

Cover Sheet: Request 13466

Bachelor of Arts: Geographical Science and Sustainability

Info

Process	Major New Ugrad/Pro Residential
Status	Pending at PV - University Curriculum Committee (UCC)
Submitter	Liang Mao liangmao@ufl.edu
Created	1/2/2019 2:43:36 PM
Updated	8/22/2019 8:56:38 AM
Description of request	The Bachelor of Arts in Geographical Science and Sustainability is a joint program between Geography and Sustainability Studies, and is intended for students interested in using geospatial technologies to advance sustainability. Students in the major learn modern geospatial technologies, such as geographical information system, remote sensing and spatial analysis, and use them to maintain ecological and environmental health, create economic welfare, and pursue social justice in a changing world.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CLAS - Geography 011609000	Jane Southworth		1/2/2019
UCC External Consultations - FRED for GPY.pdf uccconsult.pdf					1/2/2019 1/2/2019
College	Approved	CLAS - College of Liberal Arts and Sciences	Joseph Spillane		2/8/2019
No document changes					
AP for Undergraduate Affairs	Approved	PV - Associate Provost for Undergraduate Affairs	Casey Griffith		2/19/2019
No document changes					
University Curriculum Committee	Commented	PV - University Curriculum Committee (UCC)	Lee Morrison	Added to March 3-26 agenda.	3/21/2019
No document changes					
University Curriculum Committee	Tabled	PV - University Curriculum Committee (UCC)	Casey Griffith	Tabled pending further discussion at college level.	3/27/2019
No document changes					
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			3/27/2019
No document changes					
Faculty Senate Steering Committee					
No document changes					
Faculty Senate					
No document changes					
Academic Affairs					
No document changes					

Step	Status	Group	User	Comment	Updated
Board of Trustees Notified					
No document changes					
Academic Affairs Notified					
No document changes					
Office of the Registrar					
No document changes					
OIPR Notified					
No document changes					
Student Academic Support System					
No document changes					
Catalog					
No document changes					
Academic Assessment Committee Notified					
No document changes					
College Notified					
No document changes					

Major|New for request 13466

Info

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Submitter: Liang Mao liangmao@ufl.edu

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Form version: 1

Responses

Program Level B - Bachelor's Degree

CIP Code 45.0701

Program or Department Name Geography

Major Code, Degree & Name for Existing Majors GPY, BA in Geography

GPY, BS in Geography

GPY, BA in Environmental Geoscience

GPY, BA in Medical Geography in Global Health

GPY, BS in Medical Geography in Global Health

Major Code GPY

Requested New Major Name Geographical Science and Sustainability

Degree of Requested Major BA

Credits 120

Tracks/Concentrations no

Delivery Method On Campus

Students 45

Effective Term Fall

Effective Year Earliest Available

Percentage of Credits Available Fully Online <50%

Percentage of Credits Available Off-Campus <25%

Rationale for the Proposed Major Geospatial technologies, such as geographical information system, remote sensing, and spatial analysis, play an important role in sustainable development by helping understand human-environment interaction and supporting optimal decision making.

Current sustainability programs on campus (in CLAS and DCP) do not have a strong component in geography and geospatial technologies. We hope to develop this joint program between geography and sustainability studies to fill this gap. The catalog is tailored based on current BA in Sustainability Studies, and adds a strong component of geographic technique courses.

Impacts on Other Programs The new major will increase needs for elective courses offered by other programs, such as Wildlife Ecology and Conversation, Environmental Engineering Sciences, Urban Planning, Food, Resources Economics.

External Consultation Results (departments with potential overlap or interest in proposed course, if any)

Department Food and Resource Economics Department	Name and Title Lisa House, Professor and Interim Department Chair
Phone Number 294-7653	E-mail lahouse@ufl.edu
<p>Comments</p> <p>The Food and Resource Economics Department supports the creation of the BA in Geographical Science and Sustainability, including the inclusion of a number of our courses as options for students pursuing the major. We have no enrollment concerns related to this curriculum proposal, especially as our courses are listed as options and not requirements.</p>	

Department _____	Name and Title _____
Phone Number _____	E-mail _____
<p>Comments</p>	

Department _____	Name and Title _____
Phone Number _____	E-mail _____
<p>Comments</p>	

External Consultation Results (departments with potential overlap or interest in proposed course, if any)

Department	Name and Title
_____	_____
Phone Number	E-mail
_____	_____
Comments	

Department	Name and Title
_____	_____
Phone Number	E-mail
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Comments	

Department	Name and Title
_____	_____
Phone Number	E-mail
_____	_____
Comments	

UF Major

Bachelor of Arts: Geographical Science and Sustainability

Overview:

The Bachelor of Arts in Geographical Science and Sustainability is a joint program between Geography and Sustainability Studies, and is intended for students interested in using geospatial technologies to advance sustainability. Students in the major learn modern geospatial technologies, such as geographical information system, remote sensing and spatial analysis, and use them to maintain ecological and environmental health, create economic welfare, and pursue social justice in a changing world.

About this Major

- **College:** Liberal Arts and Sciences
- **Degree:** Bachelor of Arts
- **Credits for Degree:** 120
- **Contact:** liangmao@ufl.edu; thiele@ufl.edu
- [Related Geography Programs](#)

To graduate with this major, students must complete all university, college, and major requirements.

[Critical Tracking Model Semester Plan](#)

Coursework for the major

The Bachelor of Arts in Geographical Science and Sustainability requires a major coursework of 47-50 credits from the geography program and sustainability studies program, and 3 credits of STA2023. Students must earn a minimum grade of C in all coursework for the major.

Required courses

STA2023	Introduction to Statistics	3
Geography Fundamentals		7
GEO2200	Physical Geography	3
GEO2200L	Physical Geography Lab	1
GEO2410 or GEO2420 or GEO2500	Social Geography or Introduction to Human Geography or Global and Regional Economies	3
Sustainability Fundamentals		9
IDS 2154	Facets of Sustainability	3
AMH 2631 or CLA 2521 or REL 2071 or LIT 3400	History of Sustainability or Classical Antiquity and Sustainability or Sustainability and Religion or Literature of Sustainability	3
ANT 2402 or POS 2032 or ECO 2310 or	Anthropology of Sustainability or Politics of Sustainability or Economics of Sustainability or	3

PSY 3626	Psychology of Sustainability	
Geospatial technique courses (Select two courses)		6-8
GIS 3043	Foundations in GIS	4
GIS 4001	Maps and Graphs	4
GIS 4037	Digital Image Processing	4
GIS 4102C	GIS Programming	3
GIS 4021C	Aerial Photo Interpretation	3
Geography for sustainability courses (select 3 courses)		9
GEO 3930	Geographical Sciences & Sustainability (required)	3
GEO 2006	Natural hazards geography	3
MET 4938	Mapping for a changing climate	3
GIS 4324	GIS analysis of hazard vulnerability	3
Capstone Courses		4
GEO 4930	Senior Seminar	1
IDS 4942	Sustainability in Action	3
Sustainability Systematic Courses (Select one course from each cluster; at least two of the four courses must have a GEO/GIS prefix).		12-13
<i>Cluster A: Ethics, Culture and Human Behavior</i>		
AEB 4126	Agricultural and Natural Resource Ethics	3
AMH 3630	American Environmental History	3
ANT 3420	Consumer Culture	3
ANT 4006	Human Rights and Culture	3
ANT 4403	Environment and Cultural Behavior	3
FOR 3202	Society and Natural Resources	3
FNR 4070C	Environmental Education Program Development	3
GEO 3427	Plants, Health and Spirituality	3
PHM 3032	Ethics and Ecology	3
REL 2104	Environmental Ethics	3
REL 2166	Religion and the Environmental Crisis	3
REL 3103	Religion and Nature in North America	3
REL 3492	Religion Ethics and Nature	3
SYD 4020	Population	3
SYD 4510	Environment and Society	3
SYG 2010	Social Problems	3
SYO 4530	Social Inequality	3
WIS 4523	Human Dimensions of Natural Resource Conservation	3
WST 3349	Ecofeminism	3
<i>Cluster B: Economics, Law and Policy</i>		
AEB 2451	Economics of Resource Use	3
AEB 3450	Introduction to Natural Resource and Environmental Economics	3

AEB 4123	Agricultural and Natural Resource Law	3
AEB 4282	International Humanitarian Assistance	3
AEB 4283	International Development Policy	3
CPO 4793	Environmental Politics in the Global South	3
ECP 3302	Environmental Economics and Resource Policy	4
EUH 3683	The History of Consumption	3
FNR 4660	Natural Resource Policy and Economics	3
FOR 4664	Sustainable Ecotourism Development	3
FYC 4408	Organizational Leadership for +Nonprofits	3
FYC 4409	Working with Nonprofit Organizations in Community Settings	3
FYC 4427	Non-Governmental Organizations	3
GEO 3372	Conservation of Resources	3
POT 3503	Environmental Ethics and Politics	3
PUP 4224	Florida Environmental Politics	3
SYO 4352	Consumption, Economy and Society	3
<i>Cluster C: Production Systems and the Built Environment</i>		
ARC 1000	Architecture and Humanity	3
ARC 3291	Special Studies in Architecture	1 - 6
ARC 3880	Sustainable Architecture	3
ARC 4882	Vernacular Architecture and Sustainability	3
AGG 3501	Environment, Food and Society	3
AGR 4212	Alternative Cropping Systems	3
ALS 3133	Agricultural and Environmental Quality	3
AOM 2520	Global Sustainable Energy: Past, Present and Future	3
BCN 1582	International Sustainable Development	3
BCN 3730	Construction, Safety, Health and the Environment	3
DCP 3200	Methods of Inquiry for Sustainability and the Built Environment	3
DCP 3210	Sustainable Solutions for the Built Environment	3
DCP 3220	Social and Cultural Sustainability and the Built Environment	3
DCP 4941	Practicum in Sustainability and the Built Environment	<u>6</u>
EES 3008	Energy and Environment	3
EES 4050	Environmental Planning and Design	3
ENV 4932	Special Problems in Environmental Engineering Sciences	1 - 4

FOR 3162C	Silviculture	4
FOR 4060	Global Forests	3
FOR 4090C	Urban Forestry	3
HOS 3281C	Organic and Sustainable Crop Production	3
HOS 4283C	Advanced Organic and Sustainable Crop Production	3
LAA 2330	Site Analysis	3
LAA 4260	Site Designed Green Roofs	3
SWS 3022	Introduction to Soils in the Environment	3
SWS 4116	Environmental Nutrient Management	3
SWS 4231C	Soil, Water and Land Use	3
SWS 4233	Soil and Water Conservation	3
SWS 4245	Water Resource Sustainability	3
SWS 4550	Soils, Water and Public Health	3
SWS 4932	Special Topics in Soil and Water Science	1 - 3
URP 4000	Preview of Urban and Regional Planning	3
Cluster D: <i>Ecology and Environmental Stewardship</i>		
BOT 2800C	Plants in Human Affairs	3
BSC 2005	Biological Sciences	3
BSC 2011	Integrated Principles of Biology 2	3
FOR 2662	Forests for the Future	3
FOR 3004	Forests, Conservation and People	3
FOR 3153C	Forest Ecology	3
GEO 2242	Extreme Weather	3
GEO 3250	Climatology	3
GEO 3315	Geography of Crop Plants	3
GEO 3280	Principles of Geographic Hydrology	4
GEO 3341	Extreme Floods	3
GEO 3352	The Human Footprint on Landscape	3
GEO 3452	Introduction to Medical Geography	3
GEO 3454	Peoples and Plagues	3
GEO 4300	Environmental Biogeography	4
GLY 2010C	Physical Geology	4
GLY 2030C	Environmental and Engineering Geology	3
GLY 3074	Oceans and Global Climate Change	3
GLY 3083C	Fundamentals of Marine Sciences	3
GLY 3882C	Hydrogeology and Human Affairs	3
PCB 3034C	Introduction to Ecology	4
PCB 3601C	Plant Ecology	3
PCB 4043C	General Ecology	4
SWS 2007	The World of Water	3
SWS 2008	Land and Life	3
SWS 4223	Environmental Biogeochemistry	3

SWS 4244	Wetlands	3
WIS 2040	Wildlife Issues in a Changing World	3
WIS 2552	Biodiversity Conservation: Global Perspectives	3
WIS 3401	Wildlife Ecology and Management	3
WIS 3402	Wildlife of Florida	3
WIS 3434	Tropical Wildlife	3
WIS 4554	Conservation Biology	3
WIS 4934	Topics in Wildlife Ecology and Conservation	3

Model Semester Plan

Semester One		Credits
IDS 2154	Facets of Sustainability (Critical Tracking)	3
State Core Gen Ed Composition (Writing Requirement)		3
Foreign language		4-5
State Core Gen Ed Mathematics (pure math)		3-4
Credits		13-15
Semester Two		
ECO 2310	Principles of Microeconomics (recommended; Gen Ed Social and Behavioral Sciences)	4
IUF 1000	What is the Good Life (Gen Ed Humanities)	3
GEO 2200 & 2200L	Physical Geography (Critical Tracking; Gen Ed Physical Sciences) and Physical Geography Laboratory (Science laboratory)	4
Foreign language		3-5
Credits		14-16
Semester Three		

GEO2410 or GEO2420 or GEO2500	Social Geography or Introduction to Human Geography or Global and Regional Economies	3
STA 2023	Introduction to Statistics 1 (Gen Ed Mathematics)	3
State Core Gen Ed Biological or Physical Sciences ¹		3
Sustainability Fundamentals course (Critical Tracking)		3
Elective or foreign language if 4-3-3 option		3
Credits		15
Semester Four		
Gen Ed Biological or Physical Sciences (area not taken in semester three) ¹		3
Gen Ed Biological Sciences or elective ^{1,2}		3
GEO3930 Geographical Sciences & Sustainability; Critical Tracking		3
State Core Gen Ed Humanities ¹		3
State Core Gen Ed Social and Behavioral Sciences ^{1,3}		3
Credits		15
Semester Five		
Gen Ed Composition (Writing Requirement)		3
Geography for sustainability course		3
Geospatial technique course (GIS3043 Foundations in GIS recommended)		4
Elective (3000 level or above, not in major)		3
State Core Gen Ed Physical Sciences or elective ^{1,4}		3
Credits		16
Semester Six		
Two cluster courses		6
Geospatial technique course		4

Elective (3000 level or above; not in major)	3
State Core Gen Ed Humanities (if needed) or elective ¹	3
Credits	16
Semester Seven	
Cluster course	3-4
Geography for sustainability course	3-4
Electives (3000 level or above, not in major)	6-9
GEO4930 Senior Seminar	1
Credits	16-18
Semester Eight	
IDS 4942 Sustainability in Action (capstone course)	3
Cluster course	3
Elective	3
Electives (3000 level or above, not in major)	6
Credits	15
Total Credits	120