

ZOO 4956 (13220): Overseas Studies (3 credits)

UF in Cusco: Infectious Disease in the Americas

Summer A 2024

Instructor: Dr. J.M. Ponciano

Office hours: Scheduled as needed

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Text: Infectious Disease: A Very Short Introduction, 2nd Edition, Wayne & Bolker 2023

The goal of this course is to complement your service learning experiences in Cusco with a theoretical and empirical grounding in emerging infectious disease, particularly the ecology and evolution of emerging infectious disease. This course provides an overview of human infectious diseases. After an initial look at how epidemics grow, each week will focus on a different mode of transmission (e.g. air borne, food and water, sexual interactions) and associated diseases.

PREREQUISITES

Prereq: BSC 2011 and 2011L with minimum grades of C and undergraduate advisor permission.

COURSE REQUIREMENTS AND ASSESSMENT

-Class participation/preparation	30%
-Short assignments (4 to 8 depending on time)	40%
-Final project	<u>30%</u>
	100%

CLASS PARTICIPATION AND ENGAGEMENT

Class meetings: Attendance at class meetings is **mandatory**. The class will generally meet for two hours on each day as scheduled below. Changes to the schedule, e.g. to deal with unpredicted logistical challenges, will be announced with as much advance notice as possible and made in coordination with other scheduled activities. Due to the active learning nature of the class, your presence and participation are essential! Any missed classes for reasons other than illness will be penalized by a zero for class participation on that day. If you are sick, please notify me within 24 hours by WhatsApp or email. Class is offered for a letter grade; no S/U option is possible. The topics listed below are examples of what we will discuss in class, but we will also incorporate relevant experiences from your service placements, as well as current events.

Week	Reading	Topic
1) 22-23 May	Chapters 1, 2	"Infection is inevitable" and "Transmission at different scales"
2) 27-29 May	Chapters 5, 6	GI infections, vector-borne diseases (Influenza, Malaria, Zika)
3) 23-27 May	Chapter 3	Influenza, vaccination, community engagement
4) 3-6 June	Chapter 4	STIs, HIV, community engagement continued
5) 10-13 June	Chapter 8	Emergent pathogens, SARS-CoV-2/COVID-19
6) 17-20 June	Chapter 9	Wrap-up and reflection
June 25- Last meeting		

Class participation: You must do the reading prior to coming to class. As part of your class participation grade, you may be asked to complete questions or discussion posts before class. You will also be asked to participate in face to face discussions, review one another's essays, and other active learning work during class.

Short assignments: You will write some short (500-word) essays. The topics and formats of the short assignments will vary, with details provided to you the previous week. As an example, for the first short assignment, you will write an essay consider the readings and in class discussions and argue that the epidemiology of Gainesville, Florida and Cusco, Perú are either fundamentally the same (describe parallels), or fundamentally different (highlight critical differences). As part of your short essay, please speak with at least one local person about their experiences and perceptions of infectious diseases and include this conversation and the person's name either within your essay or as a short appendix. Please provide detailed references. Due dates will be posted on Canvas; assignments are due at 9:00 am unless otherwise noted. Late assignments will be penalized 5 points each day or fraction thereof. Please note, only pdf or txt submissions will be accepted.

Final project: For your final project, you will work in small groups to write a targeted to readers with a strong science background, but who are not necessarily experts in infectious disease. The article should be in the style of e.g. *New Scientist* or *National Geographic*, focusing on an emerging disease relevant to Perú (preferably in the Cusco or Andean regions, but you may include the whole country). You suggest the parasite/disease, perhaps informed by your placements, for my approval. Examples could include tuberculosis, Bartonellosis, Mayaro, Chagas, etc. Through the lens of the disease you select, you can explore a range of relevant topics depending on your interest, from the legacy of colonialism on health care, to the possible role of global change in mosquito (and hence disease) distribution, to the use of evolutionary theory in understanding origins of outbreaks. The chapter should include detailed references from the primary literature as well as other sources you may wish to include; and should draw upon material from Chapter 2 and the modeling material that I will be lecturing on. Again, the audience you are writing for is well-educated and scientifically literate, but not necessarily experts in your subject—essentially, your classmates.

Student Learning Objectives

Critical thinking:

- Students will learn to apply logical reasoning skills through scientific criticism and argument.
- Students will learn to read and critique primary, peer-reviewed literature in area of infectious disease.

Content:

- Students will learn the basics of infectious disease epidemiology, ecology, and evolution for a range of human diseases, including terminology, methodologies, approaches, and theories.

Communication:

- Students will learn to clearly and effectively communicate knowledge, ideas, and reasoning in a range of written (essay, infographic, etc.) and oral presentations.

Develop intercultural and global awareness:

- Students will analyze the geographic, cultural, economic, and historical processes that shape Peruvian healthcare and infectious disease dynamics.
- Students will be able to describe and apply UN Sustainable Development Goal 3: Good Health and Wellbeing (<https://sdgs.un.org/goals>).

Grading Scale/Distribution

Grade	Points	Grading Scale
A	4.00	93-100
A-	3.67	90-92
B+	3.33	87-89
B	3.00	83-86
B-	2.67	80-82
C+	2.33	77-79
C	2.00	73-76
C-	1.67	70-72
D+	1.33	67-69
D	1.00	63-66
D-	0.67	60-62
F	0.00	below 60
U	0.00	

UNIVERSITY POLICIES

ATTENDANCE

This is a small class, and if you aren't completing assignments on time, I'll worry. If you have a planned conflict, discuss it with me in advance. If there is an unforeseen circumstance, please let me know as soon as possible. I know that special circumstances may come up while we are in Peru, and we will stay in communication to ensure your success. Please see the UF policy for excused absences here: <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>

No make-up exams without prior permission or documentation of illness. Students missing an exam due to a university-approved excused absence should let the instructor know in advance. In case of illness or emergency on exam day, students must submit documentation here: <https://care.dso.ufl.edu/instructor-notifications/> and request a letter be sent to the instructor. Please also contact Dr. Ponciano by WhatsApp or emails.

If you have symptoms of COVID-19, do **not** come to class; instead contact Dr. Luna and Dr. Ponciano right away. Don't worry, I will create alternative opportunities for you to make up class participation points.

<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>

ACADEMIC HONESTY

All students registered at the University of Florida have agreed to comply with the following statement:

"I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University."

In addition, on all work submitted for credit the following pledge is either required or implied:

"On my honor I have neither given nor received unauthorized aid in doing this assignment."

Any acts of cheating, plagiarism, or other forms of academic dishonesty will result in, at minimum, a 0 grade for the assignment or exam. Sharing information about exams with those who have not yet taken an exam or posting ANYWHERE ON THE INTERNET outside of Top Hat, Canvas, or other assigned locations (social media, Course Hero, etc.) any information about exams or other assignments, is a serious act of academic dishonesty. Maintaining academic honesty is especially important and requires each of you to commit to it during this pandemic during which courses are hosted online. If you witness any instances of academic dishonesty in this class, please notify the instructor or contact the Student Honor Court (392-1631) or Cheating Hotline (392-6999). For additional information on Academic Honesty, please refer to the University of Florida Student Honor Code and Student Conduct Code at: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>

ACCOMMODATIONS

Students who will require a classroom accommodation for a disability must contact the Dean of Students Office of Disability Resources, in Peabody 202 (phone: 352-392-1261). Please see the University of Florida Disability Resources website for more information at: <https://disability.ufl.edu/>. Note that the student should provide documentation of a requirement for accommodation by the second week of classes. No accommodations are available to students who lack this documentation. It is the policy of the University of Florida that the student, not the instructor, is responsible for arranging accommodations when needed. Once notification is complete, the Dean of Students Office of Disability Resources will work with the instructor to accommodate the student.

SUPPORT

College can be a very stressful time in a person's life. Resources are available on campus to help students meet academic goals and solve personal problems, which may interfere with their academic performance. If you find that you are having difficulty emotionally or academically, there is substantial support available. There are several online help resources: (<https://counseling.ufl.edu/resources/online/>) provided by the UF Counseling and Wellness Center or contact one of the following services:

1. UF Counseling and Wellness Center, <http://www.counseling.ufl.edu/cwc/>, Radio Rd Facility, 392-1575
2. Dean of Students Office, <https://www.dso.ufl.edu>, 202 Peabody Hall, 392-1261
3. Career Resource Center, <http://www.career.ufl.edu/>, Reitz Union, 392-1601
4. CLAS Academic Advising Center, <http://www.advising.ufl.edu/>, Farrior Hall, 100 Fletcher Drive, 392-1521

Also available is the The U Matter, We Care initiative, which is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 911.