

# GEO3452/6451: INTRODUCTION TO MEDICAL GEOGRAPHY

Course Number: GEO3452/GEO6451

Credit Hours: 3

Semester/Year: Fall 2023

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

## COURSE INFORMATION

### INSTRUCTOR INFORMATION:

NAME: *Jason K. Blackburn, PhD*

EMAIL: Please use the Canvas Inbox Tool.

OFFICE: TUR3133

PHONE: 352-294-7501 (By appointment only)

OFFICE HOURS: By appointment only. Please contact me to schedule an online Zoom Conference. Office hour availability will be listed in Canvas.

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

**COURSE COMMUNICATIONS:** Please use the Canvas Inbox Tool. Inquiries received Mondays through Fridays will usually receive a reply with 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 the 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.** *Assignments will not be accepted late.* 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** (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 to 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. No assignments will be accepted after the due date. You are advised to make back-up copies of all work and submit your work early to avoid technical problems.

**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, ArcMap, via UFApps: <https://info.apps.ufl.edu/>. ArcMap 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 semesters, 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:** While AI tools like Chat GPT can be efficient, students should be critical of it as in any other source of information. It may interpret technical information poorly, may get facts wrong, and does not appropriately credit sources. Be very careful in its application and credit and paraphrase it as you would any other sources. Good writing integrates multiple sources and aims for engaging readers with the content which Chat GPT can fail to do. Direct copy-paste of text or minimal revision of artificially generated is a form of plagiarism, as would be from any other text or document, so please always thoroughly revise, edit, fact-check, and improve any writing generated with AI tools. It is expected that students will produce their own writing for assignments in this course. Any use of AI must be disclosed in any writing. If deemed a copy/paste, credit will not be assigned. It is fine to not to use it at all.

Please read this to learn more about [https://medium.com/@kjc\\_44470/why-chat-gpt-is-not-a-threat-to-writers-and-creatives-how-to-use-it-as-a-tool-4a59b3934b5a](https://medium.com/@kjc_44470/why-chat-gpt-is-not-a-threat-to-writers-and-creatives-how-to-use-it-as-a-tool-4a59b3934b5a)

**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](http://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](mailto: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.

**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 ArcMap-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              |
| <b>Total</b>     | <b>100</b>      |

## 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 10/18 7:00 AM ET – 10/19 11:59 PM ET**. No exceptions.

The Final Video Presentation (no camera required) is due **12/1 11:59 PM ET**.

The Peer Review of Final Video Presentations is due **12/6 11:59 PM ET**.

The Final Term Paper is due **12/12 11:59 PM ET**.



## A WEEKLY SCHEDULE OF TOPICS AND ASSIGNMENTS:

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

| Module      | Date        | Topic                             | Reading   | Assignment   |
|-------------|-------------|-----------------------------------|---|--|
| Orientation | 8/23 – 8/29 | Course Overview                   | Syllabus<br>Lab_Setup.pdf                             | Introduce Yourself Discussion<br>Initial Post Due Friday<br>Response to Classmate Due Monday<br>Orientation Quiz<br>GIS Lab Setup Quiz |
| 1           | 8/23 – 8/29 | Introduction to Medical Geography | Zika Virus news article<br>Medical Geography web page | Discussion 1<br>Initial Post Due Friday<br>Response to Classmate Due Monday<br>Module Quiz 1   |
| 2           | 8/30 – 9/5  | Basic Concepts and Principles     | On Airs, Waters, and Places<br>Module 2 Definitions   | Discussion 2<br>Initial Post Due Friday<br>Response to Classmate Due Monday<br>Module Quiz 2   |
| 3           | 9/6 – 9/12  | Measuring Diseases                | Kentucky Cancer Registry                              | Discussion 3<br>Initial Post Due Friday<br>Response to Classmate Due Monday<br>Module Quiz 3   |
| 4           | 9/13 – 9/19 | Methodology Design                | 4.1 Where to Find Data for Medical Geography Studies? | Module Quiz 4  |

| Module | Date          | Topic                             | Reading  | Assignment   |
|--------|---------------|-----------------------------------|--|--|
|        |               |                                   | Data Analysis of Epidemiological Studies                                       |  |
| 5      | 9/20 – 9/26   | Inferring Causal Relationships    | Data Analysis of Epidemiological Studies                                       | Module Quiz 5  |
| 6      | 9/27 – 10/3   | Maps and GIS                      | 6.1 Principles of Maps & 6.2 GIS Basics<br><br>Spatial Turn in Health Research | Discussion 4<br>Initial Post Due Friday<br>Response to Classmate Due Monday<br>GIS Lab 1   |
| 7      | 10/4 – 10/10  | Mosquito-Borne Diseases           | Malaria Transmission in the U.S.<br><br>7.3-7.5 Mosquito-Borne Diseases        | Case Study #1 Discussion<br>Initial Post Due Friday<br>Response to Classmate Due Monday<br>GIS Lab 2<br>Midterm Study Guide<br>Initial Post Due Monday |
| 8      | 10/11 – 10/17 | Tick-Borne Diseases               | 8.3 RMSF & 8.4 STARI   | Mid-Course Survey<br>Case Study #2 Discussion<br>Initial Post Due Friday<br>Response to Classmate Due Monday<br>GIS Lab 3                              |
| 9      | 10/18– 10/24  | Midterm Exam                      | None   | Midterm Exam <b>available 10/18 7:00 AM ET – 10/19 11:59 PM ET</b>   |
| 10     | 10/25 – 10/31 | Climate Changes and Global Health | 10.4 Climate Change<br><br>Case Study #3                                       | Discussion 5<br>Initial Post Due Friday  |

| Module | Date          | Topic                              | Reading   | Assignment  |
|--------|---------------|------------------------------------|---|---|
|        |               |                                    |   | Response to Classmate Due Monday<br>Module Quiz 6<br>GIS Lab 4  |
| 11     | 11/1 – 11/7   | Air Pollution and Human Health     | 11.1-11.3 Air Pollutants and Health<br><br>Ghost Factories article  | Case Study #4 Discussion<br>Initial Post Due Friday<br>Response to Classmate Due Monday<br>GIS Lab 5  |
| 12     | 11/8 – 11/14  | Spatial Diffusion of Diseases      |   | Case Study #5 Discussion<br>Initial Post Due Friday<br>Response to Classmate Due Monday<br>Module Quiz 7  |
| 13     | 11/15 – 11/21 | Human Behavior and Health          |   | Topic Approval for Final Assignment<br>Case Study #6 Discussion<br>Initial Post Due Friday<br>Response to Classmate Due Monday<br>Module Quiz 8 |
| 14     | 11/22 – 11/30 | Spatial Disparities in Health Care | None  | End-of-Course Survey<br>Case Study #7<br>Initial Post Due Friday<br>Response to Classmate Due Monday<br>GIS Lab 6                               |
| 15     | 11/29 – 12/12 | Final Assignment                   | Final Video Presentation <b>12/1 11:59 PM ET</b><br>Peer Review of Final Video Presentations <b>12/6 11:59 PM ET</b><br>Final Term Paper <b>12/12 11:59 PM ET</b> |   |

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

Last update: 8/22/2023