FAU

FLORIDA ATLANTIC UNIVERSITY

NEW/CHANGE PROGRAM REQUEST
Undergraduate Programs

UUPC Approval 3-29-21
UFS Approval _____
Banner Posted _____
Catalog _____

Department Geosciences

College Charles E. Schmidt College of Science

Program Name

Bachelor of Arts with Major in Geosciences: Geography Focus

☐ **New Program**

☑ **Change Program**

Effective Date
(TERM & YEAR)

Fall 2021

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

Add the following two courses:
-GIS 4054C Web GIS (new course currently in the approval process)
-GIS 4140C Mobile GIS & Drone Technology (in catalog)

They represent new areas in our discipline and will add strengths to our programs. As detailed in the proposed catalog text, the department seeks approval to include them into the curriculum of Bachelor of Arts with Major in Geosciences: Geography Focus.

Faculty Contact/Email/Phone

James Gammack-Clark /gammack@fau.edu

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

N/A

Approved by		***Date***
Department Chair	[signature]	2/22/2021
College Curriculum Chair	Jerry Haky	3-18-21
College Dean	[signature]	3/24/2021
UUPC Chair	Jerry Haky	3-29-21
Undergraduate Studies Dean	Edward Pratt	3-29-21
UFS President		
Provost		

Email this form and attachments to mjenning@fau.edu one week before the UUPC meeting so that materials may be viewed on the UUPC website prior to the meeting.

Bachelor of Arts with Major in Geosciences
(Minimum of 120 credits required)

The Geosciences core course below (10 credits) are required of all students for the B.A. in Geosciences. Students then choose between a focus in either Geography or Geology.

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**

Bachelor of Arts with Major in Geosciences: Geography Focus
In addition to the Geosciences core courses noted above, students selecting the Geography Focus are required to complete the Geography Focus 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 Focus are 55-56 credits.

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

Areas of Emphasis (select 33-34 credits from the emphasis areas below with a minimum of 6 credits from each)		
Environmental Systems		
The Blue Planet	ESC 2000	3
Physical Geology/Evolution of the Earth	GLY 2010C	4
History of the Earth and Life	GLY 2100	3
Environmental Issues in Atmospheric and Earth Science	ESC 3704	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

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 & Drone Technology	GIS 4140C	3
Spatial Data Analysis	GEO 4167C	3
Areas of Emphasis Total		**33-34**

Bachelor of Arts with Major in Geosciences: Geology Focus
In addition to the Geosciences core courses noted above (10 credits), students selecting the Geology Focus are required to complete a Science core (19 credits), the Geology Focus core (10 credits), and Geosciences electives (18-22 credits) as noted below. Total credits for the B.A. in Geosciences with a Geology Focus 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 Focus Core Course		
Physical Geology/Evolution of the Earth	GLY 2010C	4
History of the Earth and Life	GLY 2100	3
Field Methods	GLY 4750C	3
Core Total		**10**

Geosciences Electives (select six courses from the list below to total 18-22 credits)		
Solar System Astronomy	AST 3110	3
Paleontology	GLY 3603C	3
Environmental Issues in Atmospheric and Earth Science	ESC 3704	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
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**