

GEO3452: INTRODUCTION TO MEDICAL GEOGRAPHY

Course Number: GEO3452

Credit Hours: 3

Semester/Year: Spring 2024

Class meeting time & location: This course is facilitated 100% online and asynchronous.

COURSE INFORMATION

INSTRUCTOR INFORMATION:

NAME: *Tan M. Luong, MScPH.,
Ph.D. Candidate in Medical Geography.*

EMAIL: Please use the Canvas Inbox Tool.

OFFICE: TUR3014

OFFICE HOURS: 1 – 2 pm Tuesday and Thursday via online Zoom conference.

PHONE: 352-225-8727

Or by appointment (please contact me using the Canvas Inbox Tool).

COURSE WEBSITE: <http://elearning.ufl.edu/>

COURSE COMMUNICATIONS: Please use the Canvas Inbox Tool. Inquiries received Mondays through Fridays will usually receive a reply within 24 hours of receipt; however, if you have not received a reply within 48 hours, please resend your inquiry.

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](#).

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.

PREREQUISITE KNOWLEDGE AND SKILLS: Students with a sophomore standing or higher. Entry level knowledge of statistics is preferred (STA2023, GEO3162C, or equivalent), but not required.

COURSE OBJECTIVES: At the end of this course, successful students will be able to:

1. Apply basic concepts, principles, and methods that are widely used in medical geography studies.
2. Investigate health problems with a systematic approach and spatial analysis methods.
3. Analyze real-world health problems using geographic information systems software.

COURSE POLICIES:

COURSE EXPECTATIONS: You need to be aware that online learning can present significant challenges, particularly to individuals who are not self-starters or those who do not possess good time management skills. The online classroom is available to you 24 hours a day. Unlike traditional instructional settings in which each student gets the same class, the online setting means that every student gets a different class of his or her choosing. In theory, this type of instruction should be more adaptable to a variety of learning styles. The reality is, however, that some students seem unwilling (we believe all are able) to create their virtual classroom. This results in procrastination and low-quality performance.

Recognizing that everyone learns differently, I'm not going to prescribe the *best way* to approach the course. You should note, however, that this course is not self-paced. You are expected to adhere to the class calendar. **Most assignments are due by 11:59 P.M. (ET) on the date specified in the course schedule.** *A 10% deduction per day will be assigned for a late submission.* I do recognize that personal circumstances arise which may interfere with the student's ability to meet a deadline. If something does occur, communicate with me as soon as you are aware of a conflict. I will not be receptive to retrospective requests for extensions. Your emails will be responded to **within 24 business hours during weekdays** (typically sooner). Anytime you have a question or problem, email immediately.

If you have questions about course expectations or the grading procedures, or if you have difficulty with the course content, the readings, the lectures, the class activities, or the assignments, please contact me immediately. Don't wait until it's too late. Keep up; it is easy to *ignore* online course requirements until it is too late. Plan to be online 5-7 times each week and schedule time to work on your course(s) in your day planner or calendar. Be sure to schedule a time in which you can work without interruptions. Use a word processor program when typing drafts of your discussion postings and responses. This will enable you to save your work in case of any unexpected technical glitches. It

will also enable you to use sophisticated spelling and grammar checkers. Strive to make assignments meaningful and relevant to your personal and professional goals. Life happens. I understand that during this semester, you may experience challenging personal or professional situations, which may take your attention away from this course. It is important that if you are experiencing difficulty in the class, communicate with me as soon as a difficulty occurs.

REQUIRED READINGS: You are responsible for the interpretations of all assigned readings. Not all reading materials will be covered in the course lectures. Read carefully and critically.

DUE DATES: All assignments are due by 11:59 PM (ET) on the assigned date listed in the course schedule. A 10% deduction per day will be assigned for a late submission. You are advised to make backup copies of all work and submit your work early to avoid technical problems. Large-file submissions usually require a longer time or cause upload failures.

ATTENDANCE, MAKE-UP EXAM, AND ASSIGNMENT POLICIES: Requirements for class attendance, make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the [Undergraduate Catalog's Academic Regulations](#).

COURSE TECHNOLOGY: This course is facilitated 100% online through Canvas. You may access Canvas from UF's e-Learning webpage: <http://elearning.ufl.edu/>. You will also access geographic information system (GIS) software, ArcGIS Pro, via UFApps: <https://info.apps.ufl.edu/>. ArcGIS Pro is a mainstream software tool to create, store, analyze, and map geospatial datasets. Review [Accessibility in ArcGIS](#) for accommodation information.

Please contact the UF Help Desk, <http://helpdesk.ufl.edu>, if you have any technical difficulties with Canvas or UFApps.

ONLINE COURSE EVALUATION: Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations 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/results>.

COMMERCIAL SALE OF COURSE LECTURES: The content presented in the class is the property of UF and may not be duplicated in any format without permission from the College of Health and Human Performance and UF and may not be used for any

commercial purposes. Students violating this policy may be subject to disciplinary action under the UF Conduct Code.

POLICY ON CHAT GPT AND USE OF WRITING BOTS: AI tools are not allowed in this course. If deemed use AI tools to complete the assignments, no credits will be assigned. Students are expected to produce their own writing for assignments in this course. Though AI may be good tools for generating initial ideas, they should not be used to complete the assignments as they can produce inaccurate responses. More importantly, direct copy-paste of text or minimal revision of artificially generated products is a form of plagiarism, as would be from any other text or document, which is strictly prohibited.

RECORDING OF LIVE MEETINGS VIA ZOOM: Our group office hours sessions, or any meetings where I answer questions, may be audio-visually recorded for students in the class to refer to and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voice recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording, and unauthorized sharing of recorded materials by students or any other party is prohibited.

UF POLICIES:

UNIVERSITY POLICY ON ACCOMMODATING STUDENTS WITH DISABILITIES:

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting an accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

UNIVERSITY POLICY ON ACADEMIC CONDUCT: UF students are bound by The Honor Pledge which 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 by abiding by the Honor Code." 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." The [Honor Code](#) specifies a number of behaviors that are in violation of this code and the possible Sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor in this class.

CLASS DEMEANOR OR NETIQUETTE: All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions, and chats.

GETTING HELP:

For issues with technical difficulties for Canvas, please contact the UF Help Desk at helpdesk@ufl.edu or (352) 392-HELP (4357).

Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from the Help Desk when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Other resources are available at [Distance Learning's Getting Help](#) for:

- Counseling and Wellness resources
- Disability resources
- Resources for handling student concerns and complaints
- Library Help Desk support

Should you have any complaints with your experience in this course, please visit [Distance Learning's Student Complaint Process](#) to submit a complaint.

GRADING POLICIES:

METHODS BY WHICH STUDENTS WILL BE EVALUATED AND THEIR GRADE DETERMINED

DISCUSSIONS: There are multiple modules having discussion forums (combined for 10% of overall grade). These are opportunities to extend what you have learned in the same module. Students are expected to adhere to professional etiquette/netiquette standards (see UF Policies below) in all posts and to engage in CONSTRUCTIVE dialogue. Posts are expected to be thoughtful, detailed responses (i.e., "yes," "no," "I agree," or "I disagree" answer is not sufficient).

In most cases, discussions require some research or reading before initial post. Follow-up posts are typically required. For discussion forum assignments, **timeliness is critical**, and due dates should be strongly adhered to. Please check the course schedule for the specific due dates.

QUIZZES: There are two types of quizzes in the course, including module quizzes and GIS lab quizzes, combined for 40% of the final grade. All quizzes will be due on the dates listed in the course schedule at **11:59 PM (ET)**.

MODULE QUIZZES: There are **8** module quizzes throughout the course. Each module quiz is graded, timed, and worth 100 points. Questions are asked based on the objectives, lectures, and readings of the module. You will have 30-90 minutes to complete the quiz, depending on the number of quiz questions.

GIS LAB QUIZZES: There are **6** lab quizzes after the GIS labs with no time limit. There is also an extra GIS lab setup quiz to prepare for the labs. Please follow the PDF instructions for each lab and answer the lab-related questions.

SCENARIO-BASED EXERCISE: The quiz utilizes scenario-based exercises for epidemiological investigations developed by the US Centers for Disease Control and Prevention (CDC). Each student is required to complete at least three missions of level 1 in the CDC's website (link is provided in Canvas) to earn at least 4500 points. The student will also discuss how medical geography can be incorporated into the investigations.

MIDTERM EXAM: A closed-book exam will cover all course contents by that time. Review of the course notes and PowerPoints is strongly encouraged. No questions will be asked about the ArcGIS Pro-related tasks.

FINAL ASSIGNMENT: The purpose of the Final Assignment is to share your readings with your classmates so you would be able to learn more disease problems and their ecological triangles. You will choose any disease problem or any other health-related issue that has NOT been covered in the class, for example, Ebola, Dengue Fever, Obesity, health seeking behavior, etc. Please follow the instructions provided in Canvas.

Step 1: Topic selection and approval.

*Step 2: Final video presentation of **one most interesting article**.*

Step 3: Peer review of video presentations.

*Step 4: Complete final term paper that includes **six articles**.*

INSTRUCTOR FEEDBACK: Please allow FIVE business days from the due date for assignment feedback.

COURSE GRADING POLICY: Grades will be determined based on your performance on the following activities:

Items	Percentages (%)
Discussions	10
Quizzes	40
Midterm	20
Final Assignment	30
Total	100

GRADING SCALE:

Letter Grades	Percentage Ranges
A	93.00-100%
A-	90.0-92.9%
B+	88.00-89.9%
B	83.5-87.9%
B-	80.0-83.4%
C+	78.00-79.9%
C	73.5-77.9%
C-	70.0-73.4%
D+	68-69.9%
D	60-67.9%
E	Less than 60%

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.” **I do not, have not, and will not round grades.**

UF GRADING POLICIES: Information on current UF grading policies for assigning grade points can be found in the [UF Undergraduate Catalog](#).

COURSE SCHEDULE:

CRITICAL DATES:

The Midterm Exam will only be **available in 24 hours from 03/05 6:00 AM ET to 03/06 5:59 AM ET**. No exceptions.

The Topic Approval for Final Assignment is due **03/31 11:59 PM ET**.

The Final Video Presentation (no camera required) is due **04/14 11:59 PM ET**.

The Peer Review of Final Video Presentations is due **04/21 11:59 PM ET**.

The Final Term Paper is due **04/24 11:59 PM ET**.

A WEEKLY SCHEDULE OF TOPICS AND ASSIGNMENTS:

All Modules begin on a Monday and end on a Sunday. All assignments (module quizzes, lab quizzes, and discussions) are due by the end of the Module week (i.e., Sunday) at 11:59 PM ET unless otherwise stated on this schedule.

Module	Date	Topic	Reading	Assignment
Orientation	01/08 – 01/14	Course Overview	Syllabus Lab_Setup.pdf	Introduce Yourself Orientation Quiz GIS Lab Setup Quiz
1	01/08 – 01/14	Introduction to Medical Geography	Zika Virus news article Medical Geography web page	Discussion 1 Module Quiz 1
MLK Jr. holiday	01/15			
2	01/16 – 01/21	Basic Concepts and Principles	On Airs, Waters, and Places Module 2 Definitions	Discussion 2 Module Quiz 2
3	01/22 – 01/28	Measuring Diseases	Kentucky Cancer Registry	Discussion 3 Module Quiz 3
4	01/29 – 02/04	Methodology Design	4.1 Where to Find Data for Medical Geography Studies? Data Analysis of Epidemiological Studies	CDC - Solve the Outbreak Module Quiz 4
5	02/05 – 02/11	Inferring Causal Relationships	Data Analysis of Epidemiological Studies	Module Quiz 5
6	02/12 – 02/18	Maps and GIS	6.1 Principles of Maps & 6.2 GIS Basics Spatial Turn in Health Research	Discussion 4 GIS Lab 1
7	02/19 – 02/25	Vector-borne diseases	Malaria Transmission in the U.S. 7.3-7.5 Mosquito-Borne Diseases 8.3 RMSF & 8.4 STARI	Case Study #1 Discussion GIS Lab 2 Midterm Study Guide

Module	Date	Topic	Reading	Assignment
8	02/26 – 03/03	Zoonoses	Zoonoses presentation. Chapter 2 – Ecology of Health and Disease, recommended textbook. Paper readings	Mid-Course Survey Case Study #2 Discussion GIS Lab 3
9	03/04 – 03/08	Midterm Exam		Midterm Exam is available in 24 hours from 03/05 6:00 AM ET to 03/06 5:59 AM ET
Spring Break	03/09 – 03/16			
10	03/17 – 03/24	Climate Changes and Global Health	10.4 Climate Change Case Study #3	Discussion 5 Module Quiz 6 GIS Lab 4
11	03/25 – 03/31	Air Pollution and Human Health	11.1-11.3 Air Pollutants and Health Ghost Factories article	Case Study #4 Discussion GIS Lab 5 Topic Approval for Final Assignment 03/31 11:59 PM ET
12	04/01 – 04/07	Spatial Diffusion of Diseases		Case Study #5 Discussion Module Quiz 7
13	04/08 – 04/14	Human Behavior and Health		Case Study #6 Discussion Module Quiz 8 Final Video Presentation 04/14 11:59 PM ET
14	04/15 – 04/21	Spatial Disparities in Health Care		Case Study #7 Discussion GIS Lab 6 Peer Review of Final Video Presentations 04/21 11:59 PM ET
15	04/22 – 05/03	Final Assignment	Final Term Paper 04/24 11:59 PM ET	

Disclaimer: This syllabus represents current plans and objectives. As we go through the semester, the plans may change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.

Last update: 01/04/2024