

GEO 3452 & GEO 6451

Introduction to Medical Geography

Time:	Tuesday: 9:35am to 10:25am; Thursday: 9:35am to 11:30am
Location:	Class will meet in Turlington Hall 3006
Instructor:	Dr. Gabriela Hamerlinck Turlington 3122 352.294.9051
Office Hours: All office hours will be held in Dr. H's office and via Zoom. The Zoom link will be provided on the front page of our Canvas course.	Tuesday 10:30am-12:30pm Wednesday 10:00 am – 1:00 pm (or by appointment)
E-Mail:	ghamerlinck@ufl.edu

Course description

Medical geography deals with human-environment interactions and the influence of these interactions on public health. This course provides a broad-based, comprehensive survey of geographic topics and approaches in medical sciences. Hands-on experiences will be emphasized through GIS labs.

Course objectives

This course will ...

- Explore the basic concepts, principles, and methods that are widely used in medical geography studies;
- Investigate health problems with spatial analysis skills;
- Apply geographic information system techniques for medical studies using real-world data;
- Provide the background necessary for upper-level courses of medical geography.

Prerequisites

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

Textbooks

Recommended textbook: Emch, M., Root, E. D., & Carrel, M. (2017). *Health and medical geography* (4th ed.). New York, NY: The Guilford Press.

****Free online access** to *Health and medical geography* in the [UF Library](#).

Tentative course schedule

Students should note that the syllabus is a guideline and that there may be changes to the class schedule.

Week	Topics	Assignments & readings
Introduction and Module 1: Basic concepts, principles, and methodologies		
1	Introduction Geography and medical science	Zika virus news article; Optional Textbook Chapters 1 & 2
2	Basic concepts and principles Measuring diseases	Optional Textbook Chapter 12; Homework 1
3	Data collection Optional: extra calculation practice	Optional Textbook Chapter 12; Quiz 1
4	GIS Lab setup Basic methodology designs	Optional Textbook Chapter 12; Quiz 2
5	Statistical inference Principles of maps	Optional Textbook Chapter 3
Module 2: Landscape epidemiology		
6	GIS basics Optional: GIS Lab help day	Spatial turn in health research; Optional Textbook Chapter 4; Quiz 3; GIS Lab 1: Basic mapping
7	Mosquito-borne disease I Mosquito-borne disease II	Malaria transmission in the US; Optional Textbook Chapter 4; Homework 2; GIS Lab 2: Spatial query
8	Tick-borne disease I Tick-borne disease II	GIS Lab 3: Buffers & spatial exposure estimation; Homework 3
9	Mid-term exam prep Mid-term exam;	Midterm exam (taken during class)
Module 3: Climate change and global health		
10	Spring break	
11	Weather-related diseases Introduction to the term paper	Optional Textbook Chapter 6; GIS Lab 4: Hospital service areas; Quiz 4
12	Air pollution and health Optional: GIS Lab help day	GIS Lab 5: FL Air Pollution
Module 4: Modeling disease diffusion		
13	Human health and mobility; Spatial patterns of disease diffusion	Optional Textbook Chapter 10; Quiz 5; Homework 4
14	No class this week: work time on final presentations, papers, and peer reviews	Final presentation (due 4/21)
Module 5: Health disparities and planning		
15	Spatial disparity of health Optional: GIS Lab & term paper help day	Optional Textbook Chapter 5 & 11; GIS Lab 6: Hospital Service Areas & Networks; Peer reviews (due 4/26)
16	Course summary	
TERM PAPER DUE DURING FINALS WEEK (5/1)		

Grading scale:

A	100 %	to 94.0%	C	< 77.0 %	to 74.0%
A-	< 94.0 %	to 90.0%	C-	< 74.0 %	to 70.0%
B+	< 90.0 %	to 87.0%	D+	< 70.0 %	to 67.0%
B	< 87.0 %	to 84.0%	D	< 67.0 %	to 64.0%
B-	< 84.0 %	to 80.0%	D-	< 64.0 %	to 61.0%
C+	< 80.0 %	to 77.0%	E	< 61.0 %	to 0.0%

You determine your grade based on the quality and frequency of your work. Consequently, your time management skills, time spent on assignments, and communication with me when you have questions or concerns regarding quizzes and assignments will impact your success or failure within this course. With this approach of grading on adherence to predetermined standards, there is no preconceived distribution of grades. Everyone or no one can receive an “A.” Please note that I do not round up grades— requests to do so will not be considered.

For current UF policies on assigning grade points, consult the following policy website:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Disputing a grade: If you wish to dispute a grade for any assignment, you must contact the instructor in writing within two business days (48 hours) after the assignment has been returned. In your message, you must include a specific explanation for why you think the grade is incorrect and how you think it should be changed. An instructor will then arrange a meeting with you to discuss the issue and determine whether or not the grade should be changed. The grade assigned following this meeting will be final.

Grading system

Course component	Weight
GIS Labs (x6)	20%
Quizzes (x5)	15%
Homework assignments (x4)	15%
Midterm exam	15%
Term paper	15%
Final presentation & Peer Review	20%
Total	100%

Graded Work

Quizzes

There will be five quizzes throughout the semester. All quizzes will be available through Canvas. Quiz start time will be posted in advance on Canvas and announced in class. These will test you on material covered since the previous quiz, although some early, foundational material may appear in later quizzes. Quizzes can only be made up if the instructor receives prior notification of absence or formal documentation (e.g. note from a physician) excusing the absence. The absence of such a notice will prevent students from making up missed quizzes.

Mid-term exam

A closed-book exam will cover all course content by that time. Review of the course notes and PowerPoints is strongly encouraged. The exam will be taken during class.

Term paper

Each student will be asked to select ONE specific health topic based on interest, and identify, read, and analyze a series of research papers on this topic. The selected papers should use GIS or mapping techniques to address this health issue. After the final class, each student will hand in a reading report in a designated format. A rubric and template will be available on Canvas at least three weeks prior to the deadline.

Students in GEO3452 will use six research articles in their term paper. Students in GEO6451 will use eight research articles in their term paper, and will also present a critique of the methods for each article.

Final presentation & Peer reviews

Students are expected to prepare a recorded 10-minute presentation about selected topics based on their term papers. Each student will be assigned two of their peers to review using a provided rubric.

Extra Credit

Extra credit assignments may be posted at the instructors' discretion only. Any other extra work submitted in order to raise a grade will not be accepted and requests for additional extra credit will not be considered.

Submitting assignments: All assignments must be submitted electronically via Canvas unless otherwise noted. Emailed or paper submissions for Canvas assignments will not be accepted. You are responsible for ensuring that all your work is uploaded correctly and completely by the deadline. Corrupted files will be treated as missing work (= 0 grade) until they are re-uploaded correctly and late penalties will apply if your resubmission is past the deadline. So, please always double check your files right after you upload them. If you experience technical problems when submitting your work in Canvas, contact the UF Computing Help Desk for assistance: <https://helpdesk.ufl.edu>.

Late Work & Make-Up Assignments

All assignments must be submitted by the due date and time indicated on Canvas. If you miss a class, you are still responsible for turning in the work due on that date at the required time. If an assignment is submitted late, 10% of its total point value will be deducted for every day that it is late. Credit cannot be earned for assignments that are turned in 5+ days past the due date, or for those that are submitted after the instructor has graded and returned the assignment to the class. Late work will not be accepted after the deadline for the final assignment in the course.

Extensions will be considered on a case-by-case basis (at the instructor's discretion) only in the event of unforeseen emergencies. In such a case, you must contact the instructor as soon as possible to discuss the situation; note that the instructor may request documentation. No extensions will be granted for students who miss the due date for any other reason.

A note about deadlines: Remember, the due date does not have to be the "do" date. In other words, it is highly encouraged to work on your assignments in advance— do not wait until right before the deadline to submit your work. Last-minute computer problems or other non-emergency situations that arise right before the deadline are not valid reasons for requesting an extension; such requests will not be considered and late penalties will be applied to your work if it is not submitted before the deadline.

Communication & Conduct

Meeting Policy

If you need help with any aspect of the course, you are encouraged to come to office hours (see the details on Page 1 of this syllabus). Alternatively, you can schedule a 1-on-1 meeting with the instructor. Please email Dr. Hamerlinck to arrange a meeting time. Outside of office hours, email is the preferred method of contact. I will do my best to respond to messages within 48 hours (not including weekends or holidays). As a courtesy, please check the syllabus and Canvas before reaching out; answers to many of your questions can be found there.

Canvas

Important announcements and updates will be regularly posted to the course Canvas website, so be sure to check Canvas frequently. To ensure that you do not miss anything, please make sure that your Canvas profile is set to receive notifications.

Email Accounts

It is UF policy that you use your GatorLink account or Canvas when emailing your instructors; we will not answer emails sent from other accounts (e.g., personal Gmail, etc.).

Professional Conduct

All members of the class are expected to conduct themselves in a professional and respectful manner at all times. Please use appropriate etiquette when interacting with your peers and instructors, including during class, on Canvas, and via email. Students who behave disrespectfully or disruptively will be reported to the Dean of Students Office.

All members of the class will agree to a Course Contract during the first week of the semester that outlines conduct expectations. The Course Contract document is available on Canvas.

VI. University Policies

University Policy on Academic Honesty

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit 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."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be

reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code>.

Instructors' note: Any action that subverts the learning goals of the course (or a particular course activity) will be treated as academic misconduct and reported to the Dean of Students Office. This includes– but is not limited to– cheating or assisting others in cheating, plagiarism (i.e., misrepresenting someone else's work as your own, whether it is copied directly or paraphrased), self-plagiarism (i.e., copying/reusing work that you have submitted previously), collaborating with others when it is not permitted, fabricating data, lying to an instructor, and bad faith attempts to undermine the intent of an learning activity. In addition to being reported to the Dean of Students Office, a student will earn a grade of 0 on any assignment that is plagiarized or that otherwise violates these academic honesty policies. This 0 grade is irreversible– it cannot be dropped and the assignment cannot be resubmitted for a different grade. After this, any subsequent incidents of plagiarism or academic honesty will result in an automatic E (= failing grade) in the course.

Accommodations for Students with Disabilities

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services, and mediating faculty-student disability related issues. Students requesting classroom accommodation 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 instructor when requesting accommodation.

Disability Resource Center

001 Reid Hall

(352) 392-8565 | <https://disability.ufl.edu/>

Instructors' note: We want you to succeed in this course! To ensure your accommodations are in place when you need them, please be sure to have your DRC accommodation letter sent to us as early as possible– ideally at the beginning of the semester.

Policy on Recording Class Sessions

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are: (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

Use of Electronic Devices

You may use personal electronic devices such as laptops or tablets in class, unless otherwise noted by the instructor. However, it is your responsibility to make sure that you use your devices in a professional and courteous manner. This includes:

- Limiting device use only to activities that are directly related to your learning of course material, such as taking notes or running data analyses. Using your devices for any other purpose is not allowed in the classroom; doing so is disrespectful to the instructor, distracting to your fellow students, and robs you of a quality learning experience.
- Keeping your devices muted at all times to prevent disrupting others around you.
- Quietly stepping out into the hall if you must take a call or contact someone. We understand that emergencies can happen and will not prevent you from attending to them, but we also ask that you try to minimize disruptions to your peers.

If your device use is disruptive or inappropriate, you will be asked to put away your device. Students who repeatedly violate this policy will no longer be allowed to use devices in class.

Course Evaluations

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at: <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at: <https://gatorevals.aa.ufl.edu/public-results/>.

Campus Helping Resources

Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university’s counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance:

University Counseling & Wellness Center

Counseling Services, Groups and Workshops, Outreach and Consultation, Self-Help Library,
Wellness Coaching
3190 Radio Road
(352) 392-1575; <https://counseling.ufl.edu>

Other campus resources include:

U Matter, We Care: <http://umatter.ufl.edu>

Career Connections Center: Reitz Student Union- First Floor; (352) 392-1601;
<http://career.ufl.edu>

Student Success Initiative: <http://studentsuccess.ufl.edu>

Student Complaints: Complaints regarding on-campus courses may be filed at
<https://sccr.dso.ufl.edu/policies/student-honor-code-studentconduct-code/>. For online courses,
please see <https://distance.ufl.edu/getting-help/student-complaint-process/>

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It is your responsibility to ensure that you fully understand the policies outlined in this syllabus as well as the policies of the university as they relate to this course. By remaining enrolled in this course, you agree that you have read and understood all of these policies and that you will be held accountable to them.

At their discretion, the instructor may change aspects of the course during the semester to accommodate new opportunities, unforeseen disruptions, or other circumstances. These changes will be communicated clearly in class and through Canvas. The current version of the syllabus will always be available on our course's Canvas website. It is your responsibility to ensure that you are following the most recent version of the syllabus.

If you have any questions, please contact the instructors as soon as possible (preferably at the beginning of the course)!