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Course Syllabus FDSC 5223 Food Biosecurity

Fall 2016

Course Description;

This course is a study of the new field known as Biosecurity. As the term implies, we are studying the security of agriculture and subsequently our food supply protecting it from both domestic and international terrorists. We will look into such areas as the agriculture of the U.S., agencies involved in Biosecurity, risk management, types of terrorism, crisis management planning, international and domestic terrorism and RFID.

Prerequisite(s);

None

Instructor;

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Communication; Best to use email. If you are having any difficulty with opening material etc, please let me know as soon as possible.

Required Text; There is no book for this course. It is just too new and too comprehensive for any book published.

Goals;

The goal of this course is to provide students with information and learning activities that will allow them to demonstrate mastery of biosecurity and crisis management planning in the food industry. We will take a look at the food defense system from agricultural inputs through to final consumption to enable both critical analysis of current food system vulnerabilities and examination of available and needed interventions and countermeasures.

Objectives;

Upon completion of this course, the student will be able to;

1. Understand the terms used in the area of biosecurity.
2. Understand risk management and the use of CARVER +Shock.
3. Be able to define the types of bioterrorism, name the target foods and how to prepare for bioterrorism events.
4. Understand the various government assistance programs and agencies involved in biosecurity.

5. Discuss the importance of and know how to write a detailed crisis management plan

Content/ Course Topics;

6. Introduction to Biosecurity, definitions used, history and background of terrorism.
7. What is Food Defense?
8. Food Defense – Where are we going and how are we doing?
9. Food Defense Awareness
10. Federal Agencies Involved in Food Defense
11. FDA Guidance Documents on Food Defense
12. Law Enforcement
13. Specific Agriculture and Food Concerns
14. Types of Bioterrorism
15. Food Defense Planning
16. Risk Management
17. ALERT
18. Crisis Management Planning
19. RFID

Activities: The following are activities that you will perform in order to receive a grade. Since most of these activities are papers/reports require thought which makes them subjective, my grading will be mostly on the thought process versus following the proper style, etc;

20. Write a 2-3 page paper Due September 9 (Week 3) on the following subject; Does the food industry have concern for food defense” If so, what are they doing. If not, why are they not concerned? There is no concrete answer, just your opinion. For 10 points or 10% of your grade
21. Write a 5 plus page short story about an imaginary bioterrorism incident. This is your chance to become a writer like Dan Brown (The Da Vinci Code). How does the story unfold? What agencies are involved and what did they do? Due September 30 (Week 6). For 25 points or 25% of your grade.
22. Write a 3-5 page paper on who is in charge at the state and local level of bioterrorism. Due October 7 (Week 7) for 5 points or 5% of your grade.
23. Write a paper on the following subject; “According to USDA, what are the 3 steps in creating a food defense plan and what are the essential components?” Due October 28 (Week 10). Counts for 10 points or 10% of your grade.
24. Submit 5 questions that you would like to see on the final exam. Due November 18 (Week 13). Counts for 5 points or 5% of your grade.
25. Term Paper – Due December 12 (Week 15). For 25 points or 25% of your grade. Write a 10-15 page paper on any topic you would like in the area of biosecurity. Some possible ideas are listed below.
 - Identify the characteristics of foods and food systems that contribute to their potential vulnerability for intentional contamination to classify vulnerable foods and systems

- Apply CARVER + Shock (Criticality, Accessibility, Recognizability, Vulnerability, Effect and Recuperability) and Operational risk Management (ORM) tools to food systems/facilities to identify potential vulnerabilities
- Identify potential interventions and countermeasures to close food system vulnerabilities and define required future technical requirements
- Describe the current public health systems' abilities to identify food system contamination events and define options for improvements that could reduce the implications of an event
- Summarize the current DHS, FDA, USDA and related regulatory and oversight activities in protecting the food system from intentional contamination including identification of gaps and overlaps
- Draft a food defense plan for a specific facility, system or operation that demonstrates mastery of the above.

7) Final Exam – December 12. For 20 points or 20% of your grade.

Evaluation;

I was once an undergraduate student at a college and then went on to graduate school. I guess I will never forget the total philosophical change that occurred between undergraduate school and graduate school. As an undergraduate, most assessments were simply tests where gave an answer back based on what you learned in class. In graduate school, we are not as interested so much in you memorizing facts to give back on a test. Our interest is more in leaning big concepts and then applying what you learned in a situation. So graduate school is all about thinking and communication. On campus graduate students spend a lot of time learning to communicate both verbally and in writing. I take writing as a very serious issue. Correspondingly, I expect students to read their lessons assignments not only for content but also reading to understand what good writing looks like. In recent years we have had some students get to the point of their special problem where they do some small project and write about. It is then we realize how our online students are just not understandings the writing component of the graduate degree. I do not consider myself a very good writer. I wish I could write better for the things you write both in content and in style will probably get you promoted more than anything else. Let's face it, knowledge is cheap but leadership especially through communication (writing) is of the highest value and the " pen is still mightier than the sword". Posted in the index should be some tips on writing scientific papers (Writing Hints). These tips may not apply to every paper you write but good grammar and spelling are always in style.

Please outline and begin drafting papers early. I can tell the difference between a paper with thought and planning versus something written the night before it is due. Also, I would hope to see good term papers written over the semester versus ones written several days in advance. In addition, please try to submit papers into Blackboard. I know there are times it does not work well and you may have to email them but try to get used to the Blackboard system.

Point Assignment;

Paper on Food Defense in Industry	10%
Short Story on Bioterrorism	25%
State and Local Bioterrorism Control	5%
USDA Bioterrorism Plan	10%
Final Exam Questions	5%
Term Paper	25%
Final Exam	20%
Total Percentage	100%

Cutoff Percentage (Rounded)	Grade Equivalent
100- 90% of possible course points	A
89 - 80% of possible course points	B
79- 70% of possible course points	C
69- 60% of possible course points	D
<59% of possible course points	F

Grades of "I" (incomplete) are awarded for emergency situations only as identified by the University Handbook. Documentation must be provided in such instances. Incomplete grades automatically turn into an "F" after a certain date.

Late Work Policy;

All work is due based on established and announced due-dates unless prior approval is obtained from the instructor. If work is turned in late, 50% of the total assignment value will be deducted prior to assessment of the work, as long as the work is turned in no later than three days following the due date. Work turned in after that will automatically receive a 0. This policy is in effect as an incentive to stay current with the assigned work. Like many courses, the work of one session is based on understanding the work of the previous session(s). Falling behind in the work greatly reduces the chances of success at attempting later work.

Academic Honesty;

I am committed to the principle of academic honesty and I expect each student in my class to maintain a high standard of academic integrity. My commitment to you, the student, is to provide a learning environment that promotes academic honesty in and out of the classroom. I support the University of Arkansas policy concerning academic honesty that is described in the Student Handbook. Consequently, any student involved in an academically dishonest act will be given an F in the class and the action will be reported to the All University Judiciary.

Communications:

1. If you have any questions about the course material, email or call Steve Seideman (seideman@uark.edu; 479/575-4221). I will check my email on a regular basis and usually get back to you within 48 hours.
2. If you have technical questions or problems with Blackboard, contact

Blackboard Learn Help Desk (Faculty Technology Center) 479-575-6804 Monday through Thursday, 7 a.m. to 10 p.m. Friday from 7 a.m. to 5 p.m. Saturday from 11 a.m. to 4 p.m., and Sunday from 6 to 11 p.m. bbhelp@uark.edu

Call 479-575-2904 to alert technical staff if Blackboard Learn is not responding after hours. Limited technical support and troubleshooting is also available after hours.