May satisfy Gordon Rule with Writing (GRW) and/or Global Learning (GL) requirements. Please speak with your advisor.
Common Prerequisites	MAC 2311	Calculus I	4	B	Also satisfies UCC Mathematics Group 1 course. (1) See endnote

Spring Term 2018

Term Hours: 14

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Common Prerequisites	CHM 1046	Gen Chemistry II	3	B	
Common Prerequisites	CHM 1046L	Gen Chem Lab II	1	B	
UCC Communication	ENC 1102	Writing and Rhetoric II	3		Satisfies UCC Communication course 2. (1) See endnotes
Common Prerequisites	MAC 2312	Calculus II	4	B	Also satisfies UCC Mathematics Group 2 course. (1) See endnotes
UCC Social Science 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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Summer Term 2018

Term Hours: 4

By end of Summer 1 student should have 30 credits or more.
 Use this semester to catch up on coursework and/or satisfy the 9 credits summer requirement (if needed). (3) See endnotes

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Intro to Analytical Chemistry	CHM 3120	Intro Analyt Chem	3		
Intro to Analytical Chemistry	CHM 3120L	Intr Analyt Chm Lab	1		

Fall Term 2018

Term Hours: 15

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Common Prerequisites	CHM 2210	Organc Chem I	4	B	
Common Prerequisites	CHM 2210L	Org Chem Lab I	1	B	
General Biology	BSC 1010	General Biology I	3	C	
General Biology	BSC 1010L	Gen Biology Lab I	1	C	
UCC Social Science Group Two			3		May satisfy Gordon Rule with Writing (GRW) and/or Global Learning (GL) requirements. Please speak with your advisor.
UCC Humanities Group One			3		May satisfy Gordon Rule with Writing (GRW) and/or Global Learning (GL) requirements. Please speak with your advisor.

Spring Term 2019

Term Hours: 14

May use 3000-4000 Level Electives course to satisfy the Outside of Major requirement

May use electives to satisfy Global Learning (GL) or Gordon Rule with Writing (GRW) requirements. Please speak with your advisor.

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
3000-4000 Level Electives			3		
Common Prerequisites	CHM 2211	Organic Chem II	3	B	
Common Prerequisites	CHM 2211L	Organic Chem Lab II	1	B	
UCC Humanities - Group Two			3		May satisfy Gordon Rule with Writing (GRW) and/or Global Learning (GL) requirements. Please speak with your advisor.
Cognate Area Courses			3		Environmentally Related Topic
Cognate Area Courses			1		Taken only if the Cognate Area Course has a corresponding lab. Some courses do not have a corresponding lab.

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Summer Term 2019

Term Hours: 6

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

May use electives to satisfy Global Learning (GL) or Gordon Rule with Writing (GRW) requirements. Please speak with your advisor.

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
3000-4000 Level Electives			3		Global Learning Discipline Specific Course Recommended
3000-4000 Level Electives			3		

Fall Term 2019

Term Hours: 14

Cum GPA: 2

May use electives to satisfy Global Learning (GL) or Gordon Rule with Writing (GRW) requirements. Please speak with your advisor.

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Physics With Calculus Sequence			4	C	PHY 2048 or PHY2053
Physics With Calculus Sequence	PHY 2048L	General Phys Lab I	1	C	
General Electives			3		
General Electives			3		
General Electives			3		

Spring Term 2020

Term Hours: 12

Cum GPA: 2

If College of Arts, Sciences & Education Foreign Language requirement has been satisfied or waived, a General Elective may be taken instead to satisfy the Elective Outside the Major requirement (if needed)

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Biological Chemistry I	CHM 4304	Biol Chemistry I	3	C	
Biological Chemistry I	CHM 4304L	Biol Chem I Lab	1	C	
General Electives			3		
Physics With Calculus Sequence			4	C	PHY 2049 or PHY 2054. Also satisfies UCC Natural Science Group 2 course. (1) See Endnotes
Physics With Calculus Sequence	PHY 2049L	General Phys Lab II	1	C	Also satisfies UCC Natural Science Group 2 lab. (1) See Endnotes

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Summer Term 2020

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

Fall Term 2020

Apply for Spring Graduation

Term Hours: 13

Cum GPA: 2

May use electives to satisfy Global Learning (GL) or Gordon Rule with Writing (GRW) requirements. Please speak with your advisor.

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Fundamentals of Physical Chemistry	CHM 3400	Fund.Phys.Chm	3		
Fundamentals of Physical Chemistry	CHM 3400L	Fund.Phys.Chm.Lab	1		
Restricted Electives - Additional			3		The following courses may be used to satisfy this requirement: CHM 3411, CHM 3610, CHM 4220, CHM 4300, and CHM 4307
3000-4000 Level Electives			3		
3000-4000 Level Electives			3		

Spring Term 2021

Students are required to take a nationally-normed chemistry examination in their last semester before graduation.

Term Hours: 14

Cum GPA: 2

May use one 3000-4000 Elective to satisfy the Elective Outside the Major requirement (if needed)

College of Arts, Sciences & Education requires 48 credits of 3000 or 4000 level courses, plan accordingly.

May use electives to satisfy Global Learning (GL) or Gordon Rule with Writing (GRW) requirements. Please speak with your advisor.

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Senior Seminar			1		
Chemistry 4000 Level			3		May NOT use CHM4910L or CHM4911L and MUST be Environmentally related
3000-4000 Level Electives			3		
3000-4000 Level Electives			3		
Restricted Electives	CHM 4130	Instrument Analysis	3		
Restricted Electives	CHM 4130L	Instr Analysis Lab	1		

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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.

(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.
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: BA in Chemistry (Environmental Chemistry Concentration) specific requirements

This concentration is intended for students who desire a comprehensive background in chemistry but with an

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interest in applying their expertise in chemistry to environmentally-related careers and issues.

1. Choose from List 1 (Cognate Area Courses): An environmentally-related course.
2. Choose from List 2 (Restricted Electives): CHM4130/4130L and one other lecture course.
3. One senior level chemistry elective (CHM4XXX/CHM5XXX)** which is environmentally-related.
**CHM4910L or CHM4911L may not be used to satisfy this requirement.
4. Students are required to take a nationally-normed chemistry examination in their last semester before graduation. Please contact the chemistry department for more information.

NOTE: To earn a Certificate in Environmental Studies (offered by the Department of Environmental Studies), satisfy the College's requirement of 9 credits outside the major by taking the appropriate environmental studies courses.

List 1 - Cognate Area Courses

BSC1011/1011L
CCJ 3024
EVR 3011
EVR 3013/3013L
EVR 4211/4211L
EVR 4312
EVR 4321
EVR 4592/4592L
GLY 3202/3202L
GLY 4822
OCE 3014

List 2 - Restricted Electives

CHM 4220
CHM 4300
CHM 4307
CHM 4307
CHM 3610
CHM 3411
CHM 4130
CHM 4230L
CHM 4130L
CHM 4370L
CHM 4610L
CHM 3411L