BIOL 830P Special Topics: The Next Pandemic Course Syllabus – Fall 2023

Instructor: Dr. Austin Nuxoll

Office: Bruner 201D Phone: 308.865.8602 Email: nuxollas@unk.edu

Office hours: MWF 1:30 – 2:30 CST or by appointment

Course Description

Throughout history, pandemics have been the biggest killer of people from Black Death to COVID. Dr. Ali Khan, the Dean of Public Health at UNMC, has written a book about his experiences with epidemics during his career at CDC. What do these experiences teach us about pandemics and the future of humankind?

Course Objectives: Following completion of this course, students should be able to:

- 1. Students will be able to define epidemic and pandemic and give the conditions in which epidemics and pandemics arise.
- 2. Students will have knowledge of the diseases that have caused epidemics and pandemics and the characteristics of the infectious agent that make it successful.
- 3. Students will understand how CDC responds to epidemics and what steps are required to help control them.

Required Materials

Text: The Next Pandemic: On the Front Lines Against Humankind's Gravest Dangers

Author: Ali Khan

Publisher: PublicAffairs

Computer and Software:

Access to a computer with internet access and Microsoft Word. Software can be purchased through UNK bookstore at a discount.

Communication

The best way to reach me is through email. I will respond to email fairly quickly and if you need to talk to me please email me and we can set up a time to talk further. You should frequently check your UNK email and Canvas for course assignments or announcements. Powerpoints will be posted on Canvas but you will still be required to watch lectures as additional information provided during lectures will be pertinent.

<u>Grading</u>

Discussion (10pts each)	120
Quizzes (10pts each)	110
Exams (50pts each)	100
Research Paper	30
Total	360

Grades will be assigned using the Department of Biology standard grading scale: follows: A (93-100%), A- (90-92%), B+ (88-89%), B (83-87%), B- (80-82%), C+ (78-79%), C (73-77%), C- (70-72%), D+ (68-69%), D (63-67%), D- (60-62%), and F (below 60%).

Finals Week Policy

The final exam will be administered in the time period scheduled during finals week in accordance with University policy (<u>Final Exam Schedule</u>). More information about UNK's Finals Week Policy, including when it is appropriate to ask for special accommodations to move a course's final exam, can be found here: <u>Finals Week Policy</u>.

Quizzes

Weekly quizzes will be made up of short answer, multiple choice, matching, and true/false questions and are due on Monday of each week. These will consist of material from the book and assigned readings. Lockdown Browser will be used for the exams/quizzes, and they are closed note/closed book.

Discussion

I will post questions on Canvas on Tuesdays and you will have until the following Monday to participate (unless directions specify differently). To receive full credit, students must have significant contributions weekly on each discussion topic. You must have 2 meaningful comments on each topic. Your responses must contribute something new to the discussion and not simply restate what was mentioned in the previous response. References will be required to support your statement. Please be considerate of your classmates' responses, abusive comments or attacking other student's comments will not receive credit as comments should be constructive even if you strongly disagree with another student.

Exams

Exams will be in take home format and students will have a week to complete the exam. References are expected to be used throughout.

Academic Dishonesty

Plagiarism will not be tolerated, please refer to the student handbook or ask me for more clarification on the subject if unsure what constitutes plagiarism. It is expected students work independently on assignments unless otherwise stated by the instructor. Group work where not specified will be considered cheating and students will receive a zero for that assignment. Multiple offenses will result in the student(s) receiving a failing grade for the course and possible removal from the program.

Withdraw (W) and Incomplete (I)

In unusual circumstances beyond the student's control, an incomplete (I) may be issued. The (I) is issued as a final grade with the student having 12 months to complete the necessary work. If the coursework is not completed in this time the (I) will be converted to a failing grade (F) on the student's transcript. Students may withdraw from the course before 9 weeks have been completed and a (W) will appear on the transcript. Students are responsible for filling out the necessary paperwork to complete this process. Instructors are not able to withdraw students. If the student drops the class, the (W) will not contribute to the student's overall GPA.

Student Accommodations

Students with Disabilities

It is the policy of the University of Nebraska at Kearney to provide flexible and individualized reasonable accommodation to students with documented disabilities. To receive accommodation services for a disability, students must be registered with the UNK Disabilities Services for Students (DSS) office, 175 Memorial Student Affairs Building, 308-865-8214 or by email unkdso@unk.edu

UNK Statement of Diversity & Inclusion:

UNK stands in solidarity and unity with our students of color, our Latinx and international students, our LGBTQIA+ students and students from other marginalized groups in opposition to racism and prejudice in any form, wherever it may exist. It is the job of institutions of higher education, indeed their duty, to provide a haven for the safe and meaningful exchange of ideas and to support peaceful disagreement and discussion. In our classes, we strive to maintain a positive learning environment based upon open communication and mutual respect. UNK does not discriminate on the basis of race, color, national origin, age, religion, sex, gender, sexual orientation, disability or political affiliation. Respect for the diversity of our backgrounds and varied life experiences is essential to learning from our similarities as well as our differences. The following link provides resources and other information regarding

D&I: https://www.unk.edu/about/equity-access-diversity.php

Students Who are Pregnant

It is the policy of the University of Nebraska at Kearney to provide flexible and individualized reasonable accommodation to students who are pregnant. To receive accommodation services due to pregnancy, students must contact the Student Health office at 308.865.8218. The following links provide information for students and faculty regarding pregnancy rights. https://thepregnantscholar.org/title-ix-basics/

https://nwlc.org/resource/faq-pregnant-and-parenting-college-graduate-students-rights/

Reporting Student Sexual Harassment, Sexual Violence or Sexual Assault

Reporting allegations of rape, domestic violence, dating violence, sexual assault, sexual harassment, and stalking enables the University to promptly provide support to the impacted student(s), and to take appropriate action to prevent a recurrence of such sexual misconduct and protect the campus community. Confidentiality will be respected to the greatest degree possible. Any student who believes she or he may be the victim of sexual misconduct is encouraged to report to one or more of the following resources:

- Local Domestic Violence, Sexual Assault Advocacy Agency 308-237-2599
- Campus Police (or Security) 308-865-8911
- Title IX Coordinator 308-865-8655

Retaliation against the student making the report, whether by students or University employees, will not be tolerated.

Technical Support

LoperTECH Service Desk Phone: 308-865-8363 Email: support@nebraska.edu If you are having problems or technical issues with Canvas, please contact ITS.

Course Policies

Contact and Response

- I will try to respond to your emails as quickly as possible (within 2 business days). There may be instances in which I do not respond until the next business day (e.g., if you email me on a Friday night I may not email back until Monday).
- Please check your UNK email account and Canvas announcements on a regular basis. I will only use your official UNK email address for communication, so it is your responsibility to ensure you are receiving emails regarding this course.
- · When sending emails, treat the message as if you were sending it in a professional situation (e.g., to a boss or supervisor).

Course Conduct

Be considerate to your fellow students. In this class, I encourage comments and questions. As such, I ask that you are respectful and courteous towards one another.

Late Policy

You are responsible for following the course schedule and completing tasks by their due dates. Late assignments and assessments will NOT be graded. There are no exceptions to this policy. Technology issues are NOT an excuse for late submissions. This includes: corrupted files, spotty WiFi, hard drive failures, and other computer problems. [Note: some late assignments may be accepted at the discretion of the instructor with appropriate documentation.]

Copyright

During this course, you are prohibited from selling notes to or being paid for taking notes by any person or commercial firm without the express written permission of the professor teaching this course.

Preparation for class	Week	Schedule
	Aug 21- Aug 28	Introduction to Pandemics
Chapter 1: First Blush	Aug 29 – Sep 4	Influenza
Chapter 2: Sin Nombre	Sep 5 – Sep 11	Hantaviruses
Chapter 3: The Face of the Devil	Sep 12 – Sep 18	Viral Hemorrhagic Fevers
	Sep 19 – Sep 25	Research Paper
Chapter 4: A Pox on Both Your Houses	Sep 26 – Oct 2	mPox and Smallpox
Chapter 5: A Higher Form of Killing	Oct 3 – Oct 9	Anthrax and other Bioterrorism Agents
Chapter 6: Migrations	Oct 10 – Oct 16	Avian Influenza
	Oct 17 – Oct 23	Midterm Exam
Chapter 7: Direct from the Metropole Hotel	Oct 24 – Oct 30	SARS, MERS, Coronaviruses
Chapter 8: After the Deluge	Oct 31 – Nov 6	Public Health Failures
Chapter 9: Sierra Leone	Nov 7 – Nov 13	Ebola
Chapter 10: #JeSuisleMonde	Nov 14 – Nov 20	Bacteria, Fungi, and Parasites
	Nov 21 – Nov 27	Thanksgiving Break
	Nov 28 – Dec 4	Future Pandemics
	Dec 5 – Dec 11	Final Exam