

The University of Oklahoma

College of Continuing Education

Advanced Programs – Course Syllabus

Course Title:

Biosecurity and Emerging Pathogens

Course Number:

CAS 5970 - 103

Course Description:

This class will introduce students to the fields of Biosecurity and Pandemic Planning. It will include an overview of pathogenic microbes, zoonoses and disease ecology along with discussion of the ways infectious diseases have shaped human evolution, human history and global politics. Several pandemic scenarios will be discussed, including the history of Plague in medieval Europe and the impact of smallpox on human populations. The last section of the class will focus on contemporary global security risks posed by the rapid evolution of new pathogens, combined with ongoing threats of laboratory escape, bio-warfare and bioterrorism.

Class Dates, Location and Hours:

Dates: June 2 – 4 & 9 – 11, 2017

Location: 3281 Sheridan Road, Fort Sill, Oklahoma.

Hours: Friday 5:30 - 9:00 p.m., Saturday 9:00 a.m. - 5:00 p.m.; Sunday 12:00 - 4:00 p.m.

Last day to enroll or drop without penalty: May 4, 2017

Site Director:

Email: apftsill@ou.edu. Phone: 580-355-1974.

Professor Contact Information:

Course Professor: Dr. Tassie Katherine Hirschfeld

Mailing Address: Department of Anthropology
University of Oklahoma
Norman, OK 73019

Telephone Number: (405) 325-7462 (work)
(405) 642-7059 (cell)

E-mail Address: tkhirschfeld@ou.edu

Professor availability: The professor will be available via e-mail to students before and after the class sessions. On-site office hours are half an hour before and after each class session, by appointment.

Textbook(s) and Instructional Materials:

Student materials are available at the OU Follett Bookstore located at 1185 Asp Avenue; Norman, OK, and can be ordered online, by phone, by email, or by fax. Ordering online at <http://www.bkstr.com/oklahomastore/home> is strongly recommended – students can track the status of their order within 48 hours. If an order has not been shipped within three days, students can contact the Follett textbook manager by phone (405) 325-3511, (800) 522-0772 (toll-free) or email 0831mgr@fhcg.follett.com. Phone orders (ask for the textbook manager and identify yourself as an Advanced Programs student) can be placed 8 a.m. to 6 p.m. Monday through Thursday; 8 a.m. to 5 p.m. on Friday; 10 a.m. to 4p.m. on Saturday (CST). Summer hours: 9 a.m. to 5 p.m. Monday through Friday (CST). Fax orders can be placed 24 hours a day at (405) 325-7770. Text prices are available online.

1. Johnson, S. (2007). *The ghost map*. New York: Penguin Group. ISBN 9781594482694.
2. Ryan, J.R. & Glarum, J.F. (2008). *Biosecurity and bioterrorism: Containing and preventing biological threats*. San Diego, CA: Elsevier. ISBN 9780750684897.

- Materials posted on the OU Canvas learning management system: Access Canvas at <https://oklahoma.instructure.com/>, enter your OU NetID and password, and select course to access material. Please contact your local Site Director if you require assistance.

Note: Follett is the Advanced Programs contractual textbook provider. Should text changes become necessary after publication of the course syllabus, Advanced Programs will facilitate text returns/refunds only for texts purchased through Follett.

Supplemental Articles (posted on Canvas) [Note: Instructor may update or modify this list prior to the start of class]:

- Clark, Dennis and DeGeest, Theresa (2004) “Globalization and Biosecurity,” In, *Ecological Security*, Dennis Clark Pirages and Theresa Manly DeGeest, eds. New York: Rowan and Littlefield, pp. 139-165.
- Murry, CJ et al 2002 Armed Conflict as a Public Health Problem. *British Medical Journal*, 324:346-349.
- McInnin, Colin and Lee, Kelley 2006 Health, Security and Foreign Policy. *Review of International Studies*, 32:5-23.
- Robbins, Jim. The Ecology of Disease. *New York Times*. July 14 2012.
- Kosal, Margaret 2014 A New Role for Public Health in Bioterrorism Deterrence. *Frontiers in Public Health*, 2: 1-4.
- Katona, Peter, Sullivan John and Intriligator, Michael (2010) Global Biosecurity and the Spectrum of Infectious Disease Threats: A Networked Global Approach. In, *Global Biosecurity: Threats and Responses*, Peter Katona, John Sullivan and Michael Intriligator, eds. London: Routledge Press, pp. 5-11.
- Katona, Peter and Scheld, Michael (2010). Emerging and Re-Emerging Infectious Diseases. In, *Global Biosecurity: Threats and Responses*, Peter Katona, John Sullivan and Michael Intriligator, eds. London: Routledge Press, pp. 13-24.
- Coyle, Philip (2010). Biowarfare and Bioterrorism: How do they differ from other WMD threats? In, *Global Biosecurity: Threats and Responses*, Peter Katona, John Sullivan and Michael Intriligator, eds. London: Routledge Press, pp. 25-40.
- Hirschfeld, Katherine 2017 Failing States as Epidemiological Risk Zones: Implications for Global Health Security.

Course Objectives:

This class will provide students with skills for understanding and assessing the security dimensions of global health trends. Students will gain a basic understanding of how new diseases evolve in nature; how human hosts respond to novel pathogens, and why some emerging diseases pose greater global health and security threats than others. The class will also facilitate interdisciplinary learning across microbiology, anthropology, international relations and public health. Integrating material from these diverse fields provides unique insight into the essential role of the military and security services in pandemic planning scenarios.

Course Outline:

Day	Content	Readings
1	Introduction to the class; global health and disease; pandemics and security; discussion; Quiz #1	Biosecurity, chapters 1-2
2	Discussion/review; mortality transitions	Biosecurity, chapters 3-4
3	Case studies; film/discussion;	Biosecurity chapters 5-6
4	Emerging Infections; discussion; Quiz #2	Biosecurity chapters 6-7

Day	Content	Readings
5	Pandemic planning; discussion/review; biowarfare and bioterrorism	Biosecurity, chapters 8-9
6	Case study presentations; discussion/review for final	Biosecurity chapters 10-11 and 14

Assignments, Grading and Due Dates:

Pre Class Assignments:

There will be two pre-class assignments: completion of a short (3-5 page) paper and a short pre-class (2 page) questionnaire. The paper will be a reading response to *The Ghost Map*. The questionnaire will consist of 10-15 short questions designed to assess students' baseline knowledge of infectious disease and epidemiology prior to the beginning of class. This questionnaire will not be graded—the points will be awarded for successful completion of the assignment. An assignment sheet and grading rubric for the paper will be posted on Canvas. **Due Date:** Both pre-class assignments are to be completed by **June 1, 2017**.

Vocabulary Quizzes:

Vocabulary quizzes will be short answer questions intended to test knowledge of core concepts in infectious disease ecology, pandemic preparedness and biosecurity. These will be administered in class on the days designated in the course outline. Lists of vocabulary words for each quiz will be posted on Canvas before **June 1, 2017**. Students should look up definitions in the class readings, and pay particular attention to the way these concepts are used in *Biosecurity and Bioterrorism*.

Case Study Presentation:

For the case study presentation, the instructor will assign each student a specific outbreak scenario. Students will develop a presentation that explores: 1) the origin and ecology of the microbe; 2) the way the microbe affects human populations; 3) whether the microbe has pandemic potential; and 4) the strategic, ethical and medical issues involved in containing the outbreak. The case study presentations will take place on the final two days of class. All students will provide peer comments on presentations.

Final Exam:

The final exam will consist of two analytical essays that integrate lecture and reading material from the various sections of the class. The essays will require discussion and citation of class readings **only**. An assignment sheet with a selection of essay questions will be posted on Canvas. **Due Date:** The final exam should be turned in online by 11 pm **July 10, 2017**.

Course Policies:

Citations:

In your written work, make sure you cite all sources appropriately in the anthropological citation style (author, date), with a bibliography at the end in your essay. Failure to do so may be regarded as plagiarism, and you may fail the assignment as a result. Academic misconduct on course work may result in a failing grade for this class. It is the responsibility of each student to be familiar with the definitions, policies, and procedures concerning academic misconduct. The Academic Misconduct Code is printed with the Student code and is available on the web at <http://www.ou.edu/provost>

Papers:

Please do not submit written work by e-mail. You should use Canvas to turn in your papers. Late paper policies will be detailed on the individual assignment sheets.

Grading:

This is a letter-graded course: A, B, C, D, or F.

Graded Assignments	Due Date	Percent of Grade
Participation	June 1-July 10	10%
Pre-class worksheet	June 1	5%
Pre-class reading response	June 1 or earlier	15%
In class quizzes	Quiz 1: June 2 Quiz 2: June 10	20%
Case study presentation	June 10 and 11	20%
Take home final exam (open book)	July 10	30%

Notice: Failure to meet assignment due dates could result in a grade of I (Incomplete) and may adversely impact Tuition Assistance and/or Financial Aid.

POLICIES AND NOTICES

Attendance/Grade Policy

Attendance and participation in interaction, individual assignments, group exercises, simulations, role playing, etc. are valuable aspects of any course because much of the learning comes from discussions in class with other students. It is expected that you attend all classes and be on time except for excused emergencies.

Excused absences are given for professor mandated activities or legally required activities such as emergencies or military assignments. It is the policy of the University to excuse absences of students that result from religious observances and to provide without penalty for the rescheduling of examinations and additional required class work that may fall on religious holidays. Unavoidable personal emergencies, including (but not limited to) serious illness; delays in getting to class because of accidents, etc.; deaths and funerals, and hazardous road conditions will be excused.

If you are obtaining financial assistance (TA, STAP, FA, VA, Scholarship, etc.) to pay all or part of your tuition cost, you must follow your funding agency/institution's policy regarding "I" (Incomplete) grades unless the timeline is longer than what the University policy allows then you must adhere to the University policy. Students who receive Financial Aid must resolve/complete any "I" (Incomplete) grades by the end of the term or he/she may be placed on "financial aid probation." If the "I" grade is not resolved/completed by the end of the following term, the student's Financial Aid may be suspended making the student ineligible for further Financial Aid.

Students are responsible for meeting the guidelines of Tuition Assistance and Veterans Assistance. See the education counselor at your local education center for a complete description of your TA or VA requirements.

Academic Integrity and Student Conduct

Academic integrity means honesty and responsibility in scholarship. Academic assignments exist to help students learn; grades exist to show how fully this goal is attained. Therefore all work and all grades should result from the student's own understanding and effort.

Academic misconduct is any act which improperly affects the evaluation of a student's academic performance or achievement. Misconduct occurs when the student either knows or reasonably should know that the act constitutes misconduct. Academic misconduct includes: cheating and using unauthorized materials on examinations and other assignments; improper collaboration, submitting the same assignment for different classes (self-plagiarism); fabrication, forgery, alteration of documents, lying, etc...in order to obtain an academic advantage; assisting others in academic misconduct; attempting to commit academic misconduct; destruction of property, hacking, etc...; intimidation and interference with integrity process; and plagiarism. All students should review the Student's Guide to Academic Integrity at http://integrity.ou.edu/students_guide.html

Students and faculty each have responsibility for maintaining an appropriate learning environment. All students should review policies regarding student conduct at <http://studentconduct.ou.edu/>

Accommodation Statement

The University of Oklahoma is committed to making its activities as accessible as possible. For accommodations on the basis of disability, please contact your local OU Site Director.

Adjustment for Pregnancy/Childbirth-Related Issues

Should you need modifications or adjustments to your course requirements because of documented pregnancy-related or childbirth-related issues, please contact me as soon as possible to discuss. Generally, modifications will be made where medically necessary and similar in scope to accommodations based on temporary disability. Please see <http://www.ou.edu/content/eoo/faqs/pregnancy-faqs.html>.

Title IX Resources

For any concerns regarding gender-based discrimination, sexual harassment, sexual misconduct, stalking, or intimate partner violence, the University offers a variety of resources, including advocates on-call 24/7, counseling services, mutual no-contact orders, scheduling adjustments, and disciplinary sanctions against the perpetrator. Please contact the Sexual Misconduct Office at smo@ou.edu or (405) 325-2215 (8-5), or the Sexual Assault Response Team at (405) 615 -0013 (24/7) to report an incident. To learn more about Title IX, please visit the Institutional Equity Office's website at <http://www.ou.edu/content/eoo.html>

Course Policies

Advanced Programs policy is to order books in paperback if available. Courses, dates, and professors are subject to change. Please check with your OU Site Director. Students should retain a copy of any assignments that are mailed to the professor for the course. Advanced Programs does not provide duplicating services or office supplies.

Any and all course materials, syllabus, lessons, lectures, etc. are the property of professor teaching the course and the Board of Regents of the University of Oklahoma and are protected under applicable copyright.

For more information about Advanced Programs, visit our website at: <http://www.goou.ou.edu/>

INSTRUCTOR VITA

Dr. Tassie Katherine Hirschfeld

Education

PhD Anthropology Emory University 2001

Current Positions

- Advanced Programs Professor since 2014
- Associate Professor and Chair Department of Anthropology University of Oklahoma
- Chair-Elect University of Oklahoma Faculty Senate
- Board Secretary American Orthopsychiatric Association

Frequently Taught Advanced Programs Courses

CAS 5970 Biosecurity and Emerging Pathogens

Major Areas of Teaching and Research Interest

- Medical Anthropology
- Disease ecology
- Post-socialism
- Public health

Selected Publications

Books

- 2015 *Gangster-States: Organized Crime, Kleptocracy, Collapse*. Palgrave MacMillan
- 2007 *Health, Politics and Revolution in Cuba since 1898*. Transaction Press.

Selected Articles

- “Failing States as Epidemiological Risk Zones: Implications for Global Health Security.” Under review, *Health Security*.
- Rethinking Structural Violence: From Imperialism to Empiricism in the Political Economy of Health. *Society* 2017.
- Reassessing the Cuban Health Care System: A Qualitative Critique. *Cuban Affairs*. 2007.
- Rules of the Underworld. *Sapiens*.

Representative Honors and Awards Received

Marjorie Shostak Award for Ethnographic Writing, Emory University

Major Professional Affiliations

- American Anthropological Association
- Association for the Study of the Cuban Economy
- Society for Medical Anthropology