

UNIVERSITY OF FLORIDA
Department of Geography
GEOG 3454 People and Plagues
SYLLABUS: Spring 2021

INSTRUCTOR INFORMATION:

Instructor:	Dr. Gabriela Hamerlinck Turlington 3122 352.294.7513
Office Hours: Turlington Hall 3122	Monday 2:30 pm – 4:00 pm Tuesday noon – 1:30 pm Wednesday 1:00 pm – 4:00 pm (or by appointment)
E-Mail:	ghamerlinck@ufl.edu

COURSE INFORMATION:

Time:	Tu/Th; 7-8, 7 (Tu: 1:55 pm – 3:50 pm; Thurs: 1:55 pm – 2:45 pm)
Location:	Tuesday: Turlington 3006 Thursday: Turlington 3018

COURSE DESCRIPTION: This course is an introduction to emerging infectious diseases (EIDs) in the context of previous outbreaks, focusing on geography, origin, and management response. We will explore basic models of infectious disease processes, transmission cycles and life-histories of host-vector systems, and the ecological and landscape conditions that favor emergence. We will also explore the social, demographic, economic, and environmental context of historical and modern epidemics. The course will comprise lecture style introductions to weekly themes, which will center around a disease, or group of diseases, as illustrations of the impact of outbreaks, responses, or environmental context. These lecture style sessions will be complemented with student-led discussions and/or group activities, based on the readings and exercises provided by the instructor. Readings and supporting materials are taken from a wide variety of sources such as academic journals, popular news sources and magazines, agency factsheets, documentaries, and popular literature and movies. Both assigned and optional readings will be made available to students to develop thoughts and discussions. Accordingly, students will be expected to have read the assigned reading and be prepared to comment and participate in discussion.

COURSE OBJECTIVES/STUDENT LEARNING OUTCOMES:

- Define and learn terminology used to discuss and describe emerging infectious diseases (EIDs): hosts, reservoirs, vectors, accidental hosts, dead-end hosts, viral chatter, micro- and macroparasites.
- Describe and discuss EID history and management: Case histories, previous management responses, successes and failures, public perceptions, social impacts and education, the role of veterinary, agricultural and public health players and agencies.
- Explore EIDs and Ecology: how emergence interacts with the landscape from ecological, demographic and climate perspectives, and what that will mean in the future.

After completing this course students should be able to:

1. Define what an emerging infectious disease (EID) is, and discuss how this differs from endemic and chronic diseases.
2. Describe and discuss past outbreaks of infectious diseases, particularly of zoonotic origin, their impact and management.
3. Describe the ecological conditions that favor disease emergence and how this fits into our current understanding of the domestic-agricultural-wildlife interfaces, and future global change predictions.

4. Define and learn fundamental EID terminology, such as: hosts, reservoirs, vectors, accidental hosts, dead-end hosts, viral chatter, micro- and macroparasites.
5. Explore *basic* quantitative models of infectious disease processes, understanding of R_0 and compartmental modeling.
6. Describe the direct and indirect transmission cycles for several EIDs of concern, and several aspects of their in-host immunological and cellular biology.
7. Discuss potential intervention and management strategies for different scenarios of EIDs, from veterinary cordons to economic strategies to public health plan implementation.

REQUIRED TEXTS: *None.* Students will be assigned a set of weekly readings, made available to them online, or in hard copy from the instructor.

GRADE DISTRIBUTION:

1. Class Participation (100 points - 10%)

Students are expected to participate in discussions, and will lead specific discussions in groups of 2-3 via a short presentation of the discussion topic (<10 minutes), and introducing questions based on the readings, for the class to explore. Students will be assigned a date and a specific discussion topic to lead following the drop/add date once the number of students in the class is finalized.

2. Reading comprehension homework (100 points - 10%)

Students are expected to complete 10 reading comprehension homework assignments prior to each class discussion. These assignments are to be completed and submitted via Canvas

3. In-class Tests (300 points - 30%)

Three short (one-period) tests will be administered throughout the course, in class. These will comprise a mix of short answer, matching, and short essay responses. Each test is worth 100 points. The third exam is comprehensive and will occur during finals week.

4. Review/Critique short paper (100 points - 10%)

Students will write a short essay (ca. 1,000 words, 3-5 pages), on a book, movie, documentary, or set of articles, related to the course themes. Topic approval by the instructor is required.

5. Final paper (400 points - 40%)

Students will work in pairs to take one of the diseases we discuss, or another EID of choice, and go into much greater depth. This paper will address multiple facets of the EID, such as economic and social impacts, biological detail beyond the scope of the course, management history or potential options, etc. Length is 4,000-4,500 words, and must have proper references. We will approach this in stages, with a final copy due the last week of class, although you can turn it in early.

The stages of paper development will be graded and returned to the student pair, to ensure progress: Outline – 50 points, Draft – 50 points, Peer review of 2 classmate’s drafts – 100 points (50 points each), Final paper – 200 points. Rubrics will be provided at least 3 weeks in advance of deadlines.

CLASSROOM POLICIES:

- **Attendance & makeup policy:** Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.
- **Late Policy:** A class roll will be passed around at the beginning of class. If a student is late, he or she will have to sign the roll after class. Such lateness distracts other students and the instructor and will affect the student’s final participation grade. Students will lose 1% from their final grade each time they arrive late.
- **Cell phone and texting policy:** Students must turn cell phones to silent before coming to class. Each time a student’s cell phone rings or each time that a student texts during class, 1% will be deducted from that student’s final grade for each instance.
- **Grade Disputes:** Should a student wish to dispute any grade received in this class (other than simple addition errors), the dispute must be in writing and be submitted via email to the instructor within a week

of receiving the grade. The dispute should set out very clearly, the grade that the student believes the assignment should have received as well as why he or she believes that he or she should have received such a grade.

Grading Scale (& GPA equivalent):

A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E
100-93 (4.0)	92-90 (3.67)	89-87 (3.33)	86-83 (3.0)	82-80 (2.67)	79-77 (2.33)	76-73 (2.0)	72-70 (1.67)	69-67 (1.33)	63-66 (1.0)	62-60 (0.67)	59- (0)

Note: A grade of C- is not a qualifying grade for major, minor, Gen Ed, or College Basic distribution credit.

For

further information on UF's Grading Policy, see:

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

<http://www.isis.ufl.edu/minusgrades.html>

Academic Honesty: 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 honor 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 (<http://www.dso.ufl.edu/sccr/process/student-conduct-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.

Accommodations for Students with Disabilities: 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. Contact the Disability Resources Center (<http://www.dso.ufl.edu/drc/>) for information about available resources for students with disabilities.

Counseling and Mental Health Resources: Students facing difficulties completing the course or who are in need of counseling or urgent help should call the on-campus Counseling and Wellness Center (352-392-1575; <http://www.counseling.ufl.edu/cwc/>).

Online Course Evaluation Process: 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/results>.

COURSE SCHEDULE

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

	(Tues 7-8) Topic	(Thurs 7) Topic	Landmarks
Week 1	Course overview; Introduction to EIDs	Basic Disease Models	
Week 2	Basic epidemiology, outbreak investigation; Plague	Plague	Choose Critique topic
Week 3	Watch <i>Contagion</i>	Discussion: Plague	
Week 4	Tuberculosis	Discussion: TB	Choose topic for final paper
Week 5	Smallpox (and the other poxes)	First Exam	First Test
Week 6	Vaccination	Discussion: Vaccinations	Critique Due
Week 7	Coronaviruses	No class: Homecoming	
Week 8	Flu, old and new	Discussion: Flu	Paper Outline due
Week 9	Wildlife EIDs	Discussion: Wildlife EIDs	
Week 10	HIV/AIDS	Second Exam	Second Test
Week 11	VBD I: Malaria	Discussion: Malaria	Paper draft due
Week 12	VBD II: Yellow Fever, Dengue, Zika	No class: University Holiday	
Week 13	VBD III: Chagas & African Sleeping Sickness	Discussion: Trypanosomes	
Week 14	VBD IV: Lyme and other tick-borne diseases	No Class: Thanksgiving	Peer reviews due
Week 15	VHFs: Hanta, Ebola, Sin Nombre	Discussion: VHFs	
Week 16	Exam Review	No Class: Reading Days	Final paper due
Comprehensive Final Exam: Friday, December 17th 12:30pm-2:30pm (Turlington 3006)			