

Undergraduate Major Map

Catalog Year 2023
College / School Arts, Sciences & Education
Major Geosciences - BS
Track / Concentration Atmospheric Sciences
Career Path Four Year Freshman

Fall Term 2023 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 your Math Placement Score and classes are to be selected in consultation with an advisor. Pre-Calculus math sequence is , MAC1105 and MAC1147 *Course availability subject to change. Please see Academic Advisor.					Term Hours: 13 Cum GPA: 2
Course Group	Course Required	Course Description	Credit Hours	Course Notes	
General Chemistry I & II	CHM 1045	Gen Chemistry I	3	Also satisfies UCC Natural Science Group One lab. Corequisite: CHM1045L.	
General Chemistry I & II	CHM 1045L	Gen Chem Lab I	1	Also satisfies UCC Natural Science Group One lab. Corequisite: CHM1045.	
UCC Communication	ENC 1101	Writing and Rhetoric I	3		
UCC First Year Experience	SLS 1501	First Year Exper	1		
Calculus I & II	MAC 2311	Calculus I	4	Prerequisites: MAC1147 or appropriate Math placement. Also satisfies UCC Mathematics Group One course	
First Year Seminar	ISC 1056	First Year Sem Earth Env	1		

Spring Term 2024					Term Hours: 14 Cum GPA: 2
Course Group	Course Required	Course Description	Credit Hours	Course Notes	
General Chemistry I & II	CHM 1046	Gen Chemistry II	3	Corequisite: CHM1046L. Prerequisite: CHM1045 with lab	
General Chemistry I & II	CHM 1046L	Gen Chem Lab II	1	Corequisite: CHM1046	
UCC Communication	ENC 1102	Writing and Rhetoric II	3	Prerequisite: ENC1101	
Calculus I & II	MAC 2312	Calculus II	4	Also satisfies UCC Mathematics Group Two course. Prerequisite: MAC2311.	
UCC Humanities 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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<p>Summer Term 2024 By end of Summer 1, student should have at least 30 credits.</p> <p>May use electives to satisfy Global Learning (GL) or Gordon Rule with Writing (GRW) requirements. Please speak with your advisor.</p> <p>Use this semester to catch up on coursework and satisfy some or all of the 9 credits summer requirement.</p>				<p>Term Hours: 3 Cum GPA: 2</p>
Course Group	Course Required	Course Description	Credit Hours	Course Notes
UCC Social Science Group One			3	May satisfy Gordon Rule with Writing (GRW) and/or Global Learning (GL) requirement. Please speak with your advisor. (8) POS 2041 or AMH 2020 recommended if Civic Literacy requirement is not met.

<p>Fall Term 2024</p>				<p>Term Hours: 12 Cum GPA: 2</p>
Course Group	Course Required	Course Description	Credit Hours	Course Notes
Physics I	PHY 2048	Physics W/Calculus I	4	Pre/Co-requisite: MAC2311. Could also take PHY2053, Physics w/o Calc I. *** PHY2048/2049: Physics with Calculus is strongly recommended for students in the Atmospheric Sciences Major
Physics I	PHY 2048L	General Phys Lab I	1	Pre/Co-requisite: PHY2048/2053
UCC Humanities - Group Two			3	May satisfy Gordon Rule with Writing (GRW) and/or Global Learning (GL) Requirement. Please speak with your advisor
Atmospheric Science Track - Additional Math	MAC 2313	Multivariable Calc	4	Prerequisite: MAC2312

<p>Spring Term 2025</p>				<p>Term Hours: 12 Cum GPA: 2</p>
Course Group	Course Required	Course Description	Credit Hours	Course Notes
Physics II	PHY 2049	Physics W/Calc II	4	Also satisfies UCC Natural Science Group Two course. Prerequisites: PHY2048, MAC2312. Could also take PHY2054, Physics w/o Calc II (Pre-req; PHY2053). ** PHY2048/2049: Physics with Calculus is strongly recommended for students in the Atmospheric Sciences Major
Physics II	PHY 2049L	General Phys Lab II	1	Also satisfies UCC Natural Science Group Two course. Pre/Co-requisite: PHY2049/2054
Atmospheric Science Track - Additional Math	MAP 2302	Differential Equat	3	Prerequisite: MAC2312
Geosciences Lower Division	GLY 1010	Physical Geology	3	Also satisfies UCC Natural Science Group Two course. Or can take ESC1000 or GLY3039.
Geosciences Lower Division	GLY 1010L	Physical Geology Lab	1	Also satisfies UCC Natural Science Group Two course. Or can take ESC1000L or GLY3039L with its corresponding lecture.

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Summer Term 2025 Use this semester to catch up on coursework and/or satisfy the 9 credits summer requirement (if needed)				Term Hours: 6 Cum GPA: 2
Course Group	Course Required	Course Description	Credit Hours	Course Notes
UCC Arts			3	May satisfy Gordon Rule with Writing (GRW) and/or Global Learning (GL) requirement. Please speak with your advisor
UCC Social Science Group Two			3	May satisfy Gordon Rule with Writing (GRW) and/or Global Learning (GL) Requirement. Please speak with your advisor

Fall Term 2025 May use electives to satisfy Global Learning (GL) or Gordon Rule with Writing (GRW) Requirements. Please speak with your advisor				Term Hours: 15 Cum GPA: 2
Course Group	Course Required	Course Description	Credit Hours	Course Notes
Geosciences Required	OCP 3002	Physical Oceanography	3	Prerequisites: CHM1045 and (PHY2048 or PHY2053)
Geosciences Electives	MET 4532	Hurricanes	3	Or can take other List 4 course.
General Electives			3	
General Electives			3	3000-4000 Level Electives
Geosciences Required	MET 3003	General Meteorology	3	Prerequisite: PHY2048 or PHY2053.

Spring Term 2026 May use electives to satisfy Global Learning (GL) or Gordon Rule with Writing (GRW) Requirements. Please speak with your advisor				Term Hours: 16 Cum GPA: 2
Course Group	Course Required	Course Description	Credit Hours	Course Notes
Major Specific Courses	MET 3502	Synoptic Meteorology	3	
Geosciences Required	GLY 3112	Earth thru Time	3	Prerequisites: GLY1010 or GLY3039
General Electives			3	
Geosciences Required	GLY 4822	Intro Hydrogeology	3	Prerequisites: (GLY1010 or GLY3039), (PHY2048 or PHY2053), CHM1045, MAC2311
General Electives			3	
Major Specific Courses	MET 3502L	Synoptic Meteor Lab	1	

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<p>Summer Term 2026 Use this semester to catch up on coursework and/or satisfy the 9 credits summer requirement (if needed)</p>	<p>Cum GPA: 2</p>
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<p>Fall Term 2026 Please speak with your advisor about applying for graduation. May use electives to satisfy Global Learning (GL) or Gordon Rule with Writing (GRW) Requirements. Please speak with your advisor</p>	<p>Term Hours: 15 Cum GPA: 2</p>
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Course Group	Course Required	Course Description	Credit Hours	Course Notes
Major Specific Courses	MET 4301	Dynamic Meteorolo I	3	Prerequisite: PHY2048
Major Specific Courses	MET 4102	Physical Climatology	3	Prerequisites: PHY2054 or PHY2049.
Remote Sensing and Instrumentation Courses	MET 4410	Remote Sensing	3	
3000-4000 Level Electives			3	
General Electives			3	

<p>Spring Term 2027 May use electives to satisfy Global Learning (GL) or Gordon Rule with Writing (GRW) requirements. Please speak with your advisor. May use electives to satisfy the Elective Outside the Major requirement (if needed)</p>	<p>Term Hours: 14 Cum GPA: 2</p>
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Course Group	Course Required	Course Description	Credit Hours	Course Notes
Senior Seminar	ISC 4935	Senior Sem Earth & Enviro	1	
Major Specific Courses	MET 4302	Dynamic Meteorol II	3	Prerequisites: PHY2048, PHY2049, MET4301
Major Specific Courses	MET 4420	Physical Meteorology	3	
Additional Weather Forecasting	MET 4521	Advanced Forecasting	2	
3000-4000 Level Electives			3	
General Electives			2	Research Credit or Internship recommended.

<p>Summer Term 2027 Use this semester to catch up on coursework and/or satisfy the 9 credits summer requirement (if needed)</p>	<p>Cum GPA: 2</p>
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General Requirements

*Course availability subject to change. Please see Academic Advisor.

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.

(6) 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.

(7) Summer Enrollment. Students transferring to FIU with less than 60 credits are required to earn at least 9 credits during one or more summer terms at FIU or any other university in the State University System of Florida. Courses may be completed in person or online

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.

College of Arts, Sciences & Education:Upper Division Credit Requirement

Requires completion of 45 credits upper division (3000 and 4000 level). We recommend checking your degree audit and coordinating with your assigned advisor.

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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>.

Major specific requirements

1. ISC 1056 First Year Seminar (1 unit)
2. Geoscience Essentials (12 units)
3. Atmospheric Major Specific Courses (16 units)
4. Remote Sensing and Instrument (3 units)
5. Weather Forecasting (2-3 units)
6. Geosciences electives (6 units)
7. ISC 4935 Senior Seminar (1 unit)