NEW/CHANGE PROGRAM REQUEST
Undergraduate Programs

FLORIDA ATLANTIC UNIVERSITY

UUPC Approval 2/26/24
UFS Approval _____
Banner _____
Catalog _____

Department GEOSCIENCES

College SCIENCE

Program Name	☐ **New Program***	**Effective Date** *(TERM & YEAR)*
BA Geosciences Geography Concentration	☑ **Change Program***	FALL 2024

Please explain the requested change(s) and offer rationale below or on an attachment.

Add EVR 4322 "Intro to Coastal Freshwater Resources" as an elective (Environmental Systems area of emphasis)
Add MET 3052 "Atmospheric Hazards" as an elective (Environmental Systems area of emphasis)
Add MET 4142 "Climate Data Applications" as an elective (Environmental Systems area of emphasis)
Add MET 3112 "Tropical Climatology" as an elective (Environmental Systems area of emphasis)
Amend course number of GEO 4167C "Spatial Data Analysis" to GIS 4115C "Spatial Data Analysis"

The amendments listed above will enhance the BA Geosciences Geography Concentration, by adding newly created environmental science classes to the program.

*All new programs and changes to existing programs must be accompanied by a catalog entry showing the new or proposed changes.

Faculty Contact/Email/Phone	**Consult and list departments that may be affected by the change(s) and attach documentation**
James Gammack-Clark, jgammack@fau.edu, 561-297-0314	

Approved by	***Date***
Department Chair	1/31/24
College Curriculum Chair	2/15/24
College Dean	2/16/24
UUPC Chair Korey Sorge	2/26/24
Undergraduate Studies Dean Dan Moeroff	2/26/24
UFS President	
Provost	

Email this form and attachments to mjenning@fau.edu seven business days before the UUPC meeting.

FAU

FLORIDA ATLANTIC UNIVERSITY

NEW/CHANGE PROGRAM REQUEST
Undergraduate Programs

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Department GEOSCIENCES

College SCIENCE

Program Name
BA Geosciences Geology Concentration

☐ **New Program***

☑ **Change Program***

Effective Date *(TERM & YEAR)*
FALL 2024

Please explain the requested change(s) and offer rationale below or on an attachment.

Add EVR 4322 "Intro to Coastal Freshwater Resources" as an elective
Remove GLY 4200C "Mineralogy & Crystal Chemistry"

Amend course name of GLY 4310C from "Petrology of Igneous & Metamorphic Rocks" to GLY 4310C "Mineralogy & Petrology"
Remove AST 3111 "Solar System Astronomy"

The amendments listed above will enhance the BA Geosciences Geology Concentration, by adding a newly created environmental science classes to the program. It also seeks to reflect the combination of GLY 4200C and GLY 4310C into a single class. Lastly, the removal of AST 3111 "Solar System Astronomy" will redirect Geology students to Geology electives.

*All new programs and changes to existing programs must be accompanied by a catalog entry showing the new or proposed changes.

Faculty Contact/Email/Phone
James Gammack-Clark, jgammack@fau.edu, 561-297-0314

Consult and list departments that may be affected by the change(s) and attach documentation
FAU Department of Physics

Approved by	***Date***
Department Chair	2/12/24
College Curriculum Chair	2/15/24
College Dean	2/16/24
UUPC Chair Korey Sorge	2/26/24
Undergraduate Studies Dean Dan Meeroff	2/26/24
UFS President	
Provost	

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GEOSCIENCES
BACHELOR OF ARTS (B.A.)

Geography Concentration
Geology Concentration

(Minimum of 120 credits required)

The Geosciences core courses below (10 credits) are required of all students for the B.A. in Geosciences. Students then choose between a concentration in either Geography or Geology. The B.A. in Geosciences, Geography Concentration, is also available fully online.

Prerequisite Coursework for Transfer Students
Students transferring to Florida Atlantic University must complete both lower-division requirements (including the requirements of the Intellectual Foundations Program) and requirements for the college and major. Lower-division requirements may be completed through the A.A. degree from any Florida public college, university or community college or through equivalent coursework at another regionally accredited institution. Before transferring and to ensure timely progress toward the baccalaureate degree, students must also complete the prerequisite courses for their major as outlined in the *Transition Guides* .

All courses not approved by the Florida Statewide Course Numbering System that will be used to satisfy requirements will be evaluated individually on the basis of content and will require a catalog course description and a copy of the syllabus for assessment.

Geosciences Core Courses (required of all students)		
Weather, Climate and Climate Change	MET 2010	3
Introductory Statistics	STA 2023	3
Introduction to Mapping and GIS	GIS 3015C	3
Geosciences Honors Colloquium	GEO 4920	1

Core Total		**10**

Geography Concentration

In addition to the Geosciences core courses noted above, students selecting the Geography Concentration are required to complete the GeographyConcentration core courses (12 credits) noted below. Students then select 33-34 credits from the three areas of emphasis (Environmental Systems, Human Systems and GIScience). A minimum of 6 credits must be chosen from each area. Total credits for the B.A. in Geosciences with a Geography Concentration are 55-56 credits.

Geography Concentration Core Courses		
World Geography	GEA 2000	3
Introduction to Physical Geography	GEO 2200C	3
Quantitative Methods	GEO 4022	3
RI: Human-Environmental Interactions in South Florida	GEA 4275	3
Core Total		**12**

Areas of Emphasis		
Choose 33-34 credits from the emphasis areas below with a minimum of 6 credits from each.		
Environmental Systems		
The Blue Planet	ESC 2000	3
Environmental Issues in Atmospheric and Earth Science	ESC 3704	3
Intro to Coastal Freshwater Resources	EVR 4322	3
Physical Geology/Evolution of the Earth	GLY 2010C	4
History of the Earth and Life	GLY 2100	3
Coastal and Marine Science	GLY 3730	3
Water Resources	GEO 4280C	3
Biogeography	GEO 4300	3
Geomorphology	GLY 4700C	3

Hydrogeology	GLY 4822	3
Atmospheric Hazards	MET 3052	3
Tropical Climatology	MET 3112	3
Climate Data Applications	MET 4142	3
Human Systems		
Climate Change: Myths, Realities and Solutions	EVR 3114	3
Hazards, Climate and People	EVR 4112	3
Culture and Environment: Latin America and the Caribbean	GEA 4405	3
American Cultural Landscape	GEO 4422	3
Tourism and Commercial Recreation	GEO 4542	3
Urban Geography	GEO 4602	3
Transportation and Spatial Organization	GEO 4700	3
GIScience		
Photogrammetry and Aerial Photograph Interpretation	GIS 4021C	3
Remote Sensing of the Environment	GIS 4035C	3
Digital Image Analysis	GIS 4037C	3
Principles of GIS	GIS 4043C	3
Applications in GIS	GIS 4048C	3
Web GIS	GIS 4054C	3
Programming in GIS	GIS 4102C	3
Geospatial Databases	GIS 4118	3
Geovisualization and GIS	GIS 4138C	3
Mobile GIS and Drone Technology	GIS 4140C	3
Spatial Data Analysis	GIS 4115C ~~GEO 4167C~~	3
Areas of Emphasis Total		**33-34**

Geology Concentration

In addition to the Geosciences core courses noted above (10 credits), students selecting the

Geology Concentration are required to complete a Science core (19 credits), the Geology Concentration core (10 credits), and Geosciences electives (18-22 credits) as noted below. Total credits for the B.A. in Geosciences with a Geology Concentration are 57-61 credits.

Science Core Courses		
Biological Principles and Lab	BSC 1010/1010L	4 **or**
Biodiversity and Lab	BSC 1011/1011L	4
College Algebra	MAC 1105	3
Introduction to Astronomy	AST 2002	3
General Chemistry 1 and Lab	CHM 2045, 2045L	4
General or College Physics and Lab	PHY 2048 or PHY 2053 and 2048L	5
Science Core Total		**19**

Geology Concentration Core Courses		
Physical Geology/Evolution of the Earth	GLY 2010C	4
History of the Earth and Life	GLY 2100	3
Geology Field Methods	GLY 4750C	3
Core Total		**10**

Geosciences Electives ***Choose six courses from the list below to total 18 - 22 credits.***		
~~Solar System Astronomy~~	~~AST 3110~~	~~3~~
Environmental Issues in Atmospheric and Earth Science	ESC 3704	3
Intro to Coastal Freshwater Resources	EVR 4322	3
Paleontology	GLY 3603C	3

Coastal and Marine Science	GLY 3730	3
~~Mineralogy and Crystal Chemistry~~	~~GLY 4200C~~	~~4~~
Environmental Geochemistry	GLY 4241	3
Water Resources	GEO 4280C	3
Mineralogy and Petrology ~~of Igneous and Metamorphic Rocks~~	GLY 4310C	4
Structural Geology	GLY 4400C	4
Stratigraphy and Sedimentation	GLY 4500C	4
Geomorphology	GLY 4700C	3
Hydrogeology	GLY 4822	3
Geosciences Electives Total		**18-22**