

Cover Sheet: Request 11795

GEO3452 Introduction to Medical Geography

Info

Process	Course New/Close/Modify Ugrad Gen Ed
Status	Pending at PV - General Education Committee (GEC)
Submitter	Liang Mao liangmao@ufl.edu
Created	8/28/2017 10:11:00 AM
Updated	10/24/2017 8:50:27 AM
Description of request	Biological Sciences (B)

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CLAS - Geography 011609000	Liang Mao		9/1/2017
MecialGeographySyllabus_GenEd.docx					8/28/2017
College	Approved	CLAS - College of Liberal Arts and Sciences	Liang Mao		10/24/2017
No document changes					
General Education Committee	Pending	PV - General Education Committee (GEC)			10/24/2017
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
College Notified					
No document changes					

Course|Gen_Ed|New-Close-Modify for request 11795

Info

Request: GEO3452 Introduction to Medical Geography

Description of request: Biological Sciences (B)

Submitter: Liang Mao liangmao@ufl.edu

Created: 8/28/2017 10:11:00 AM

Form version: 1

Responses

Course Prefix and Number

Response:
GEO3452

Enter the three letter prefix, four-digit course number, and lab code (if applicable), as the course appears in the Academic Catalog (or as it has been approved by SCNS, if the course is not yet listed in the catalog). If the course has been approved by the UCC but is still pending at SCNS, enter the proposed course prefix and level, but substitute XXX for the course number; e.g., POS2XXX.

Course Title

Enter the title of the course as it appears in the Academic Catalog (or as it has been approved by SCNS, if the course is not yet listed in the catalog, or as it was approved by the UCC, if the course has not yet been approved by SCNS).

Response:
Introduction to Medical Geography

Delivery Method

Please indicate the delivery methods for this course (check all that apply). Please note that content and learning outcome assessment must be consistent regardless of delivery method.

Response:
4204Classroom

Request Type

Response:
Change GE/WR designation (selecting this option will open additional form fields below)

Effective Term

Enter the term (semester and year) that the course would first be taught with the requested change(s).

Response:
Summer

Effective Year

Response:
2018

Credit Hours

Select the number of credits awarded to the student upon successful completion. Note that variable credit courses are not eligible for GE or WR certification.

Response:
3

Prerequisites

Response:
Sophomore standing; entry-level knowledge of statistics (STA 2023, GEO 3162C or equivalent) is preferred, but not required.

Current GE Classification(s)

Indicate all of the currently-approved general education designations for this course.

Response:
4236None

Current Writing Requirement Classification

Indicate the currently-approved WR designation of this course.

Response:
None

One-semester Approval?

Response:
No

Requested GE Classification

Indicate the requested general education subject area designation(s) requested for this course. If the course currently has a GE designation and the request includes maintaining that designation, include it here.

Response:
4243B

Requested Writing Requirement Classification

Indicate the requested WR designation requested for this course. If the course currently has a WR designation and the request includes maintaining that designation, include it here.

Response:
None

Fall 2017: Introduction to Medical Geography

GEO3452 Section 1F53

Time: MWF Period 6 12:50-1:40pm

Location: Turlington hall 3012

Instructor: Dr. Liang Mao

E-mail: liangmao@ufl.edu

Office hour: Wednesdays 3-5pm or by appointment @ Turlington Hall 3121

Course Description:

Medical geography studies human-environment interactions and the influence of these interactions on human and animal health. This course provides instruction in the basic concepts, theories and practice of geographic methods and techniques in the context of medical science and public health. Hands-on experiences will be emphasized through lab exercises.

General Education Objectives and Learning Outcomes:

This course is a biological sciences (B) subject area course in the UF General Education Program. Biological science courses provide instruction in the basic concepts, theories and terms of the scientific method in the context of the life sciences. Courses focus on major scientific developments and their impacts on society, science and the environment, and the relevant processes that govern biological systems. Students will formulate empirically-testable hypotheses derived from the study of living things, apply logical reasoning skills through scientific criticism and argument, and apply techniques of discovery and critical thinking to evaluate outcomes of experiments.

These general education objectives will be accomplished through:

1. Introduction of basic concepts, theories and terms in both epidemiology and geography
2. Discussion of step-by-step research design in medical geography
3. Lab exercises to foster geospatial analysis skills on health-related data
4. Analysis on research articles that employ geographic methods in a variety of health topics.

The general education student learning outcomes (SLOs) describe the knowledge, skills and attitudes that students are expected to acquire while completing a general education course at the University of Florida. The SLOs fall into three areas: content, communication and critical thinking.

1. Content: *Students demonstrate competence in the terminology, concepts, methodologies and theories used within the discipline.* For this class, students will be able to identify and describe basic concepts, principles, and methods that are widely used in medical geography studies. They will also be able to use GIS software tools to map and analyze health related data. Achievement of this learning outcome will be assessed through 7 home assignments (including 5 lab exercises), 4 in-class quizzes, and a midterm exam.

2. Communication: *Students communicate knowledge, ideas, and reasoning clearly and effectively in written or oral forms appropriate to the discipline.* For this class, students will interpret and effectively communicate information spatially and graphically. Students are required to give oral presentations that introduce health issues of their interests spatially and graphically, and discuss three medical geography studies concerning the health issues. Achievement of this learning outcome will be evaluated by a rubric during oral presentations.

3. Critical Thinking: *Students analyze information carefully and logically from multiple perspectives, using discipline specific methods, and develop reasoned solutions to problems.* In this class, students will demonstrate their ability of analyzing health issues from spatial and ecological perspectives. Students will develop a final term paper that analyzes contributing factors to health issues of their interests. They will formulate 6 hypotheses of possible contributing factors from multiple perspectives, and find 6 research articles to support their hypotheses. In the final term paper, students will discuss how each research was conducted, including the research design being used, data collection, geographic analysis methods, result presentation, and limitations of this study. Achievement of this learning outcome will be evaluated by a rubric for final term paper.

Textbooks

Recommended Textbook:

- Melinda S. Meade and Michael Emch, 2010. *Medical Geography*, 3rd ed. New York: The Guilford Press (Free on-line access in UF Library).
- Leon Gordis, 2013. *Epidemiology*, 5th ed. Philadelphia: ELSEVIER SAUNDERS

Prerequisites:

Students with a sophomore standing or higher. Entry level knowledge of statistics is preferred (STA2023), but not required.

Tentative course schedule (may change based on actual progress)

Week	Topic	Reading & Assignment
1	Module 1: Introduction	
	Module 2: Basic concepts, principles, and methodologies	
2	Definition and Terminology Triangle of human ecology for diseases	^a MG, Chapter 1&2
3	Measuring diseases (I-II)	^b EP, Chapter 3&4 Homework #1
4	Data collection Basic methodology designs (I-II) (Quiz 1)	EP, Chapter 9&10 Homework #2
5	Statistical inference Principles of Maps	EP, Chapter 11 MG, Chapter 3 &12
	Module 3: Landscape epidemiology	
6	GIS basics Mosquito-borne diseases(I) GIS Lab 1 Basic mapping	MG, Chapter 3 Homework #3
7	Mosquito-borne diseases(II-III) GIS Lab 2 Spatial query	MG, Chapter 4 Homework #4
8	Tick-borne diseases (I-II) (Quiz 2)	MG, Chapter 4
9	Pre-exam review Mid-term exam Discussion of the exam	
	Module 4: Climate change and Global health	
10	Weather-related diseases Climate change and Global health GIS Lab 3 Spatial test with buffers	MG, Chapter 6 Homework #5
11	Air pollution and Health (I-II) GIS Lab 4 Spatial estimation of exposure	MG, Chapter 7 Homework #6
	Module 5: Modeling Disease diffusion	
12	Human health and mobility Spatial patterns of disease diffusion (I-II) (Quiz 3)	MG, Chapter 10
	Module 6: Health disparities and planning	
13	Human health behavior Spatial disparity of health	MG, Chapter 9
14	Geography of health systems (I-II) (Quiz 4) GIS Lab 5 Hospital service areas	MG, Chapter 11 Homework #7
15	Course Summary	
16	Student presentations	

^aTextbook: Medical Geography

^bTextbook: Epidemiology

Grading Policies

Assessment	Points	Percent
Assignments	100	30%
Mid-term exam	100	20%
Quizzes	100	20%
Final Term paper	100	15%
Final Presentation	100	10%

Attendance	100	5%
Total		100%

The grading scale for this course consists of the standard scale, including minus grades, below:

93 - 100 = A	90 - 92.9 = A-	87 - 89.9 = B+	83 - 86.9 = B	80 - 82.9 = B-
77 - 79.9 = C+	73 - 76.9 = C	70 - 72.9 = C-	67 - 69.9 = D+	63 - 66.9 = D
60 - 62.9 = D-	Below 60 = E			

“Please note that C- is not considered a passing grade for major, minor, Gen Ed, Gordon Rule, or basic distribution requirements.”

More information on current UF grading policies for assigning grade points can be accessed by the following link: <http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html>

Assignments: 7 assignments will be given in class, with each worthy of 100 points. The average of 7 assignments account for 30% of your final score. Students should hand in the assignments by the due date. Otherwise 10% penalty per day will be AUTOMATICALLY applied to late assignments up to 7 days after they are due. Assignments received after the 7-day late period will not be graded, and will automatically receive 0 points. **If something unexpected happens, please inform the instructor in advance.**

Quizzes: There will be **four in-class quizzes** that occur at about a two-week interval. Quiz time will be informed in advance during the class and online. These will test you on material covered usually within the most recent two weeks, although testing outside of this period may also occur due to the nature of the subject. Quizzes can only be made up if the instructor receives prior notification of absence. The absence of such a notice will prevent students from making up missed quizzes.

Mid-term exam: A close-book exam will cover all course contents by that time. Review of the course notes and PowerPoints is strongly encouraged.

Term paper: Each student will develop a final term paper that analyzes contributing factors to health issues of their interests. They will formulate 6 hypotheses of possible contributing factors from multiple perspectives, and find 6 research articles to support their hypotheses. The selected papers must use GIS or maps to address this health issue. In the final term paper, students will discuss how each research was conducted, including the research design being used, data collection, geographic analysis methods, result presentation, and limitations of this study. The designated format of term paper will be discussed after the midterm exam.

Final presentation: Students are required to give a 10-minute oral presentation that introduce health issues of their interests spatially and graphically, and discuss three medical geography studies concerning the health issues.

Class Attendance and Make-Up Policy

Attendance/Participation: Attendance is mandatory for all students, and is the easiest way to do well in this class. To encourage uninterrupted participation in class, it is expected that cell phone and pagers be TURNED OFF prior to entering the classroom.

Absences may be excused if they are documentable. For expected absences, students must provide at least two business days’ advance notice of the absence. Acceptable reasons for absences include but are not limited to personal or family illness or emergency, religious holidays, official university events, etc. Oversleeping, missing the bus, etc., are not excusable excuses. Students may be required to provide written documentation in order to receive an excused absence. Any absence without a reasonable excuse will result in a loss of 1 point in Attendance/Participation.

If absence is excused, students are responsible for material missed during any class session (lab or lecture). S/he should obtain notes from a peer for the material covered in class. If the absence is unexcused, assignments not turned in at the assigned time will be considered late and a penalty applied.

Policy on make-up work: Students are allowed to make up assignments and exams ONLY as the results of official university events, religious holidays, illness, or other unanticipated circumstances warranting a medical excuse and resulting in the student missing a homework or exam. Documentation from a health care provider is required. Assignments and exams missed for any other reason will receive a grade of zero.

Class Demeanor

Students are expected to arrive to class on time and behave in a manner that is respectful to the instructor and to fellow students. Please avoid the use of cell phones and restrict eating to outside of the classroom. Opinions held by other students should be respected in discussion, and conversations that do not contribute to the discussion should be held at minimum, if at all.

Materials and Supplies Fees

There are \$15 fees for this course.

University Honesty Policy

Each student is bound by the academic honesty guidelines of the University and the student conduct code printed in the Student Guide and on the University website: <http://www.registrar.ufl.edu/catalog/policies/students.html>

Cheating or plagiarism in any form is unacceptable and inexcusable behavior. The Honor Code states: “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: On my honor, I have neither given nor received unauthorized aid in doing this assignment.”

Accommodations for Students with Disabilities

Students requiring accommodations must first register with the Dean of Students' Office. The Dean of Students' Office will provide documentation to the student, who must then provide this documentation to the faculty member when requesting accommodation. If students experience personal, academic, and social issues, please consider either of the following assistances:

Instructor Evaluation Policy

Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu>.

Counseling and Wellness Center

University Counseling Services (P301 Peabody Hall – 392-1575)
<http://www.counsel.ufl.edu/base.asp?include=counselingServices.inc>

Student Mental Health Services in the Student Health Care Center (Room 245, Infirmary Bldg. – 392-1171)
<http://www.health.ufl.edu/shcc>