

Course Title: *Biological Terrorism and Weapons of Mass Destruction (MSBS 5140)*

Semester Schedule: Fall 2007, class to meet once each week (Mondays) starting 10-September 3:30p-5:30p Location: Medical Science Building (MSB) C-600

Instructors: Brendan McCluskey, JD, MPA
Nicholas Megjugorac, PhD

General goals: Using historical case studies, this course has been designed to provide students with an appreciation for the real-world insidious applications of biomedical technology to make weapons of mass destruction. At the end of the course, students will have a knowledge of the biology of agents of biological warfare and terrorism and the history of these agents as biological weapons; an appreciation for the overall effects of biological weapons use, including spread in the population and psychological impact; and an understanding of difficulties in enforcement, control, and non-proliferation.

Course structure: The course will meet once a week for 15 weeks (2 hour sessions); during the first class, each student will be assigned an agent/disease to focus on during the semester. The course consists of a combination of lectures/presentations by the instructors and other experts, and presentations by students on their assigned topic. Time will be spent during each class going over news and other noteworthy events that have recently occurred; students are expected to read, watch, and listen to news and other sources to gather information to share with the class regarding biological and other forms of terrorism.

It is highly recommended that all students join the Center for BioDefense Yahoo! Group for dissemination of news and related information. You can subscribe to this listserv by sending an email to umdnj_center_for_biodefense-subscribe@yahoogroups.com.

Student Presentations: In addition to lectures, all students will give a comprehensive PowerPoint presentation on their assigned agent/disease (the presentation will be broken up into two segments, each with a different focus). Students are expected to present a “total picture” of their assigned agent, with special emphasis on the biology of the agent; additional specific information on the student presentations will be provided in class. **There will be a strictly enforced time limit for each individual presentation; part of the student’s grade for the presentation will be based on how well the time was used.** Students who are not presenting are expected to spend some time surveying the topics for discussion that day, and have questions prepared to ask the student presenter. It would be advisable to have questions written down, as the instructors will call on students to ask questions of the presenter.

Quizzes: Four (4) quizzes throughout the semester will be used to gauge students’ understanding of key facts and other information about the agents.

Method of Evaluation: In-class presentations (30%), quizzes (20%), in-class participation (15%), and end of semester final paper (35%).

Course Schedule: (subject to change at the discretion of the instructors)

Class 1 (9/10) – Lecture (McCluskey): History of Weapons of Mass Destruction

Class 2 (9/17) – Lecture (Dr. Nancy Connell): Microbiology (Aum Shinrikyo)

Class 3 (9/24) – Lecture (Megjugorac): Immunology (IL-4 Experiments)

Class 4 (10/1) – Lecture (Megjugorac): Pathogenesis (Sverdlovsk/Pandemic Influenza)

Class 5 (10/8) – Lecture (Instructors): Art of Presentations/Scientific Communication

Quiz 1

Class 6 (10/15) – Student Presentations

Class 7 (10/22) – Student Presentations

Class 8 (10/29) – Student Presentations

Class 9 (11/5) – Lecture (McCluskey): Public Health/Epidemiology (Rajneeshee Cult)

Quiz 2

Class 10 (11/12) – Lecture (Megjugorac): Clandestine Bioweapons Laboratories

Class 11 (11/19) – Lecture (McCluskey): Forensics/Criminology/Legal Issues (Amerithrax)

Class 12 (11/26) – Student Presentations

Quiz 3

Class 13 (12/3) – Student Presentations

Class 14 (12/10) – Student Presentations

Class 15 (12/17) – Summary and Culminating In-class Exercise

Quiz 4

Each class will also have time dedicated for discussion of current events, as well as questions for the student presenters (from the instructors and other class members).