

Cover Sheet: Request 10233

Medical Geography in Global Health

Info

Process	Specialization New/Modify/Close Ugrad
Status	Pending
Submitter	Blackburn,Jason K jkblackburn@ufl.edu
Created	4/29/2015 2:54:47 PM
Updated	2/29/2016 2:37:54 PM
Description	<p>Since 2010, the Geography Department at UF has expanded in scope and faculty, including the addition of several Medical Geography tenure-track positions. With support from CLAS, the Emerging Pathogens Institute, and the UF Preeminence Initiative, the number of Medical Geography faculty now includes four full-time tenure track positions with strengths in medical geography, disease ecology, quantitative methods, human-environment-interactions, and spatial modeling. This adds to our existing expertise from senior faculty in health and aging. As part of this growth in faculty, the course listing in this sub-field is growing to accommodate larger numbers of undergraduate and graduate majors. We propose to develop an undergraduate track in 'Medical Geography in Global Health' (MGGH) to meet students' needs by allowing them to concentrate formally in the subdiscipline of Medical Geography.</p> <p>The faculty expertise includes extensive international research and teaching programs concentrated in Global Health and emerging diseases. By their nature, the changing patterns (=emergence) of disease occurs at the intersections of environmental and biological processes. In the case of zoonoses, those diseases that can infect both humans and animals, this process is often linked with cultural traditions or land use patterns, resource access and equality, and development. 'Medical Geography in Global Health' (MGGH) also extends beyond infectious diseases to study the spatial patterns and processes related to health seeking, health care and access. Collectively, these topics naturally extend to include cultural and human geography, quantitative methods, climatology, development, and regional expertise. In this way, the expansion of medical geography extends to other skills within the department. Toward this, we propose to develop two tracks in 'Medical Geography in Global Health' (MGGH), allowing students to pursue either a BA or a BS in MGGH.</p> <p>Rationale</p> <p>The department currently offers students the option of a BA or BS in Geography, as well as a joint degree with Geology in Environmental Geosciences. These new proposed degree tracks in 'Medical Geography in Global Health' (MGGH) link undergraduate coursework to strengths in departmental faculty teaching and research. Thus, with the growth of the medical geography faculty, we propose to add these two new 'Medical Geography in Global Health' (MGGH) tracks to the undergraduate degree program. Students with a focus on quantitative skills, such as GIS, Remote Sensing or spatial modeling as they relate to medical geography will track into a BS course requirement list. Those students interested in the social, cultural or developmental aspects of health will track into the BA course requirement list. Ultimately, we aim to link the BS track to the UF Pre-health Advising program, allowing undergraduate students interested in premedical coursework to combine those interests with coursework and an undergraduate degree in Geography. Offering both course tracks will allow students broad opportunities within Geography and access to courses offered by a wide range of faculty members.</p>

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CLAS - Geography 011609000	Binford, Michael W.		4/29/2015
Deleted New_Form_sub1.pdf					4/29/2015
College	Recycled	CLAS - College of Liberal Arts and Sciences	Pharies, David A	The CCC has conditionally approved this item. It needs 1. SLOs. Oddly enough, the map of SLOs is present, but not the actual SLOs. 2. The map of SLOs is not quite complete, note the phrase "Plus XX additional pre-health credits".	9/23/2015
No document changes					
Department	Approved	CLAS - Geography 011609000	Binford, Michael W.		10/21/2015
No document changes					
College	Recycled	CLAS - College of Liberal Arts and Sciences	Pharies, David A	At request of department.	10/22/2015
No document changes					
Department	Approved	CLAS - Geography 011609000	Southworth, Jane		10/22/2015
No document changes					
College	Recycled	CLAS - College of Liberal Arts and Sciences	Pharies, David A	It appears that this has now been approved twice without the requisite changes being made. Please add SLOs and complete the map before approving again.	11/5/2015
No document changes					
Department	Approved	CLAS - Geography 011609000	Binford, Michael W.		11/6/2015
Deleted MGGH_SLO_rubric_v3.pdf					11/5/2015
Deleted MGGH_SLOs.pdf					11/5/2015
Added New_Form_sub1_rev1.pdf					11/5/2015
College	Approved	CLAS - College of Liberal Arts and Sciences	Pharies, David A		12/7/2015
No document changes					
University Curriculum Committee	Comment	PV - University Curriculum Committee (UCC)	Baker, Brandi N	Added to January agenda	12/14/2015
No document changes					

Step	Status	Group	User	Comment	Updated
University Curriculum Committee	Recycled	PV - University Curriculum Committee (UCC)	Morrison, Lee Shaw	Please complete external consult and update the documentation as appropriate.	1/20/2016
No document changes					
College	Approved	CLAS - College of Liberal Arts and Sciences	Pharies, David A		2/29/2016
Added UCC_MedicalGeography_in_GlobalHealth_CONSULTS.pdf					2/29/2016
Added Geography_coursedescription_tracked.docx					2/29/2016
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			2/29/2016
No document changes					
Office of the Registrar					
No document changes					
Student Academic Support System					
No document changes					
Catalog					
No document changes					
College Notified					
No document changes					

This form may be used to propose a new specialization in an existing undergraduate major. To propose a new major or a new degree program, follow the procedures at <http://approval.ufl.edu>. Note that the terms *specialization* and *track* are synonymous for this process. Instructions for completing and submitting this form begin on the third page.

Existing Degree, Major and Specialization(s)

- | | |
|--|---------------------|
| 1. Degree Program Geography | 2. CIP Code 45.0701 |
| 3. Major Name Geography | 4. Major Code GEO |
| 5. Degree Type BA or BS | |
| 6. Existing Specializations Environmental Geosciences (joint BA with Geology Department) | |

Proposed Specialization

- | | |
|---|---------------------|
| 7. Name Medical Geography in Global Health (BS and BA option) | |
| 8. Code MGGH | 9. Credits 120 |
| 10. Students TBD | |
| 11. Effective Term Earliest Available | Effective Year 2015 |

Anticipated Delivery System

- | | | | |
|---|---|---------------------------------|--------------------------------------|
| 12. Percentage of credits available fully online: | <input checked="" type="checkbox"/> < 50% | <input type="checkbox"/> 50-99% | <input type="checkbox"/> 100% |
| 13. Percentage of credits available off-campus: | <input checked="" type="checkbox"/> < 25% | <input type="checkbox"/> 25-49% | <input type="checkbox"/> 50% or more |

14. Rationale for the Proposed Specialization

The department currently offers students the option of a BA or BS in Geography, as well as a joint degree with Geology in Environmental Geosciences. These new proposed degree tracks in ‘Medical Geography in Global Health’ (MGGH) link undergraduate coursework to strengths in departmental faculty teaching and research. Thus, with the growth of the medical geography faculty, we propose to add these two new ‘Medical Geography in Global Health’ (MGGH) tracks to the undergraduate degree program. Students with a focus on quantitative skills, such as GIS, Remote Sensing or spatial modeling as they relate to medical geography will track into a BS course requirement list. Those students interested in the social, cultural or developmental aspects of health will track into the BA course requirement list. Ultimately, we aim to link the BS track to the UF Pre-health Advising program, allowing undergraduate students interested in premedical coursework to combine those interests with coursework and an undergraduate degree in Geography. Offering both course tracks will allow students broad opportunities within Geography and access to courses offered by a wide range of faculty members.

15. Impacts on Other Programs

This request is to develop a new major that captures the breadth and expertise of new and existing faculty in Medical Geography and complements the college efforts to grow in Global Health. We do not expect this new major track to affect other departments.

- Prepare a document showing the current and proposed Undergraduate Catalog copy edited using the “track changes” feature in Word. *Note that this must include an **eight-semester plan** for each proposed specialization.*
- Prepare supporting documentation from other colleges the availability of courses that are required in the specialization and/or to provide evidence for support of the proposed major if there is clear or potential overlap or duplication of content.

Instructions

This form may be used to propose a new specialization in an existing undergraduate major. To propose a new major or a new degree program, or to modify or close (terminate) an existing specialization or track, follow the procedures at <http://approval.ufl.edu>. Note that *specialization* and *track* are synonymous for this process.

Existing Degree, Major and Specialization(s)

1. Enter the name of the Degree Program.
2. Enter the six digit Classification of Instructional Programs (CIP) code for the existing degree program. The code has the numerical format XX.XXXX. Contact the [Office of Institutional Planning and Research \(OIPR\)](#) to verify the CIP code for the existing degree program.
3. Enter the name of the major in which the new specialization will be offered. Example: Mathematics.
4. Enter the two or three letter code that uniquely identifies the major in the student records system. Example: the code for mathematics is MS.
5. Enter the degree type of the major in which the new specialization will be offered. Example: BS
6. Enter the complete name of each specialization that is currently offered in the major.

Proposed Specialization

7. Enter the name of the proposed specialization. Example: Mathematical Modeling.
8. Enter the proposed two or three letter specialization code that would uniquely identify the proposed specialization in the student information system. This code would be appended to the major code. Example: MOD.
9. The credit hours must equal the total credit hours that were approved for the existing major and degree program.
10. Enter the expected number of new students enrolled in this specialization in the first three years.
11. Enter the term (semester and year) that the proposed specialization(s) would start.

Delivery System

12. Indicate the percentage of course credits that will be available through full online courses.
13. Indicate the percentage of course credits that will be available away from the main Gainesville campus (including courses with onsite – off main campus meetings).

Rationale for the proposed specialization

14. Describe the rationale for offering this new specialization and having it on the transcript, how this program will enhance the quality of the existing major, how it relates to undergraduate programs at peer institutions. Also describe what distinguishes this new specialization within the existing major(s) in the degree program, the degree of its overlap with existing majors and specializations (both in the degree program and in other degree programs at the university), and a justification for any such overlap.

Impacts on other programs

15. Describe any potential impact on other programs or departments, including increased need for general education or common prerequisite courses, or increased need for required or elective courses outside of the existing program.

Medical Geography & Global Health MGGH Degree Descriptions

The **Bachelor of Arts in medical geography and global health** requires 41 credits of coursework. This specialization is intended for students interested in social and cultural aspects of medical geography and global health and disease issues. The degree focuses on human impacts, cultural and social aspects of health and disease, and public health planning and management.

Semester	B.A. Degree*
Year 1 Fall	HUM 2305 (3) GEO2200 (3) GEO2200L (1) STA2023 (3) COMP (C) (3) TOTAL 13
Year 1 Spring	GEO 2410 or GEO 2420 or 2500 (3) (GE-S N or D) GEN ED HUM (3) Comp GE-C (3) SOC (S) (3) MAC/MGF XXXXX (3-4) TOTAL 15-16
Year 2 Fall	COMP (C) (3) PHY SCI (P) (3) LANG XXXX (5) GEO 3452 (3) TOTAL 14
Year 2 Spring	GEA XXXX (3) (SN) SOC (S) (3) BIO (B) (3) LANG XXXX (5) TOTAL 14
Year 3 Fall	GEO3162C (4) GIS3043 (4) MED GEO ELECTIVE (3) BIO (B) (3) Elective (3) TOTAL 17
Year 3 Spring	GIS3420C (3) MED GEO ELECTIVE (3)

	GEN ED HUM (3) NAT SCI (3) ELECTIVE (3)	TOTAL 15
Year 4 Fall	MEDGEO or GIS (3-4) MEDGEO (3) Electives (9-10)	TOTAL 16-17
Year 4 Spring	GEO 4930 (1) MEDGEO ELECTIVE (3) Electives (12)	TOTAL 16

* Electives to reach the 120-credit minimum will vary depending on whether students select minimum or maximum credit course options.

The **Bachelor of Science in medical geography and global health** requires 74 credits of coursework, combining quantitative medical geography coursework with 39 credits of coursework in physics, chemistry, and biology. This specialization is best suited for someone who wishes to pursue a career in public or animal health or disease management or graduate work in medical geography, public health or related natural sciences, including ecology, biology, or epidemiology/public health. This degree track also meets the requires of Pre-Health.

Semester	B.S. Degree (Pre-Med Health)	B.S. Degree (Pre-Vet Health)
Year 1 Fall	HUM 2305 (GE-H) (3) English (3) MAC 2311 (4) CHM 2045 (3) CHM 2045L (1)	HUM 2305 (3) MAC 2311 (4) CHM 2045 (3) CHM 2045L (1) English (3)
	TOTAL 14	TOTAL 14
Year 1 Spring	GEO2200 (3) GEO2200L (1) STA 2023 (3) CHM 2046 (3)	GEO2200 (3) GEO2200L (1) STA 2023 (3) CHM 2046 (3)

	CHM 2046L (1) English (3)	CHM 2046L (1) English (3)	
	TOTAL 14-15		TOTAL 14
Year 2 Fall	GEO 2410(GE-SD), 2420, 2500 (3) CHM2210 (3) BSC 2010 (3) BSC 2010L (1) SYG 2000 (3)	GEO 2410(GE SD), 2420, 2500 (3) CHM2210 (3) BSC 2010 (3) BSC 2010L (1) SPC2608 (3)	TOTAL 13
	TOTAL 13		
Year 2 Spring	GEA XXXX (3) (SN) CHM 2211 (3) CHM 2211L (2) BSC 2011 (3) BSC 2011L (1) PSY 2012 (GE-S) (3)	GEA XXXX (3) SN CHM 2211 (3) CHM 2211L (2) BSC 2011 (3) BSC 2011L (1) GEN ED HUM (3)	TOTAL 15
	TOTAL 15		TOTAL 15
Year 3 Fall	GEO 3452 (3) GEO3162C (4) PHY 2053 (3) PHY 2053L (1) BCH 4024 or CHM3218 (4)	GEO 3452 (3) GEO3162C (4) PHY 2053 (3) PHY 2053L (1) ANS3006C (4)	TOTAL 15
	TOTAL 15		TOTAL 15
Year 3 Spring	GIS3043 (4) GIS3420C/MEDGEO (3) PHY 2054 (3) PHY 2054L (1) Pre-Med Course (3)	GIS3043 (4) GIS3420C/MEDGEO (3) PHY 2054 (3) PHY 2054L (1) ANS3404C(3)	TOTAL 14
	TOTAL 14		TOTAL 14
Year 4 Fall	MEDGEO or GIS (3-4) MEDGEO (3) PRE-MED SCIENCE (3) LANG (5) Electives (3)	MEDGEO or GIS (3-4) MEDGEO (3) MCB3020/L (4) or MCB3023/L (4) LANG (5) Electives (2)	TOTAL 17-18
	TOTAL 17-18		
Year 4 Spring	GEO4930 (1) MEDGEO ELECTIVE (3) GEN ED HUM (3) Electives (6) LANG (5)	GEO 4930 (1) MEDGEO ELECTIVE (3) Genetics (PCB3063, AGR3303, or ANS338 (4) GEN ED HUM (3) LANG (5)	

	Electives (2)	
TOTAL 18		TOTAL 18

DRAFT

Medical Geography in Global Health Undergraduate Degree Track

Student Learning Objectives

1. Identify and describe the physical and human characteristics of Earth and its regions, the essentials of human-environment interactions, and the techniques of geographic science as they applied to medical geography and global health.
2. Analyze geographic information and apply interpretation of data toward problem solving or modeling related to spatial patterns of health.
3. Interpret and effectively communicate information spatially, graphically and/or with statistics.

Courses	Content	Critical Thinking	Communication
	SLO 1	SLO 2	SLO 3
GEA 2000-4000 level Regional Geography	R		
GEO 2000 level Human Geography	I		
GEO 2200	I		
GEO 2200L	R		
GEO 3162C	I	I	R
GEO 4930	R, A	A	A
GIS 3043 or GIS 4001C	R	R	R
STA 2023			I
B.A. 12+ credits GEO/GIS in medical geography and global health coursework in the department	R	R	R
B.S. Only: 12+ credits GEO/GIS in medical geography and global health coursework in the department plus 30+ additional pre-health credits outside the department with CHM, BIO, and PHY prefixes (or addition pre-health requirements);	R	R	R

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
_____	_____
Comments	

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

January 20, 2016

Jason K. Blackburn, PhD
Director and Associate Professor
Spatial Epidemiology & Ecology Research Laboratory
Department of Geography
University of Florida

Re: consult on *Medical Geography in Global Health* tracks (BA/BS)

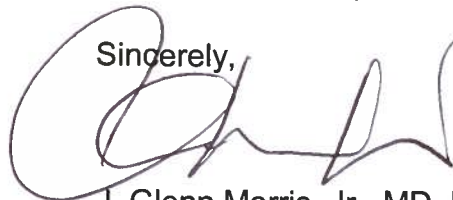
Dear Jason,

I appreciate having the opportunity to consult on your proposed degree program in Medical Geography in Global Health. Medical geography is a new and rapidly growing field, which links sophisticated technology with mathematical modeling and an understanding of disease biology to track emergence and spread of disease in humans and animals. Individuals with these skill sets are in strong demand in government and industry; students with this degree will be sought-after candidates for admission to graduate programs in medicine, veterinary medicine, and public health.

While some of the work to be undertaken is interdisciplinary, and elements of the degree program are available in other departments, this field has become sufficiently well-defined nationally that there is a need for a unified degree program to assure that students interested in the field have an appropriately structured curriculum. Medical geography is, of necessity, a global discipline, given the global nature of disease transmission (as reflected in the recent emergence and spread of diseases such as Ebola). You have a nationally- and internationally- recognized program, with projects currently underway in almost every continent; as such, the plan to base the program in the Department of Geography, and the use of the title *Medical Geography in Global Health* would appear to be appropriate.

With my best wishes for the success of this new program,

Sincerely,



J. Glenn Morris, Jr., MD, MPH&TM
Professor and Director

Jason K. Blackburn

From: deFrance,Susan D
Sent: Thursday, January 28, 2016 9:19 PM
To: Jason K. Blackburn
Subject: Re: Request for external consult on Medical Geography

Dear Jason

This looks like a great program. It does not conflict with the Medical Anthropology program. It looks like a good complement to our program.

best

Susan

Susan D. deFrance
Professor and Chair
Department of Anthropology
P.O. Box 117305
University of Florida
Gainesville, FL 32611

On Jan 28, 2016, at 7:00 PM, "Jason K. Blackburn" <jblackburn@ufl.edu> wrote:

Dear Dr. deFrance and Dr. Krigbaum –

Over the past weeks, I have been working with Alyson to request a consult of our medical geography undergraduate program. I believe from correspondence that Alyson feels it will benefit the college and does not directly conflict with medical anthropology or efforts to grow that program. As part of the UCC review, we are required to seek consultation from Anthropology, Geomatics, and Public Health. We have received positive consults from Geomatics and the Emerging Pathogens Institute. I am hoping from correspondence with Alyson that we may receive approval from your department as well. Our proposal was approved by the CLAS CCC in December 2015 and we are now trying to complete the consult process to get onto the UCC Feb or March 2016 schedule. Would it be possible to have your provide consultation on this with Alyson's input?

Thanks to Alyson for a detailed review and feedback! I look forward to your review.

Many thanks,

Jas

From: Jason K. Blackburn
Sent: Wednesday, January 20, 2016 3:01 PM
To: Young, Alyson <alys.yng@ufl.edu>
Subject: Request for external consult on Medical Geography

Dear Alyson -

I hope this message finds you well. I am chairing a committee in Geography to finalize a BS/SA track. We are now working on our *Medical Geography in Global Health* undergrad BA/BS tracks through the UCC for approval. We received CCC approval in December 2015. UCC has requested external consults on our tracks. Would you be willing to take a look at our proposed program and provide feedback? We don't believe it conflicts with the efforts in Anthropology, but we would like to meet the UCC request. They requested feedback relatively quickly. In any case, we would very much like your review and comments. I think you will agree it does not overlap or conflict with your department, but complements it, and allows Geography majors to specialize in Medical Geography in either a BA or BS track. Medical Geography is a well-established and long recognized sub-discipline and has received great support at UF in recent years. In the past two years, we have grown the single largest Medical Geography faculty in the country (Blackburn, Mao, Glass, Ryan) and we truly are global in our reach. Our courses offer training in medical geography, both social science and quantitative geospatial methods-focused, and cultural courses with regional or international focus. Our existing BA and BS programs require students to take regionally-focused courses and our current medical geography faculty have actively funded projects and graduate students working on all 7 continents. In my own class, students are training with GIS data from Azerbaijan, Kazakhstan, Africa and the US. We are aiming to attract in-college pre-health students into the BS track and offer a social science heavier BA for non-pre-health majors. Our name *Medical Geography in Global Health* is borne out of Dean Richardson's efforts to work towards UF's larger campus-wide Global Health Initiative and grow capacity within departments to meet student interests in Global Health. Hence the *in* and not *and* in the title. Our goal is to fit our Medical Geography efforts into larger university wide efforts. As we move forward, we intend to identify courses in your department (including yours) that fit as electives for medical geography students.

If you are willing to review, please note that this request will be submitted twice, once for each BS and BA.

Many thanks for your input.

Best wishes,

jas

--

Jason K. Blackburn, PhD
Director & Associate Professor
Spatial Epidemiology & Ecology Research Laboratory
Department of Geography & Emerging Pathogens Institute
University of Florida
EPI: 352-273-9374 **Geography:** 352-294-7501 **Cell:** 352-278-3232
jkblackburn@ufl.edu
www.seerlab.org

<New_Form_sub1_rev1.pdf>

Jason K. Blackburn

From: Young, Alyson
Sent: Thursday, January 28, 2016 7:20 PM
To: Jason K. Blackburn
Cc: deFrance,Susan D; Krigbaum,John
Subject: Re: Request for external consult on Medical Geography

Dear Susan and John,

I just wanted to add my support. I read through the proposal and don't see any issues, in fact, having our Med Anthro classes as electives may help draw more students into some of our courses. The way this is designed, students in this specialization could feasibly get a certificate in Medical Anthropology while completing their degree. I'm happy to write a letter, but I think UCC wants consults from Chairs/Directors.

Cheers,
Alyson

On Jan 28, 2016, at 7:00 PM, Jason K. Blackburn <jkblackburn@ufl.edu> wrote:

Dear Dr. deFrance and Dr. Krigbaum –

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Best wishes,

jas

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Jason K. Blackburn, PhD
Director & Associate Professor
Spatial Epidemiology & Ecology Research Laboratory
Department of Geography & Emerging Pathogens Institute
University of Florida
EPI: 352-273-9374 **Geography:** 352-294-7501 **Cell:** 352-278-3232
jkblackburn@ufl.edu
www.seerlab.org

<New_Form_sub1_rev1.pdf>

Institute of Food and Agricultural Sciences
School of Forest Resources and Conservation
Geomatics Program
32611-0565

406 Reed Lab
PO Box 110565
Gainesville, FL

MEMO

To: UCC and Geography Department

From: Grenville Barnes

Subject: Review of Proposed Specialization in Medical Geography (BS and BA)

Date: January 20, 2016

I was requested to review and comment on the proposed Specialization in ‘Medical Geography in Global Health.’ This seems like a logical step given the number of faculty focusing on this topic with the Geography Department. I was not furnished with the syllabi of the new courses that would be included in this specialization and so cannot comment on the scope or focus of the material to be covered. I do not see any conflict between this proposed specialization and the track in Geospatial Analysis that my program has proposed.

On a more mundane level, it would be good to keep the distinctions between ‘major’ and ‘specialization.’ In Section 15 it states that “This request is to develop a new major...” This is confusing because I think that this specialization will remain under the Geography major. It would be good to clarify this language.

Both the BA and BS options are clearly defined as is the difference between the two. Let me know if I can provide any other supporting information.



Grenville Barnes
Professor

Geography

Course Descriptions

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▲ Geography is the science of place, space, and environment. Each place on earth is distinguished by a unique mix of natural resources, cultural practices, and socioeconomic and political systems. Geographers study what makes each place unique, as well as the connections and interactions between places.

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▲ About This Major

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- **College:** Liberal Arts and Sciences
- **Degree:** Bachelor of Arts and Bachelor of Science
- **Credits for Degree:** 120
- **Programs:** Bachelor of Arts; B.A.: Environmental Geosciences; Bachelor of Science
- **Minor:** Yes
- **Combined-Degree Program:** Yes
- **Academic Learning Compact**
- **Website**
- **Contact:** mossa@ufl.edu

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▲ Overview

▲ Geography offers exciting undergraduate degrees at UF. Students learn from world-renowned faculty and award-winning mentors, and contribute to groundbreaking research, all while studying topics that have great environmental and social significance. Geography is an integrated and highly interdisciplinary field of study spanning the physical world and society. It is also a hands-on discipline, with a strong emphasis on computer-based tools and field studies.

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▲ Geographers can choose to study an enormous range of subjects, essentially anything that has a spatial component. Students who major in geography use the lens of space to examine issues as diverse as climate variability and change on the African continent, malaria outbreaks in Africa and South America, deforestation and land conflict in the Amazon, and the origin and spread of blues music in the Southeastern United States. Across the globe, geographers study tropical cyclones, river restoration, disease outbreaks, the role of parks and other protected areas, changes in land cover, forest management and fragmentation, community conservation, emerging infectious diseases, environmental influences on the elderly, and economic development.

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▲ Geography explores the relationship between human and biophysical systems and deals with some of the most critical issues of our time such as environmental hazards, conservation, sustainability of resource management systems, international development, and community and urban planning. Understanding the concept of place, including how and why places differ from each other, is a central concern. Students who have social and economic interests can enter into careers in international development, urban and regional planning, geographic information systems, and environmental consultancy. Students who combine the study of socioeconomic factors and the biophysical world can work in resource management, conservation, environmental assessment, and watershed and coastal planning.

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▲ Coursework for the Major

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▲ The geography major has five different programs: the Bachelor of Arts, the Bachelor of Science and the Bachelor of Arts in environmental geosciences (a joint program with the Department of Geological Sciences), the Bachelor of Arts in medical geography in global health, and the Bachelor of Science in medical geography in global health. Coursework for the major will depend upon the program, which are all flexible. Students must earn a minimum grade of C in all coursework for the major.

Students who are uncertain of a program should contact the Department of Geography's undergraduate coordinator for information and curriculum planning.

The **Bachelor of Arts in geography** requires 33-35 credits of coursework in geography, plus 3 credits of STA 2023. It is best suited for students

interested

in careers in urban and regional planning, business geography, medical geography and geographic education or for students who want a broad overview of the discipline with a focus on human geography.

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▲ The **Bachelor of Arts in environmental geosciences** requires a minimum of 38 credits of coursework. This joint program between the Department of Geography and the Department of Geological Sciences is intended for students interested in land and water aspects of the environment. The degree focuses on human impacts, water and mineral resource exploitation and management, disasters, environmental planning, earth science education or environmental law.

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▲ The **Bachelor of Science in geography** requires 30-32 credits of geography coursework and 24-25 credits of coursework in physics, chemistry, geology, and soils. This program is best suited for someone who wishes to pursue a career in environmental consulting or graduate work in physical geography or related natural sciences, including atmospheric science, geosciences, hydrologic sciences or meteorology.

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▲ Required Coursework

▲ All majors take some techniques courses, including GEO 3162C and a minimum of two additional courses that involve working with data and computers. All majors take a regional course, focusing on the countries, cultures and landscapes of one region in the world. The systematic courses include specialized

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courses in human or environmental/physical geography, but majors can also take additional techniques courses as part of this requirement. Students can concentrate coursework in economic geography and planning, environmental/physical geography, geospatial technologies, medical geography or natural resource management.

Coursework for the major will depend upon the degree program. Courses for each program are listed below under Critical Tracking and Recommended Semester Plan.

Bachelor of Arts

Students must earn a minimum grade of C in all coursework for the major.

Required Coursework

- GEO 2200 and 2200L Physical Geography and Physical Geography Laboratory, 4 credits
- One course from GEO 2410 Social Geography, GEO 2420 Introduction to Human Geography or GEO 2500 Global and Regional Economies, 3 credits
- GEO 3162C Introduction to Quantitative Analysis for Geographers, 4 credits
- Two courses from GEO 4167C Intermediate Quantitative Analysis, GIS 4001C Maps and Graphs, GIS 3043 Foundations of Geographic Information Systems, GIS 4021C Air Photo Interpretation, GIS 4037 Digital Image Processing, 6-8 credits
- GEO 4930 Senior Seminar, 1 credit
- One course from GEA 2210 Geography of the United States and Canada, GEA 2270 Geography of Florida, GEA 3223 Historical Geography of the United States, GEA 3405 Geography of Latin America, GEA 3500 Geography of Europe, GEA 3600 Geography of Africa, GEA 4465 Amazonia, 3 credits
- Four courses, 12 credits minimum, from:
 - GEO 2201 Physical Landscapes
 - GEO 2242 Extreme Weather
 - GEO 2426 Popular Music and Culture: A Geographic Perspective
 - GEO 3250 Climatology
 - GEO 3280 Principles of Geographic Hydrology
 - GEO 3315 Geography of Crops Plants
 - GEO 3341 Extreme Floods
 - GEO 3352 The Human Footprint on Landscape
 - GEO 3372 Conservation of Resources
 - GEO 3427 Plants, Health, and Spirituality
 - GEO 3430 Population Geography
 - GEO 3452 Introduction to Medical Geography
 - GEO 3502 Economic Geography
 - GEO 3602 Urban and Business Geography
 - GEO 3611 Housing, People, and Places in a Spatially Diverse America
 - GEO 3803 Geography of Alcohol
 - GEO 3930 Special Topics
 - GEO 4167C Intermediate Quantitative Analysis for Geographers
 - GEO 4281 Fluvial Morphology and Processes
 - GEO 4285 Models in Geographic Hydrology
 - GEO 4300 Environmental Biogeography
 - GEO 4554 Regional Development
 - GEO 4612 Shelter and Care Options for U.S. Elderly
 - GEO 4620 Business Geography Integrating Theory
 - GEO 4970 Honors Thesis
 - GEO 4938 Selected Topics in Geography
 - GIS 3043 Foundations of Geographic Information System
 - GIS 3420C GIS Models for Public Health
 - GIS 4021C Air Photo Interpretation
 - GIS 4037 Digital Image Processing
 - GLY 4734 Coastal Morphology and Processes
 - MET 3503 Weather and Forecasting
 - MET 4532 Hurricanes
 - MET 4560 Atmospheric Teleconnections
 - MET 4750 Atmospheric Data Analysis

The same course may not be used to satisfy requirements for more than one bulleted group.

Related Coursework

- STA 2023 Introduction to Statistics I

Critical Tracking

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To graduate with this major, students must complete all university, college and major requirements. For degree requirements outside of the major, refer to CLAS Degree Requirements: Structure of a CLAS Degree.

▲ Equivalent critical-tracking courses as determined by the State of Florida Common Course Prerequisites may be used for transfer students.

Semester 1

- 2.0 UF GPA required

Semester 2

- 2.0 UF GPA required

Semester 3

- Complete 1 geography course (GEA 1000 not acceptable)
- 2.0 UF GPA required

Semester 4

- Complete 1 additional geography course (1 of the 2 must be GEO 2200; GEA 1000 not acceptable) or complete STA 2023 with a 2.5 critical-tracking GPA
- 2.0 UF GPA required

Semester 5

- Complete all critical-tracking courses (STA 2023 and 2 geography courses, 1 of which must be GEO 2200; GEA 1000 not acceptable) with a 2.5 critical-tracking GPA
- 2.0 UF GPA required

Recommended Semester Plan

▲ Students are expected to complete the writing requirement while in the process of taking the courses below. Students are also expected to complete the general education international (GE-N) and diversity (GE-D) requirements concurrently with another general education requirement (typically, GE-C, H or S).

Semester 1 Credits

GEO 2410 Social Geography (GE-S and D) or	
GEO 2420 Introduction to Human Geography (GE-S and N) or 3	
GEO 2500 Global and Regional Economies (GE-S)	
Biological or Physical Science (State Core GE-B or P)	3
Composition (State Core GE-C) (WR)	3
Foreign language	4-5
	Total 13-14

Semester 2 Credits

GEO 2200 and 2200L Physical Geography (3) and Physical Geography Laboratory (1) (GE-P) 4	
▲ IUF 1000 What is the Good Life (GE-H)	3
STA 2023 Introduction to Statistics 1 (GE-M)	3
Foreign language	3-5
	Total 13-15

Semester 3 Credits

GEO 3000 level (Systematic)	3
Biological Science (GE-B)	3
Composition (GE-C) (WR)	3
Elective (or foreign language if 4-3-3 option)	3
Social and Behavioral Sciences (State Core GE-S) 3	
	Total 15

Semester 4 Credits

GEO 3000/4000 level (Systematic)	3
Elective	3
Elective (3000 level or above, not in major)	3

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Humanities (State Core GE-H) 3
 Mathematics (State Core GE-M) 3
 Total 15

Semester 5	Credits
GEO 2000/4000 level (Regional)	3
GEO 3162 Introduction to Quantitative Analysis for Geographers (GE-P)	4
Electives (3000 level or above, not in major)	6
Social and Behavioral Sciences (GE-S)	3
Total 16	

Semester 6	Credits
GEO 3000/4000 level (Systematic)	3
GIS 3043 Foundations of Geographic Information Systems or GIS 4001 Maps and Graphs	4
Elective	3
Elective (3000 level or above, not in major)	3
Humanities (GE-H)	3
Total 16	

Semester 7	Credits
GEO 4930 Senior Seminar	1
GEO/GIS 4000 level (Technique) *	3-4
Electives	6
Elective (3000 level or above, not in major)	3
Social and Behavioral Sciences (GE-S)	3
Total 16-17	

Semester 8	Credits
GEO 3000/4000 level (Systematic)	3
Elective (3000 level or above, not in major)	3
Electives *	10
Total 16	

* Electives to reach the 120-credit minimum will vary depending on whether students select minimum or maximum credit course options.

Bachelor of Arts: Environmental Geosciences

Students must earn a minimum grade of C in all coursework for the major.

Required Coursework

- o GEO 2200 and GEO 2200L Physical Geography and Physical Geography Laboratory, 4 credits
- o GEO 4930 Senior Seminar, 1 credit
- o GIS 3043 Foundations of Geographical Information Systems, 4 credits
- o GLY 2010C Physical Geology, 4 credits
- o GLY 2100C Historical Geology or GLY 3105C Evolution of Earth and Life in America, 4 credits
- o GLY 3202C Earth Minerals, 3 credits
- o Three geography electives, 9 credits minimum, from:
 - GEO 3162C Introduction to Quantitative Analysis for Geographers
 - GEO 3250 Climatology
 - GEO 3280 Principles of Geographic Hydrology
 - GEO 3341 Extreme Floods
 - GEO 3352 The Human Footprint on Landscape
 - GEO 3372 Conservation Resources
 - GEO 4167C Intermediate Quantitative Analysis for Geographers
 - GEO 4281 Fluvial Morphology and Processes
 - GEO 4285 Models in Geographic Hydrology
 - GEO 4300 Environmental Biogeography
 - GIS 4021C Air Photo Interpretation
 - GIS 4037 Digital Image Processing
 - MET 3503 Weather and Forecasting
 - MET 4532 Hurricanes
 - MET4560 Atmospheric Teleconnections

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- MET 4750 Atmospheric Data Analysis
- Two geology electives, 6 credits minimum, from:
 - GLY 3074 Oceans and Global Climate Change
 - GLY 3163 Geology of American and National Parks
 - GLY 3603C Paleontology
 - GLY 3882C Hydrology and Human Affairs
 - GLY 4155C Geology of Florida
 - GLY 4310C Igneous and Metamorphic Petrology
 - GLY 4400C Structural Geology and Tectonics
 - GLY 4552C Sedimentary Geology
 - GLY 4734 Coastal Morphology and Processes

The same course may not be used to satisfy requirements for more than one bulleted group.

Related Coursework

- STA 2023 Introduction to Statistics

Critical Tracking

To graduate with this major, students must complete all university, college and major requirements. For degree requirements outside of the major, refer to CLAS Degree Requirements: Structure of a CLAS Degree.

Equivalent critical-tracking courses as determined by the State of Florida Common Course Prerequisites may be used for transfer students.

Semester 1

- 2.0 UF GPA required

Semester 2

- Complete one critical-tracking course with laboratory (GEO 2200/2200L or GLY 2010C) with a 2.5 critical-tracking GPA
- 2.0 UF GPA required

Semester 3

- Complete the other critical-tracking course with laboratory (GEO 2200/2200L or GLY 2010C) with a 2.5 critical-tracking GPA
- 2.0 UF GPA required

Semester 4

- Complete STA 2023 and maintain a 2.5 critical-tracking GPA
- 2.0 UF GPA required

Semester 5

- Complete two additional GLY or GEO courses with a 2.5 critical-tracking GPA. Recommended GLY courses include GLY 2100C or GLY 3105C. Recommended GEO courses include GEO 3250, GEO 3280, GEO 3315, GEO 3341, GEO 3352, GEO 3372 or MET 3503.
- 2.0 UF GPA required

Recommended Semester Plan

Students are expected to complete the writing requirement while in the process of taking the courses below. Students are also expected to complete the general education international (GE-N) and diversity (GE-D) requirements concurrently with another general education requirement (typically, GE-C, H or S).

Semester 1	Credits
IUF 1000 What is the Good Life (GE-H)	3
Composition (State Core GE-C) (WR)	3
Elective *	3
Foreign language	4-5
Mathematics (State Core GE-M)	3
Total 16-17	

Semester 2

Credits

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GEO 2200 and 2200L Physical Geography (3) (GE-P) and Physical Geography Laboratory (1) (GE-P) or GLY 2010C Physical Geology (4) (GE-P)	4
Biological or Physical Science (State Core GE-B or P)	3
Foreign language	3-5
Social and Behavioral Sciences (State Core GE-S)	3
	Total 13-15

Semester 3 Credits

GEO 2200 and 2200L Physical Geography (3) (GE-P) and Physical Geography Laboratory (1) (GE-P) or GLY 2010C Physical Geology (4) (GE-P)	4
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Composition (GE-C) (WR)	3
Elective (or foreign language if 4-3-3 option)	3
Humanities (State Core GE-H)	3
Social and Behavioral Sciences (GE-S)	3
	Total 16

Semester 4 Credits

STA 2023 Introduction to Statistics 1 (GE-M)	3
Biological Science (GE-B)	3
Elective	3
Humanities (GE-H)	3
Social and Behavioral Sciences (GE-S)	3
	Total 15

Semester 5 Credits

GIS 3043 Foundations of Geographic Information Systems	4
GLY 2100C Historical Geology or GLY 3105C Evolution of Earth and Life (both GE-P)	4
Electives (3000 level or above, not in major)	6
	Total 14

Semester 6 Credits

GLY 3202C Earth Materials	3
Geography elective, from list	3-4
Electives (3000 level or above, not in major)	9
	Total 15-16

Semester 7 Credits

Geography elective, from list	3-4
Geology elective, from list	3-4
Electives *	6
Elective (3000 level or above, not in major)	3
	Total 15-17

Semester 8 Credits

GEO 4930 Senior Seminar	1
Geography elective, from list	3-4
Geology elective, from list	3-4
Electives *	9
	Total 16-18

* Electives to reach the 120-credit minimum will vary depending on whether students select minimum or maximum credit course options.

Bachelor of Science

Students must earn a minimum grade of C in all coursework for the major.

Required Coursework

- GEO 2200 and 2200L Physical Geography and Physical Geography Laboratory, 4 credits
- GEO 3162C Introduction to Quantitative Analysis for Geographers, 4 credits
- GEO 4930 Senior Seminar, 1 credit
- One course from GEO 2410 Social Geography, GEO 2420 Introduction to Human Geography or GEO 2500 Global and Regional Economies, 3

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credits

- Two courses from GEO 4167C Intermediate Quantitative Analysis, GIS 3043 Foundations of Geographic Information Systems, GIS 4001C Maps and Graphs, GIS 4021C Air Photo Interpretation, GIS 4037 Digital Image Processing, 6-8 credits
- One course from GEA 2210 Geography of the United States and Canada, GEA 2270 Geography of Florida, GEA 3223 Historical Geography of the United States, GEA 3405 Geography of Latin America, GEA 3500 Geography of Europe, GEA 3600 Geography of Africa, GEA 4465 Amazonia
- Three courses, 9 credits minimum, from:
 - GEO 3250 Climatology
 - GEO 3280 Principles of Geographic Hydrology
 - GEO 3315 Geography of Crop Plants
 - GEO 3341 Extreme Floods
 - GEO 3352 Human Footprint on the Earth
 - GEO 3372 Conservation Resources
 - GEO 3452 Introduction to Medical Geography
 - GEO 4167C Intermediate Quantitative Analysis
 - GEO 4281 Fluvial Morphology and Processes
 - GEO 4285 Models in Geographic Hydrology
 - GEO 4938 Selected Topics
 - GEO 4970 Honors Thesis
 - GIS 3043 Foundations of Geographic Information Systems
 - GIS 3420C GIS Models for Public Health
 - GIS 4021C Air Photo Interpretation
 - GIS 4037 Digital Image Processing
 - MET 3503 Weather and Forecasting
 - MET 4532 Hurricanes
 - MET 4560 Atmospheric Teleconnections
 - MET 4750 Atmospheric Data Analysis

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Related Coursework

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- CHM 1025 Introduction to Chemistry or CHM 1030 Basic Chemistry Concepts and Applications, 2-3 credits
- GLY 2010C Physical Geology, 4 credits
- MET 1010 Introduction to Weather and Climate, 3 credits
- PHY 2004 and 2004L Applied Physics 1 and laboratory, 4 credits
- PHY 2005 and 2005L Applied Physics 2 and laboratory, 4 credits
- STA 2023 Introduction to Statistics, 3 credits
- SWS 3022 and 3022L Introduction to Soils in the Environment and laboratory, 4 credits

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Critical Tracking

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To graduate with this major, students must complete all university, college and major requirements. For degree requirements outside of the major, refer to CLAS Degree Requirements: Structure of a CLAS Degree.

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Equivalent critical-tracking courses as determined by the State of Florida Common Course Prerequisites may be used for transfer students.

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Semester 1

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- 2.0 UF GPA required

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Semester 2

- Maintain 2.0 UF GPA
- 2.0 UF GPA required

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Semester 3

- Complete 1 geography course (GEA 1000 not acceptable)
- 2.0 UF GPA required

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Semester 4

- Complete 1 additional geography course (1 of the 2 must be GEO 2200; GEA 1000 not acceptable) or complete STA 2023 with a 2.5 critical-tracking GPA
- 2.0 UF GPA required

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Semester 5

- Complete all critical-tracking courses (STA 2023 and 2 geography courses, 1 of which must be GEO 2200; GEA 1000 not acceptable) with a 2.5 critical-tracking GPA
- 2.0 UF GPA required

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Recommended Semester Plan

Students are expected to complete the writing requirement while in the process of taking the courses below. Students are also expected to complete the general education international (GE-N) and diversity (GE-D) requirements concurrently with another general education requirement (typically, GE-C, H or S).

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Semester 1	Credits
GEO 2200 and 2200L Physical Geography (3) and Physical Geography Laboratory (1) (GE-P)	4
MET 1010 Introduction to Weather and Climate (GE-P)	3
Composition (State Core GE-C) (WR)	3
Foreign language	5
	Total 15
Semester 2	Credits
CHM 1025 Introduction to Chemistry (2) or CHM 1030 Basic Chemistry Concepts and Applications 1 (3) (GE-P)	2-3
GEO 2410 Social Geography (GE-S and D) or GEO 2420 Introduction to Human Geography (GE-S and N) or GEO 2500 Global and Regional Economies (GE-S)	3
IUF 1000 What is the Good Life (GE-H)	3
Foreign language	5
	Total 13-14
Semester 3	Credits
PHY 2004 and 2004L Applied Physics 1 (3) and Applied Physics 1 Laboratory (1) (GE-P)	4
STA 2023 Introduction to Statistics 1 (GE-M)	3
Elective	3
Humanities (State Core GE-H)	3
	Total 13
Semester 4	Credits
GEO/MET 3000/4000 level (Systematic)	3
PHY 2005 and 2005L Applied Physics 2 (3) and Applied Physics 2 Laboratory (1) (GE-P)	4
Composition (GE-C) (WR)	3
Elective	3
Mathematics (State Core GE-M)	3
	Total 16
Semester 5	Credits
GEA 2000/4000 level (Regional)	3
GEO 3162C Introduction to Quantitative Analysis for Geographers (GE-P)	4
Biological or Physical Science (State Core GE-B or P)	3
Elective (3000 level or above, not in major)	3
Social and Behavioral Sciences (State Core GE-S)	3

	Total 16	
Semester 6	Credits	
GEO/MET 3000/4000 level (Systematic)	3-4	
GIS 4001C Maps and Graphs (4) or GIS 3043 Foundations of Geographic Information Systems (Technique)	4	
GLY 2010C Physical Geology (GE-P)	4	
Elective (3000 level or above, not in major)	3	
Humanities (GE-H)	3	
	Total 17-18	
	Semester 7	Credits
GEO 4930 Senior Seminar		1
GEO/MET 3000/4000 level (Systematic)		3
SWS 3022 and 3022L Introduction to Soils in the Environment (3) and Introduction to Soils in the Environment Laboratory (1) (GE-P)		4
Elective *		1
Electives (3000 level or above, not in major)		6
		Total 15
Semester 8	Credits	
GEO/GIS 3000 level or above (Technique)	3-4	
Biological Science (GE-B)	3	
Electives (3000 level or above, not in major)	6	
Social and Behavioral Sciences (GE-S, if needed)	3	
	Total 15-16	

* Electives to reach the 120-credit minimum will vary depending on whether students select minimum or maximum credit course options.

Bachelor of Arts in medical geography in global health

Students must earn a minimum grade of C in all coursework for the major.

Critical Tracking

To graduate with this major, students must complete all university, college and major requirements. For degree requirements outside of the major, refer to CLAS Degree Requirements: Structure of a CLAS Degree.

Equivalent critical-tracking courses as determined by the State of Florida Common Course Prerequisites may be used for transfer students.

Semester 1

- 2.0 UF GPA required

Semester 2

- 2.0 UF GPA required

Semester 3

- Complete 1 geography course (GEA 1000 not acceptable)
- 2.0 UF GPA required

Semester 4

- Complete 1 additional geography course (1 of the 2 must be GEO 2200; GEA 1000 not acceptable) or complete STA 2023 with a 2.5 critical-tracking GPA
- 2.0 UF GPA required

Semester 5

- Complete all critical-tracking courses (STA 2023 and 2 geography courses, 1 of which must be GEO 2200; GEA 1000 not acceptable) with a 2.5 critical-tracking GPA
- 2.0 UF GPA required

Recommended Semester Plan

Students are expected to complete the writing requirement while in the process of taking the courses below. Students are also expected to complete the general education international (GE-N) and diversity (GE-D) requirements concurrently with another general education requirement (typically, GE-C, H or S).

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Required Coursework

Semester	B.A. Degree*
Year 1 Fall	HUM 2305 (3) GEO2200 (3) GEO2200L (1) STA2023 (3) COMP (C) (3)
	TOTAL 13
Year 1 Spring	GEO 2410 or GEO 2420 or 2500 (3) (GE-S N or D) GEN ED HUM (3) Comp GE-C (3) SOC (S) (3) MAC/MGF XXXXX (3-4)
	TOTAL 15-16
Year 2 Fall	COMP (C) (3) PHY SCI(P) (3) LANG XXXX (5) GEO 3452 (3)
	TOTAL 14
Year 2 Spring	GEA XXXX (3) (SN) SOC (S) (3) BIO (B) (3) LANG XXXX (5)
	TOTAL 14
Year 3 Fall	GEO3162C (4) GIS3043 (4) MED GEO ELECTIVE (3) BIO (B) (3) Elective (3)
	TOTAL 17
Year 3 Spring	GIS3420C (3) MED GEO ELECTIVE (3) GEN ED HUM (3) NAT SCI (3) ELECTIVE (3)
	TOTAL 15
Year 4 Fall	MEDGEO or GIS (3-4) MEDGEO (3) Electives (9-10)
	TOTAL 16-17
Year 4 Spring	GEO 4930 (1) MEDGEO ELECTIVE (3) Electives (12)
	TOTAL 16

* Electives to reach the 120-credit minimum will vary depending on whether students select minimum or maximum credit course options.

Bachelor of Science in medical geography in global health

Students must earn a minimum grade of C in all coursework for the major.

The Bachelor of Science can be completed to fulfill the college pre-health requirements.
Critical Tracking

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To graduate with this major, students must complete all university, college and major requirements. For degree requirements outside of the major, refer to CLAS Degree Requirements: Structure of a CLAS Degree.

Equivalent critical-tracking courses as determined by the State of Florida Common Course Prerequisites may be used for transfer students.

Semester 1

- 2.0 UF GPA required

Semester 2

- Maintain 2.0 UF GPA
- 2.0 UF GPA required

Semester 3

- Complete 1 geography course (GEA 1000 not acceptable)
- 2.0 UF GPA required

Semester 4

- Complete 1 additional geography course (1 of the 2 must be GEO 2200; GEA 1000 not acceptable) or complete STA 2023 with a 2.5 critical-tracking GPA
- 2.0 UF GPA required

Semester 5

- Complete all critical-tracking courses (STA 2023 and 2 geography courses, 1 of which must be GEO 2200; GEA 1000 not acceptable) with a 2.5 critical-tracking GPA
- 2.0 UF GPA required

Recommended Semester Plan

Students are expected to complete the writing requirement while in the process of taking the courses below. Students are also expected to complete the general education international (GE-N) and diversity (GE-D) requirements concurrently with another general education requirement (typically, GE-C, H or S).

Semester	B.S. Degree (Pre-Med Health)	B.S. Degree (Pre-Vet Health)
Year 1 Fall	HUM 2305 (GE-H) (3) English (3) MAC 2311 (4) CHM 2045 (3) CHM 2045L (1)	HUM 2305 (3) MAC 2311 (4) CHM 2045 (3) CHM 2045L (1) English (3)
	TOTAL 14	TOTAL 14
Year 1 Spring	GEO2200 (3) GEO2200L (1) STA 2023 (3) CHM 2046 (3) CHM 2046L (1) English (3)	GEO2200 (3) GEO2200L (1) STA 2023 (3) CHM 2046 (3) CHM 2046L (1) English (3)
	TOTAL 14-15	TOTAL 14
Year 2 Fall	GEO 2410(GE-SD), 2420, 2500 (3) CHM2210 (3) BSC 2010 (3) BSC 2010L (1) SYG 2000 (3)	GEO 2410(GE SD), 2420, 2500 (3) CHM2210 (3) BSC 2010 (3) BSC 2010L (1) SPC2608 (3)
	TOTAL 13	TOTAL 13
Year 2 Spring	GEA XXXX (3) (SN) CHM 2211 (3) CHM 2211L (2) BSC 2011 (3) BSC 2011L (1) PSY 2012 (GE-S) (3)	GEA XXXX (3) (SN) CHM 2211 (3) CHM 2211L (2) BSC 2011 (3) BSC 2011L (1) GEN ED HUM (3)
	TOTAL 15	TOTAL 15
Year 3 Fall	GEO 3452 (3) GEO3162C (4)	GEO 3452 (3) GEO3162C (4)

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PHY 2053 (3)
PHY 2053L (1)
BCH 4024 or CHM3218 (4)

TOTAL 15

PHY 2053 (3)
PHY 2053L (1)
ANS3006C (4)

TOTAL 15

Year 3 Spring

GIS3043 (4)
GIS3420C/MEDGEO (3)
PHY 2054 (3)
PHY 2054L (1)
Pre-Med Course (3)

TOTAL 14

GIS3043 (4)
GIS3420C/MEDGEO (3)
PHY 2054 (3)
PHY 2054L (1)
ANS3404C(3)

TOTAL 14

Year 4 Fall

MEDGEO or GIS (3-4)
MEDGEO (3)
PRE-MED SCIENCE (3)
LANG (5)
Electives (3)

TOTAL 17-18

MEDGEO or GIS (3-4)
MEDGEO (3)
MCB3020/L (4) or MCB3023/L (4)
LANG (5)
Electives (2)

TOTAL 17-18

Year 4 Spring

GEO4930 (1)
MEDGEO ELECTIVE (3)
GEN ED HUM (3)
Electives (6)
LANG (5)

TOTAL 18

GEO 4930 (1)
MEDGEO ELECTIVE (3)
Genetics (PCB3063, AGR3303, or
ANS338 (4)
GEN ED HUM (3)
LANG (5)
Electives (2)

TOTAL 18

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Critical Tracking

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Equivalent critical-tracking courses as determined by the State of Florida Common Course Prerequisites may be used for transfer students.

Semester 1

- 2.0 UF GPA required

Semester 2

- Maintain 2.0 UF GPA
- 2.0 UF GPA required

Semester 3

- Complete 1 geography course (GEA 1000 not acceptable)
- 2.0 UF GPA required

Semester 4

- Complete 1 additional geography course (1 of the 2 must be GEO 2200; GEA 1000 not acceptable) or complete STA 2023 with a 2.5 critical-tracking GPA
- 2.0 UF GPA required

Semester 5

- Complete all critical-tracking courses (STA 2023 and 2 geography courses, 1 of which must be GEO 2200; GEA 1000 not acceptable) with a 2.5 critical-tracking GPA
- 2.0 UF GPA required

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