

Course Rubric: IB 230

Course Title: Pandemics

Course Format: Online, 8-week (2nd half of Fall semester), 2-credit hour course

Instructor:

Dr. Brian F. Allan, ballan@illinois.edu
Professor, School of Integrative Biology
337 Morrill Hall, 505 S. Goodwin Ave., Urbana, IL 61801

Teaching Assistant:

Sulagna Chakraborty, schkrbr4@illinois.edu
Ph.D. Candidate, Program in Ecology, Evolution and Conservation
303 Morrill Hall, 505 S. Goodwin Ave., Urbana, IL 61801

Course Description: Pandemics (global outbreaks of infectious disease) are among the most impactful events in human history. Through this 8-week online course, we will study the major historical and modern pandemics from a biological, social, and political perspective. We will compare these past events to the public health crisis caused by COVID-19 and use this knowledge to interpret events and scientific discoveries related to pandemics.

Student Participation: The first half of the course will be dedicated to exploring major pandemics in human history and the second half will be dedicated to exploring modern pandemics and then focusing on the current challenges related to controlling COVID-19 and preventing future pandemics. Student participation in this 2-credit course will include one hour of recorded lecture per week and one hour of live discussion per week, along with assigned readings, online assignments, and one exam.

Course Philosophy: Because online learning is different in fundamental ways from in-person instruction, this course will utilize the philosophy of "self-directed" learning. Students will be offered a range of assigned readings and other materials for each week and will be able to choose which material to learn based on personal interests and preferences. This approach will enhance the weekly live discussions, since participants will bring different perspectives and information to the discussion. Similarly, the final exam will allow students to select on which knowledge they wish to be tested based upon the material they chose to learn for this course.

Prerequisites: None.

Course Schedule: One asynchronous video lecture per week and one online synchronous discussion on Fridays, from 11-11:50, 1-1:50 or 2-2:50.

Assigned Readings: Readings will be assigned from the science news and scientific literature and available as PDFs or web links on the course Moodle page. Students will select from a range of possible assigned readings (or occasionally podcasts or videos) for each week based upon their own interests and self-directed learning. Discussion time will be used to explore and clarify knowledge students obtained on the assigned topics.

Student Learning Outcomes: Use critical thinking skills and quantitative reasoning to solve problems, read and critically interpret science-related news and information, and cultivate your ability to guide your own learning and explore your personal interests in science, the humanities, and art. A variety of assignments and exercises will be utilized to help develop these skills and enhance self-directed learning.

Student Evaluation Will Be Based Upon:

1. Completion of weekly assignments based upon recorded lectures and assigned readings (30%).
2. Participation in weekly live Zoom discussions and completion of discussion assignments (30%).
3. A "take-home" final exam due during the last week of classes (40%).

Online Assignments: To evaluate comprehension of recorded lectures and assigned readings, students will be tasked to complete weekly online assignments via the course Moodle page. These will include written responses to a weekly lecture question, assigned reading question, and discussion question, worth 2.5 points each out of the course total of 100 points. Online assignments for each week will be due by 11am on Fridays.

Weekly Discussions: Regular attendance of and participation in the weekly Zoom discussion is a required component of the course. Students should complete all assignments for the week prior to the Zoom discussion. All participants are expected to be fully engaged during the discussion and turn on their camera when possible. Students will be expected to interact maturely and responsibly with their course instructors and fellow classmates. Students who fail to adhere to this expectation will be removed from discussion and will not receive credit for participation. Since there are only six Zoom discussions scheduled for the course, students should plan to attend every discussion and student attendance will be assessed for 2.5 points each week out of the course total of 100 points. Students may attend a different discussion than assigned in a specific week with prior TA permission.

Exam: A final exam will be used to evaluate knowledge attained based upon the course materials each student selected to learn. This exam will consist of a written essay in response to one of several provided exam questions. Students will be able to choose among several questions and decide which they wish to address and support their responses using assigned course materials and additional materials obtained through independent research on a topic. Students will have one week to complete the final exam but may request an extension if needed. Late exams will be penalized 1 point per day until submitted. Students are expected to complete the exam independently and exams will be vetted for plagiarism using a plagiarism checker.

Missed Exams and Discussions: Students with a legitimate excuse for missing the final exam will be offered an opportunity to complete a make-up exam. Students will need permission from instructor to make up points due to missing a discussion or other assignments.

Class Website: A simple class website has been built using the [Moodle](#) course management system. All important materials associated with the class can be found on this website, including an up-to-date syllabus and PDFs or web links to all assigned readings. There is also an online discussion forum, where students can post questions related to class materials or events and expect a quick response from the instructor or fellow students. Grades and class announcements will also be posted/accessible via the course website.

Academic Integrity: It is the expectation of the course instructor that students will conduct themselves with the utmost integrity and honesty and adhere to the guidelines of the UIUC Student Code. Students determined to be cheating on an assignment will receive a grade of "0" for the

assignment and will receive a formal disciplinary letter. Completing assignments for other students also is considered cheating (by both parties) and will be penalized similarly. For reporting academic integrity infractions, this course will follow the procedures outlined in the Student Code, using the FAIR system.

Disability Accommodations: Students with disabilities who require assistance to participate in this class are asked to discuss any requested accommodations with the course instructor as soon as possible. For more information on disability accommodations please visit the [DRES](#) website.

Online Course Expectations: Pandemics is an online, undergraduate-level, 8-week, 2-credit hour course. The student is expected to devote at least 2 hours per week learning the topics of the course through viewing asynchronous video lectures and participating in synchronous discussions, and at least 4-6 additional hours per week on assigned readings and homework assignments. The instructors will be available for consultation online and/or face-to-face for students who are on campus by appointment.

Student Identity Verification Policy: As per the policy approved by the LAS Courses and Curricula Committee, a minimum 20% of the course grade must consist of work accomplished by the student when their identity is verified and there is a high reliability they are using only the aids intended. Therefore, student participation in synchronous discussions will be verified by i-Card confirmation.

Grade Range:

A+ = 99.5-100, A = 93.5-99.4, A- = 89.5-93.4

B+ = 86.5-89.4, B = 83.5-86.4, B- = 79.5-83.4

C+ = 76.5-79.4, C = 73.5-76.4, C- = 69.5-73.4

D+ = 66.5-69.4, D = 63.5-66.4, D- = 59.5-63.4

F = 59.4 or below.

Course Calendar:

Week	Dates	Topic	Assignment
1	10/18-10/22	Lecture 1: Introduction to Pandemics and Plagues of Classical Antiquity	Complete recorded lectures, assigned readings and lecture assignment
	10/22	Zoom Discussion 1	Discussion assignment: "Discover pandemic art". Explore artwork that depicts historical pandemics and identify one piece of art that captures your imagination.
2	10/25-10/29	Lecture 2: Plagues of the Middle Ages and the Age of Exploration	Complete recorded lectures, assigned readings and lecture assignment
	10/29	Zoom Discussion 2	Discussion assignment: "Societal disruption". Explore literature on plagues of the middle ages and diseases transmitted by explorers to indigenous populations.
3	11/1-11/5	Lecture 3: Modern Pandemics	Complete recorded lectures, assigned readings and lecture assignment
	11/5-	Zoom Discussion 3	Discussion assignment: "History repeats itself". Explore literature on the 1918 flu pandemic and identify commonalities with the current pandemic due to COVID-19.
4	11/8-11/12	Lecture 4: The Origin of COVID-19?	Complete recorded lectures, assigned readings and lecture assignment
	11/12	Zoom Discussion 4	Discussion assignment: "The COVID-19 origin wars". Based on the sum of the evidence, what do you think is the likely origin of COVID-19?
5	11/15-11/19	Lecture 5: COVID-19, Herd Immunity, and Vaccines	Complete recorded lectures, assigned readings and lecture assignment
	11/19	Zoom Discussion 5	Discussion assignment: "Talk to an anti-vaxxer". Find a friend or loved one who is vaccine hesitant and explore their concerns about a COVID-19 vaccine.
6	11/20-11/28	THANKSGIVING BREAK	
7	11/29-12/3	Lecture 6: The Next Pandemic	Complete recorded lectures, assigned readings and lecture assignment
	12/3	Zoom Discussion 6	Discussion assignment: "Predict the next pandemic". What can you predict about the next pandemic? What will the likely source be and from where might it originate?
8	12/6-12/10	Final Exam	Submit final exam by 1pm on 12/10