

# IDS 2935 The Next Pandemic

## Quest 2

### I. Course Information

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Summer B 2022

<b>Location:</b>	MTW Period 2 (9:30am-10:45am) Turlington 3012
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Primary General Education Designation: **Biological Sciences**

\*A minimum grade of C is required for general education

#### Instructor

<b>Instructor:</b>	Dr. Gabriela Hamerlinck Turlington 3122   352.294.9051
<b>Office Hours:</b>	TBA Office hours will be held both in Dr. Hamerlinck's office and via Zoom. The Zoom link will be provided on the front page of our Canvas course.
<b>Email:</b>	<a href="mailto:ghamerlinck@ufl.edu">ghamerlinck@ufl.edu</a>
<b>TA:</b>	Hannah Williams
<b>Email:</b>	<a href="mailto:williams.hannah@ufl.edu">williams.hannah@ufl.edu</a>

#### Course Description

This course is an introduction to human diseases that have shaped our civilization. Students will learn about significant historic outbreaks, modern diseases that plague our society, and hypothesize what the next pandemic will be. Disease outbreaks today are growing increasingly complex with the many emerging social, political and demographic changes in our population, as well as dynamic changes in animal and vector populations and the environment. As a result, we need new and creative mechanisms of disease prevention and control. Diseases with a pandemic potential could greatly influence the social, political and economic stability of a country, region or even the world.

There will be a considerable focus on disease burden held by resource poor areas, as well as the underlying risk factors that lead to their emergence and geographic spread. We will review a variety of diseases that have a global health significance, and explore different interventions (prevention and control strategies) used to reduce disease burden and stop disease outbreaks.

This Quest 2 course also leverages the geographical spread of historic pandemics to guide students through predicting where the next pandemic will strike – asking students to consider the following pressing questions: What social, political, biological, and environmental factors led to historic disease outbreaks? What would happen if our planet experienced a pandemic today? How can we prepare for the next disease pandemic?

## Student Learning Objectives

In this class, students will...

1. **Discuss and describe** fundamental concepts relating to global disease outbreaks through human history
2. **Explain** how diseases can become pandemics by exploring how emergence interacts with the landscape from ecological, demographic and climate perspectives
3. **Analyze and interpret** the impact of socioeconomic, environmental, political, and demographic factors on the risk and spread of a disease through a global population
4. **Synthesize** course lectures, class discussions and activities to develop a global response plan for a pandemic
5. **Develop and present** novel solutions for real-world problems
6. **Explain** key scientific findings in written, oral, and visual formats
7. **Articulate and critique** their own personal beliefs and behaviors related to the spread of disease and potential future pandemics

## Course Objectives

This course will...

1. **Explore** the interrelatedness of globalization and socioeconomic risk factors on disease burden
2. **Compare** the socioeconomic, demographic, political, and environmental factors to disease risk of populations across historic and current pandemics
3. **Evaluate** and **critique** personal beliefs and behaviors, current challenges of preventing the global spread of disease, and how disease risk differs across international communities
4. **Explore** the role of climate change on human health and potential pathogen spread
5. **Discuss** the benefits and drawbacks to medical, social, and education interventions used to slow or stop the spread of pandemic pathogens
6. **Compare** global preparedness plans for past and present disease outbreaks to develop a response plan for the next pandemic

Required & Recommended Course Materials: *None*. Students will be assigned a set of weekly readings and videos to watch. All readings and links to all videos will be made available through Canvas.

Materials and Supplies Fees: *None*

## II. Coursework & Schedule

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### 1. List of Graded Work

Assignment	Description	Percent of Grade
Module Quizzes	Students will complete a 5-question multiple-choice module quiz on Canvas that will test their understanding of the assigned video.	20%
Reading homework	Students will complete a series of reading comprehension homework assignments wherein they summarize one of the required readings in a module.	10%
Exams (x2)	Two short (one-period) tests will be administered at the end of the first and second units. Each of the exams will comprise a mix of multiple choice, short answer, diagramming, and short essay responses.	20%
Activities & Discussions	Most modules have a graded discussion or activity assigned. Each discussion or activity will provide a prompt for students to respond to related to the module's content. A response to a classmate is a necessary part of each discussion.	20%
Final Project	Each student will complete a final project that designs the next pandemic and the global response plan. The final project is composed of three parts: a presentation, peer reviews, and a term paper. The final project is introduced during module 13.	25%
Reflection	Students will periodically reflect on course themes and their personal beliefs and biases by composing a short reflection. There is one reflection per unit.	5%

## 2. Course Schedule

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

		Monday	Tuesday	Wednesday
Historic Pandemics	Week 1	Intro to the class & pandemics (lecture)	Plague lecture	Plague activity
	Week 2	No class – holiday	Influenza activity	Smallpox discussion and exam review
Current Pandemics	Week 3	<i>Exam 1: Historic Pandemics</i>	Vaccines lecture	Vaccines discussion
	Week 4	Cholera lecture and activity	Coronaviruses discussion	Diseases of poverty discussion and exam review
Future Pandemics	Week 5	<i>Exam 2: Current Pandemics</i>	Climate and health lecture; Ebola lecture	Final project introduction; Ebola activity
	Week 6	No class – final project work time	Zombies lecture and activity	Pandemic fatigue lecture & discussion

Module and Topic	Required Learning Content and Assignments
<b>Unit 1: Historic Pandemics</b>	
Module 1: Introduction to Pandemics	<p><b>Required Learning Content:</b></p> <ul style="list-style-type: none"> <li>Lecture defining what a disease is, how it becomes an epidemic or a pandemic, and a summary of agents of disease</li> <li>Senthilingam, M. (2017, April 10). <i>Seven reasons we're at more risk than ever of a global pandemic</i>. CNN.</li> <li><i>Agents of Disease</i> (14 pages; adapted from <a href="#">EDC's Exploring Infectious Disease</a>)</li> </ul> <p><b>Assignments:</b></p> <ul style="list-style-type: none"> <li>Reading homework – Agents of Disease</li> </ul>

Module 2: Plague	<p><b>Required Learning Content:</b></p> <ul style="list-style-type: none"> <li>• Lecture introducing how the plague has shaped human society, including basic plague biology and a summary of the three historic plague pandemics.</li> <li>• Barbieri, R., Signoli, M., Chevé, D., Costedoat, C., Tzortzis, S., Aboudharam, G., Raoult, D., &amp; Drancourt, M. (2020). <i>Yersinia pestis</i>: The natural history of plague. <i>Clinical Microbiology Reviews</i>, 34(1). <a href="https://doi.org/10.1128/cmr.00044-19">https://doi.org/10.1128/cmr.00044-19</a>.</li> <li>• Wright, C. &amp; Scott, K. (producers). (2014). Return Of The Black Death. British Broadcasting Corporation.</li> </ul> <p><b>Assignments:</b></p> <ul style="list-style-type: none"> <li>• Reading Homework – Plague</li> <li>• Module quiz - Plague</li> <li>• Guided Reflection</li> </ul>
Module 3: Influenza	<p><b>Required Learning Content:</b></p> <ul style="list-style-type: none"> <li>• Lecture about the influenza pathogen, and the annual flu shot. A brief introduction to the 20<sup>th</sup> century influenza pandemics and some future flu threats to think about global preparedness planning.</li> <li>• Taubenberger, J. K., &amp; Morens, D. M. (2006). 1918 Influenza: the mother of all pandemics. <i>Emerging infectious diseases</i>, 12(1), 15–22. <a href="https://doi.org/10.3201/eid1201.050979">https://doi.org/10.3201/eid1201.050979</a>.</li> <li>• Webster, R. G., &amp; Walker, E. J. (2003). Influenza: The world is teetering on the edge of a pandemic that could kill a large fraction of the human population. <i>American Scientist</i>, 91(2), 122–129. <a href="http://www.jstor.org/stable/27858180">http://www.jstor.org/stable/27858180</a>.</li> <li>• Thompson, A. (producer). (2018). The Flu That Killed 50 Million. [Video/DVD] BBC Worldwide.</li> </ul> <p><b>Assignments:</b></p> <ul style="list-style-type: none"> <li>• Reading Homework – Influenza</li> <li>• Module quiz - Influenza</li> <li>• Discussion – Influenza</li> </ul>
Module 4: Smallpox	<p><b>Required Learning Content:</b></p> <ul style="list-style-type: none"> <li>• Lecture that includes a basic introduction to the smallpox pathogen and the clinical manifestations of disease; a timeline of historic smallpox outbreaks; a brief account of the smallpox vaccine and global eradication; and some thoughts on the potential threat of smallpox being used as a bioterror agent.</li> <li>• Henderson D. A. (2011). The eradication of smallpox--an overview of the past, present, and future. <i>Vaccine</i>, 29 Suppl 4, D7–D9. <a href="https://doi.org/10.1016/j.vaccine.2011.06.080">https://doi.org/10.1016/j.vaccine.2011.06.080</a>.</li> <li>• Tognotti E. (2010). The eradication of smallpox, a success story for modern medicine and public health: what lessons for the future?. <i>Journal of infection in developing countries</i>, 4(5), 264–266. <a href="https://doi.org/10.3855/jidc.1204">https://doi.org/10.3855/jidc.1204</a>.</li> <li>• Brilliant, L. (2006). My Wish: Help me stop pandemics. TED Conferences. <a href="https://youtu.be/MNhiHf84P9c">https://youtu.be/MNhiHf84P9c</a>.</li> </ul>

	<b>Assignments:</b> <ul style="list-style-type: none"> <li>• Reading Homework – Smallpox</li> <li>• Module quiz - Smallpox</li> <li>• Discussion – Smallpox and Research Ethics</li> </ul>
Module 5: Exam	<b>Required Learning Content:</b> <ul style="list-style-type: none"> <li>• Unit summary video to help you start to organize your thoughts in preparation for the first exam.</li> </ul> <b>Assignments:</b> <ul style="list-style-type: none"> <li>• Discussion – Exam 1 Review</li> <li>• Exam 1</li> </ul>
<b>Unit 2: Current Pandemics</b>	
Module 6: Vaccines	<b>Required Learning Content:</b> <ul style="list-style-type: none"> <li>• Lecture summarizing how vaccines are made and the different types of vaccinations. The lecture also includes two case studies: measles (MMR) as a vaccine success story, and Dengvaxia as a vaccination failure story.</li> <li>• Fatima, K., &amp; Syed, N. I. (2018). Dengvaxia controversy: impact on vaccine hesitancy. <i>Journal of global health</i>, 8(2), 010312. <a href="https://doi.org/10.7189/jogh.08-020312">https://doi.org/10.7189/jogh.08-020312</a>.</li> <li>• Gubler, D. J., &amp; Halstead, S. B. (2019). Is Dengvaxia a useful vaccine for dengue endemic areas?. <i>BMJ (Clinical research ed.)</i>, 367, l5710. <a href="https://doi.org/10.1136/bmj.l5710">https://doi.org/10.1136/bmj.l5710</a>.</li> <li>• Summers, B. (producer). (2016). Dengue: The hunt for a vaccine. [Documentary] Rockhopper Productions, Ltd.</li> </ul> <b>Assignments:</b> <ul style="list-style-type: none"> <li>• Reading Homework – Vaccines</li> <li>• Module quiz - Vaccines</li> <li>• Discussion – Vaccines</li> </ul>
Module 7: Coronaviruses	<b>Required Learning Content:</b> <ul style="list-style-type: none"> <li>• Lecture summarizing the coronaviruses that have caused recent epidemics and pandemics, and how diseases get their names. The lecture also helps us understand how we can quantify how impactful a disease is in a population.</li> <li>• Recorded seminar by Dr. Nina Fefferman (UT-Knoxville) titled “The role of applied math in real-time pandemic response: How basic disease models work.”</li> <li>• Interactive NYT article “How the virus won.”</li> <li>• One of: <ul style="list-style-type: none"> <li>○ van der Graaf, R., Browne, J. L., &amp; Baidjoe, A. Y. (2022). Vaccine equity: Past, present, and future. <i>Cell Reports Medicine</i>, 3(3), 100551. <a href="https://doi.org/10.1016/j.xcrm.2022.100551">https://doi.org/10.1016/j.xcrm.2022.100551</a>.</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>○ Harman, S., Erfani, P., Goronga, T., Hickel, J., Morse, M., &amp; Richardson, E. T. (2021). Global vaccine equity demands reparative justice — not charity. <i>BMJ Global Health</i>, 6(6). <a href="https://doi.org/10.1136/bmjgh-2021-006504">https://doi.org/10.1136/bmjgh-2021-006504</a>.</li> <li>○ Nkengasong, J. N., Ndembu, N., Tshangela, A., &amp; Raji, T. (2020). Covid-19 vaccines: How to ensure Africa has access. <i>Nature</i>, 586(7828), 197–199. <a href="https://doi.org/10.1038/d41586-020-02774-8">https://doi.org/10.1038/d41586-020-02774-8</a>.</li> <li>• Two of a series of mainstream media pieces summarizing current events. The list of available articles will be updated and available via Canvas.</li> </ul> <p><b>Assignments:</b></p> <ul style="list-style-type: none"> <li>• Reading Homework – Coronaviruses</li> <li>• Module quiz - Coronaviruses</li> <li>• Discussion – Coronaviruses</li> </ul>
Module 8: Cholera	<p><b>Required Learning Content:</b></p> <ul style="list-style-type: none"> <li>• Lecture introduces the pathogen and disease, outlines the historic cholera pandemics and the current pandemic, as well as describes the WHO roadmap to addressing the cholera threat by 2030.</li> <li>• Acevedo, C. G. F. (2020). From Cholera to COVID-19: A Historical Review of Misinformation during Pandemics. <i>Progressio Journal on Human Development</i>, 14(1).</li> <li>• Harman, S., Erfani, P., Goronga, T., Hickel, J., Morse, M., &amp; Richardson, E. T. (2021). Global vaccine equity demands reparative justice — not charity. <i>BMJ Global Health</i>, 6(6). <a href="https://doi.org/10.1136/bmjgh-2021-006504">https://doi.org/10.1136/bmjgh-2021-006504</a>.</li> <li>• George, R. (2013). <i>Let's talk crap. Seriously</i>. TED Conferences.</li> </ul> <p><b>Assignments:</b></p> <ul style="list-style-type: none"> <li>• Reading Homework – Cholera</li> <li>• Module quiz - Cholera</li> <li>• Discussion – Cholera</li> </ul>
Module 9: Obesity	<p><b>Required Learning Content:</b></p> <ul style="list-style-type: none"> <li>• Lecture introducing obesity as a pandemic, the global burden of the chronic condition, and who and/or what is to blame for the obesity pandemic, and what we can do to stop it.</li> <li>• Ford, N. D., Patel, S. A., &amp; Narayan, K. V. (2017). Obesity in low-and middle-income countries: burden, drivers, and emerging challenges. <i>Annual review of public health</i>, 38, 145-164.</li> <li>• Caballero, B. (2007). The global epidemic of obesity: an overview. <i>Epidemiologic reviews</i>, 29(1), 1-5.</li> <li>• Hoffman, J. (producer). (2012). <i>Weight of the Nation: Poverty and Obesity</i>. [Documentary] HBO.</li> </ul> <p><b>Assignments:</b></p> <ul style="list-style-type: none"> <li>• Reading Homework – Obesity</li> <li>• Module quiz - Obesity</li> </ul>

	<ul style="list-style-type: none"> <li>• Discussion – Hungry Planet: Global Diets</li> </ul>
Module 10: Exam	<p><b>Required Learning Content:</b></p> <ul style="list-style-type: none"> <li>• Unit summary video to help you start to organize your thoughts in preparation for the second exam.</li> </ul> <p><b>Assignments:</b></p> <ul style="list-style-type: none"> <li>• Discussion – Exam 2 Review</li> <li>• Exam 2</li> </ul>
<b>Unit 3: Future Pandemics</b>	
Module 11: Climate and Health	<p><b>Required Learning Content:</b></p> <ul style="list-style-type: none"> <li>• Lecture focuses on a variety of health-related impacts of climate change and global warming.</li> <li>• McMichael, A. J., Woodruff, R. E., &amp; Hales, S. (2006). Climate change and human health: present and future risks. <i>Lancet (London, England)</i>, 367(9513), 859–869. <a href="https://doi.org/10.1016/S0140-6736(06)68079-3">https://doi.org/10.1016/S0140-6736(06)68079-3</a>.</li> <li>• Lustgarten, A. (2020, May 7). <i>How climate change is contributing to skyrocketing rates of infectious disease</i>. ProPublica.</li> <li>• Interview with Dr. Renee Salas on the effects of climate change on human health and health systems. Produced by the New England Journal of Medicine.</li> </ul> <p><b>Assignments:</b></p> <ul style="list-style-type: none"> <li>• Reading Homework – Climate and Health</li> <li>• Discussion – Mitigating the effects of climate change on human health</li> </ul>
Module 12: Ebola	<p><b>Required Learning Content:</b></p> <ul style="list-style-type: none"> <li>• Lecture introduces the history, transmission, and clinical manifestation of Ebola using the 2014-2016 Western Africa epidemic as a case study.</li> <li>• Zimmer, C. (2014, October 24). <i>As ebola spreads, so have several fallacies</i>. The New York Times.</li> <li>• Kilgo, D. K., Yoo, J., &amp; Johnson, T. J. (2019). Spreading Ebola Panic: Newspaper and Social Media Coverage of the 2014 Ebola Health Crisis. <i>Health communication</i>, 34(8), 811–817. <a href="https://doi.org/10.1080/10410236.2018.1437524">https://doi.org/10.1080/10410236.2018.1437524</a>.</li> <li>• Elisco, D. &amp; Barrat, J. (producers). (2016). <i>Spillover – Zika, Ebola &amp; Beyond</i>. [Documentary] Public Broadcasting Service.</li> </ul> <p><b>Assignments:</b></p> <ul style="list-style-type: none"> <li>• Reading Homework – Ebola</li> <li>• Module quiz - Ebola</li> <li>• Discussion – Ebola as the Next Pandemic</li> </ul>
Module 13: Final Project	<p><b>Required Learning Content:</b></p> <ul style="list-style-type: none"> <li>• Recording to introduce the three final project assignments: the presentation, peer reviews, and term paper. The goal of the final project is to develop a New Disease that you believe will cause the next pandemic.</li> </ul>



	<b>Assignments:</b> <ul style="list-style-type: none"> <li>• Final Presentation</li> <li>• Peer Reviews</li> <li>• Term Paper</li> </ul>
Module 14: Zombies	<b>Required Learning Content:</b> <ul style="list-style-type: none"> <li>• Lecture compares zombieism to rabies, considers the pandemic potential of zombies, and poses some hypothetical questions about disease control and ethics.</li> <li>• Centers for Disease Control and Prevention (U.S.), Office of Public Health Preparedness and Response. (n.d.). <i>Preparedness 101; Zombie pandemic</i>. Centers for Disease Control and Prevention.</li> <li>• Yong, E. (2014). <i>Zombie roaches and other parasite tales</i>. TED Conferences.</li> </ul> <b>Assignments:</b> <ul style="list-style-type: none"> <li>• Discussion – Stopping the Zombie Pandemic</li> </ul>
Module 15: Pandemic Fatigue & Course Wrap Up	<b>Required Learning Content:</b> <ul style="list-style-type: none"> <li>• Lecture with a brief summary of pandemic fatigue and how pandemics end.</li> <li>• Farewell recording to summarize the semester.</li> <li>• PBS interview with David Quammen called “Why deadly viral pandemics are becoming more common?”</li> </ul> <b>Assignments:</b> <ul style="list-style-type: none"> <li>• Guided Reflection – Future Pandemics</li> </ul>

## III. Grading

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### 3. Statement on Participation

#### Participation:

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>

- **Participation:** Consistent informed, thoughtful, and considerate class participation is expected and will be evaluated using the rubric below. The instructor will inform you of your participation grade to date when mid-term exams are returned and schedule a conference if you are earning below 70% of the possible points.
- **NOTE:** If you have personal issues that prohibit you from joining freely in class discussion, e.g., shyness, language barriers, etc., see the instructor as soon as possible to discuss alternative modes of participation.

#### Participation Grading Rubric:

	High Quality	Average	Needs Improvement
Informed: Shows evidence of having done the assigned work. This includes class preparation (i.e. posting questions to Canvas prior to class)			
Thoughtful: Shows evidence of having understood and considered issues raised.			
Considerate: Takes the perspective others into account.			

## 4. Grading Scale

For information on how UF assigns grade points, visit: <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

A	94 to 100%	C	74 to < 77%
A-	90 to < 94%	C-	70 to < 74%
B+	87 to < 90%	D+	67 to < 70%
B	84 to < 87%	D	64 to < 67%
B-	80 to < 84%	D-	61 to < 64%
C+	77 to < 80%	E	<61%

## V. General Education and Quest Objectives & SLOs

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### 7. This Course's Objectives—Gen Ed Primary Area and Quest

#### Biological Sciences + Quest 2 + Course Objectives

<b>Biological Sciences Objectives →</b>	<b>Quest 2 Objectives →</b>	<b>This Course's Objectives → (This course will....)</b>	<b>Objectives will be Accomplished By:  (This course will accomplish the objective in the box at left by...)</b>
Biological science courses provide instruction in the basic concepts, theories and terms of the scientific method in the context of the life sciences.	Address in relevant ways the history, key themes, principles, terminologies, theories, or methodologies of the various social or biophysical science disciplines that enable us to address pressing questions and challenges about human society and/or the state of our planet.	... explore the socioeconomic, demographic, political, and environmental factors related to disease risk across populations	... examining pandemic pathogens and their impacts on policy, populations, and society through student-led discussions and in-class activities
Courses focus on major scientific developments and their impacts on society, science and the environment, and the relevant	Present different social and/or biophysical science methods and theories and consider how their biases and influences shape pressing questions	... discuss the benefits and drawbacks to medical, social, and education interventions used to slow or stop the spread of pandemic pathogens	... connecting successful and unsuccessful disease interventions to future preparedness planning via student-led

<b>Biological Sciences Objectives →</b>	<b>Quest 2 Objectives →</b>	<b>This Course's Objectives → (This course will....)</b>	<b>Objectives will be Accomplished By: (This course will accomplish the objective in the box at left by...)</b>
processes that govern biological systems.	about the human condition and/or the state of our planet.		discussions and group activities
Students will formulate empirically-testable hypotheses derived from the study of living things, apply logical reasoning skills through scientific criticism and argument, and apply techniques of discovery and critical thinking to evaluate outcomes of experiments.	Enable students to analyze and evaluate (in writing and other forms of communication appropriate to the social and/or biophysical sciences) qualitative or quantitative data relevant to pressing questions concerning human society and/or the state of our planet.	... compare global preparedness plans for past and present disease outbreaks to develop a response plan for the next pandemic	... communicating inquiry results as written reports and group presentations
Biological science courses provide instruction in the basic concepts, theories and terms of the scientific method in the context of the life sciences.	Analyze critically the role social and/or the biophysical sciences play in the lives of individuals and societies and the role they might play in students' undergraduate degree programs.	... evaluate and critique personal beliefs and behaviors, current challenges of preventing the global spread of disease, and how disease risk differs across communities	... reflecting on personal beliefs, biases, and experiences with disease and how they relate to data and examples presented in class through guided written reflections
	Explore or directly reference social and/or biophysical science resources outside the classroom and explain how engagement with those resources complements classroom work.	... explore the role of climate change on human health and potential pathogen spread	... interpret real-world climate and disease data with guidance from expert testimony and case studies

## 8. This Course's Student Learning Outcomes (SLOs)—Gen Ed Primary Area and Quest

### Biological Sciences + Quest 2 + Course SLOs

	<b>Biological Sciences SLOs</b> <b>➔</b> Students will be able to...	<b>Quest 2 SLOs ➔</b> Students will be able to...	<b>This Course's SLOs ➔</b> Students will be able to...	<b>Assessment</b> Student competencies will be assessed through...
<b>Content</b>	<b>Identify, describe, and explain</b> the basic concepts, theories and terminology of natural science and the scientific method; the major scientific discoveries and the impacts on society and the environment; and the relevant processes that govern biological and physical systems.	<b>Identify, describe, and explain</b> the cross-disciplinary dimensions of a pressing societal issue or challenge as represented by the social sciences and/or biophysical sciences incorporated into the course.	<b>DISCUSS</b> and <b>DESCRIBE</b> fundamental concepts relating to disease outbreaks through human history; <b>EXPLAIN</b> how diseases can become pandemics by exploring how emergence interacts with the landscape from ecological, demographic and climate perspectives.	Three exams, weekly student-led discussion, and a final group presentation
<b>Critical Thinking</b>	<b>Formulate empirically-testable hypotheses</b> derived from the study of physical processes or living things; apply logical reasoning skills effectively through scientific criticism and argument; and apply techniques of discovery and critical thinking effectively to solve scientific problems and to evaluate outcomes.	<b>Critically analyze</b> quantitative or qualitative data appropriate for informing an approach, policy, or praxis that addresses some dimension of an important societal issue or challenge.	<b>ANALYZE AND INTERPRET</b> the impact of socioeconomic, environmental, political, and demographic factors on the risk and spread of a disease through a global population; <b>SYNTHESIZE</b> course lectures, class discussions and group activities to develop a global response plan for a pandemic.	Group activities and a final project presentation

	<b>Biological Sciences SLOs</b> ➔ Students will be able to...	<b>Quest 2 SLOs ➔</b> Students will be able to...	<b>This Course's SLOs ➔</b> Students will be able to...	<b>Assessment</b> Student competencies will be assessed through...
<b>Communication</b>	Communicate scientific knowledge, thoughts, and reasoning clearly and effectively.	<b>Develop and present</b> , in terms accessible to an educated public, clear and effective responses to proposed approaches, policies, or practices that address important societal issues or challenges.	<b>DEVELOP AND PRESENT</b> novel solutions for real-world problems; <b>EXPLAIN</b> key scientific findings in written, oral, and visual formats.	Weekly group activities and discussions, and a final project presentation
<b>Connection</b>	N/A	<b>Connect course content</b> with critical reflection on their intellectual, personal, and professional development at UF and beyond.	<b>ARTICULATE AND CRITIQUE</b> their own personal beliefs and behaviors related to the spread of disease and potential future pandemics.	Guided reflections, class discussion, and group activities

## 9. Secondary Objectives and SLOs

### International Objectives (for N co-designation)

<b>International Objectives ➔</b>	<b>This Course's Objectives ➔</b> (This course will....)	<b>Objectives will be Accomplished By:</b> (This course will accomplish the objective in the box at left by...)
International courses promote the development of students' global and intercultural awareness.	... explore the interrelatedness of globalization and socioeconomic risk factors on disease burden	... examining the risk factors of disease emergence across cultures and societies throughout human history
Students examine the cultural, economic, geographic, historical, political, and/or social experiences and processes that	... compare the socioeconomic, demographic, political, and environmental	... connecting biological pathogen characteristics to geographic spread, social implications, and economic impacts of historic and current

<b>International Objectives →</b>	<b>This Course's Objectives → (This course will....)</b>	<b>Objectives will be Accomplished By:</b> (This course will accomplish the objective in the box at left by...)
characterize the contemporary world, and thereby comprehend the trends, challenges, and opportunities that affect communities around the world.	factors to disease risk across populations across historic and current pandemics	pandemics to predict how a changing population will react to the next pandemic
Students analyze and reflect on the ways in which cultural, economic, political, and/or social systems and beliefs mediate their own and other people's understanding of an increasingly connected world.	... evaluate and critique personal beliefs and behaviors, current challenges of preventing the global spread of disease, and how disease risk differs across international communities	... reflecting on personal beliefs, biases, and experiences with disease and how they compare to their classmates' and populations across the world

### **International Student Learning Outcomes (for N co-designation)**

	<b>International SLOs →</b> Students will be able to...	<b>Course SLOs →</b> Students will be able to...	<b>Assessment</b> Student competencies will be assessed through...
<b>Content</b>	Identify, describe, and explain the historical, cultural, economic, political, and/or social experiences and processes that characterize the contemporary world.	<b>DISCUSS</b> and <b>DESCRIBE</b> fundamental concepts relating to global disease outbreaks through human history with regards to socioeconomic, cultural, and biological aspects of disease transmission	Three exams, weekly student-led discussion, and a final presentation
<b>Critical Thinking</b>	Analyze and reflect on the ways in which cultural, economic, political, and/or social systems and beliefs mediate understandings of an increasingly connected contemporary world.	<b>REFLECT</b> on the impact of socioeconomic, environmental, political, and demographic factors on the risk and spread of a disease through a global population	Group activities, student-led discussions, and guided reflections

## VI. University Policies

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### 10. Students Requiring Accommodation

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting <https://disability.ufl.edu/students/get-started/>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

### 11. UF Evaluations Process

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/>.

### 12. University Honesty Policy

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 (<https://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 or TAs in this class.

### 13. Counseling and Wellness Center

Contact information for the Counseling and Wellness Center: <http://www.counseling.ufl.edu/cwc/Default.aspx>, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

### 14. The Writing Studio

The writing studio is committed to helping University of Florida students meet their academic and professional goals by becoming better writers. Visit the writing studio online at <http://writing.ufl.edu/writing-studio/> or in 2215 Turlington Hall for one-on-one consultations and workshops.



## 15. In-Class Recordings

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.

If students have concerns about classroom issues, disagreements or grades, their first point of contact is the classroom instructor whose contact information appears on the syllabus. If the problem cannot be resolved, the student should email the next departmental contact: in classes with TAs, this is the instructor of record, in classes without TAs, this may be the department chair. Their contact information can be found on the program’s website at <https://geog.ufl.edu/>. That email should include a clear description of the student’s concern, and any supporting documents. Most concerns are resolved at this level. If a resolution cannot be reached at the departmental level, the student will be referred to the Office of the UF Ombuds <https://www.ombuds.ufl.edu>.