

BIMS 489 21st Century Biological Threats
Course Syllabus
Fall Semester – 2019

COURSE COORDINATOR AND INSTRUCTOR:

Sections 500-501

Dr. Colin Young, Course Coordinator

Department of Veterinary Integrative Biosciences

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979-458-1053

Office Hours by Appointment

Office Location: Veterinary & Biomedical Education Complex (VBEC), VIDI Rm 337

MEETING TIMES:

Section 500: Wednesday @ 1:30 - 2:20

Section 501: Wednesday @ 3:05 – 3:55

CLASS/LAB LOCATION: National Center for Therapeutic Manufacturing, Room 122

CREDIT HOURS: 1 Hour

COURSE DESCRIPTION: In depth presentation of different forms of bioterrorism, agroterrorism, sociological perspectives, surveillance, dual use research, advanced vaccine development, global health security, and career opportunities.

PREREQUISITES:

Approval of instructor.

RECOMMENDED TEXTS AND MATERIALS:

All recommended texts and readings will be made available through eCampus.

COURSE GOALS:

1. To provide students an in depth characterization of different forms of bioterrorism, agroterrorism and surveillance.
2. To define bioterrorism and forensics, the law and bioterrorism, and to present a sociological perspective on biodefense and bioterrorism
3. To provide students with contacts with faculty members, health care providers, and industrial experts as a resources for information on biological threats.

LEARNING OUTCOMES:

At the conclusion of the semester, students will:

1. Evaluate all aspects of bioterrorisms.
2. Categorize which bodies/organizations regulate biodefense, biosecurity, and bioterrorism in the world.
3. Identify what career opportunities exist globally for regulate biodefense, biosecurity, and bioterrorism.

COURSE POLICIES & INSTRUCTOR EXPECTATIONS:

- Students will be expected to attend all 14-class sessions.

- Multiple guests will be in attendance at sessions throughout the semester; students are expected to be on time! This is a courtesy to the speaker and a sign of professionalism on the part of students.
- Students are expected to avail themselves of the information and opportunities presented throughout the semester. This means ask questions if you don't understand, read or view assignments before class, and visit with the faculty if you would like further information on a topic.
- Students will be courteous and respectful of one another and our presenters. This means cell phones and mobile devices will not be used during class except as directed by the instructor or guest lecturer.
- Failure to attend a class without a university-approved excuse will result in a 5-point loss per absence.

EVALUATION/GRADING OF THE COURSE:

Grading will be based on the best scores on 10 out of 14 quizzes taken online through e-Campus and on class attendance according to a 500-point scale:

50 points per quiz – best of 10 = 500 points possible

450 - 500 points	= A
400 – 449.9 points	= B
350 – 399.9 points	= C
300 – 349.9	= D
< 300 points	= F

Quizzes will be taken online and will cover the material from the most recent class period. Students are expected to read their lecture notes as well as the provided online materials, and then take the posted quiz on eCampus. **The quiz must be completed by 11:59 pm of the following Tuesday**, and a re-take can be attempted up to **72 hours** following the deadline. The highest score of the two will be graded. Students with a University-approved excuse will be allowed to make-up the quizzes. Students with non-approved excuses will only be allowed to make-up the quizzes in exceptional circumstances.

ATTENDANCE & LATE WORK POLICY:

Late work (quizzes) is only accepted in the case of a University-approved excuse. See Student Rule 7 for a complete definition (<http://student-rules.tamu.edu/rule07>).

Attendance will be taken weekly. An unexcused absence in the course will reduce your grade by 5 points (out of a possible 500). In the case of a University-approved absence, please notify the instructor within 48 hours of the absence.

AMERICANS WITH DISABILITIES ACT (ADA) POLICY STATEMENT

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe, you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit <http://disability.tamu.edu>.

ACADEMIC INTEGRITY STATEMENT AND POLICY

"An Aggie does not lie, cheat or steal, or tolerate those who do." For additional information, please visit: <http://aggiehonor.tamu.edu>.

COURSE TOPICS, INSTRUCTORS, CALENDAR OF**ACTIVITIES, AND LEARNING OBJECTIVES:**

Class Date	Topic	Presenter	Quiz Due Date
Different Forms of Bioterrorism			
Aug. 28	Biological Weapons Convention, Biological Warfare, Bioterrorism, and Biocrime	Dr. G. Parker	Sep. 3 - 11:59pm
Learning Objectives			
Sep. 4	Agroterrorism	Dr. J. Moats	Sep. 10 - 11:59pm
Learning Objectives			
Sep. 11	Animal Diseases and Bioweapons (both intentional and unintentional)	Dr. M. Cochran	Sep. 17 - 11:59pm
Learning Objectives			
Sep. 18	Biological Toxins and Biological Terrorism	Dr. Chaki	Sep. 24 - 11:59pm
Learning Objectives			
Sep. 25	Advanced Vaccine Development, the Modern Approaches to Produce Vaccines as Quickly as Possible	Dr. T. Ficht	Oct. 1 - 11:59pm
Learning Objectives			
Oct. 2	Neglected Tropical Diseases	Dr. M. Lively	Oct. 8 - 11:59pm
Learning Objectives			
Other Aspects of Bioterrorism			
Oct. 9	Stress, Immunity, and Infectious Disease	Dr. J. Welsh	Oct. 15 - 11:59pm
Learning Objectives			
Oct. 16	Sociological Perspective on Biodefense and Bioterrorism	Dr. O'Hearn	Oct. 22 - 11:59pm
Learning Objectives			
Oct. 23	The FBI's Perspective on 21 st Century Bioterrorism	FBI	Oct. 29 - 11:59pm
Learning Objectives			
Bioterrorism Preparedness			
Oct. 30	Public Health Preparedness	Dr. Clendenin	Nov 5 - 11:59pm
Learning Objectives			
Nov. 6	Surveillance and Bioterrorism	Dr. Arenas	Nov. 12 - 11:59pm
Learning Objectives			
Nov. 13	The Use of Raman Spectroscopy for the Rapid Detection of Bioagents	Dr. Kurouski	Nov. 19 - 11:59pm
Learning Objectives			
Nov. 20	Dual Use Research and Custom Built Pathogens for Bioterrorism	Dr. C. McFarland	Nov. 26 - 11:59pm
Learning Objectives			
Dec. 4	Biodefense, Biosecurity and Bioterrorism: Career Opportunities Globally	Dr. G. Parker	Dec. 10 - 11:59pm
Learning Objectives			
	Final Exam week		