NFS 2156 Deadly Food: outbreak investigations (3 credits)

Location:
Williams 401 TR 10:05 am-11:20am

Instructor:
Dr. Andrea Etter. Book time with Andrea Etter: Office hours

Pre-requisites or co-requisites:
NFS 153 or MMG 101 or ASCI 001, or instructor permission

Course Description
Investigate how U.S. public health officials discover, investigate, and solve foodborne outbreaks. This course will use case studies to introduce common bacterial and viral pathogens and foods involved in foodborne outbreaks in the U.S., the laboratory and investigative methods officials use to solve the outbreaks, and the gaps in food safety practices and policy that lead to foodborne outbreaks.

Course Learning Objectives
- You will know the major pathogens, risky foods, and government agencies involved in foodborne outbreaks in the U.S.
- You will understand the factors (bacterial, environmental, social, policy gaps) which may lead to outbreaks of foodborne illness
- You will understand the key methods used to investigate foodborne outbreaks and their strengths and limitations
- You will master evaluating and synthesizing information from multiple sources to write scientifically about food safety issues and outbreaks
- You will test your new-found knowledge and communication skills by developing and administering a food safety knowledge survey
- You will be able to evaluate the food safety risks of various foods and cooking habits

Required Course Materials:
FDA Bad Bug Book, 2nd Edition: Brightspace or at: https://www.fda.gov/media/83271/download;
Readings required for course assignments will be posted on the LMS.

Attendance Policy and Classroom Environment Expectations:
Due to the discussion-based nature of this course, your attendance is necessary to obtain a good grade and stay caught up on the material. If you must miss a day, please let me know in advance, and I will work with you to make up any missed assignments.

Grading Criteria/Policies: Late assignments will not be accepted without my ok in advance.
Grade breakdown: 340 pts possible
11 weekly quizzes, 10 pts each (1 drop): 110 pts
10 outbreak analyses, 10 pts each (1 drop): 100 pts
Raw milk report 20 pts
Consumer knowledge survey dev 20 pts
Consumer knowledge survey report 10 pts
Participation in class discussions 30 pts
Final paper/outbreak report: 50 pts

Final grades will be calculated as earned percentages of the total points possible:

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<th>Grade</th>
<th>Points</th>
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<tr>
<td>A+</td>
<td>97-100</td>
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<td>A</td>
<td>93-96.5</td>
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<td>A-</td>
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<td>B</td>
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** You are responsible for keeping track of your grades. Grades on Brightspace may not be fully up to date. **

Assignments and Assessments:

QUIZZES (10 pts each, lowest quiz dropped): Each Thursday, we will have a quiz on the material from the previous week.

ANALYSIS REPORTS (10 pts each, lowest grade dropped): For each outbreak, you will be required to read the CDC’s final outbreak report and write a short (1 page, single spaced) analysis of the severity of the outbreak (length, hospitalization rate, deaths), any contributing or unusual factors involved in the outbreak, and any ways in which a similar outbreak might be prevented in the future. You will need to find and integrate outside sources to do get full marks on these assignments.

CLASS DISCUSSION PARTICIPATION POINTS (50 points): you should expect to participate in at least 6 total of the class discussions on the Scallan paper, the outbreaks, the raw milk discussion, and the class survey (15 discussions).

CONSUMER KNOWLEDGE & RISK PERCEPTION SURVEY (30 pts): You will collaborate to develop an online survey for friends and family/fellow students asking about food safety knowledge, habits, and risk perception (20 points). You will each write an analysis report after the survey has completed reflecting on the results of the survey as well as its shortfalls and comparing it to the data previously discussed in class (10 points; sources will be posted to Brightspace).
REPORT ON SAFETY OF RAW MILK (20 points): this will a 2-page (single-spaced) research paper on the issues and argument surrounding the safety and/or benefits of raw milk. You will be expected to find both scholarly and non-scholarly sources for this and discuss the merits and efficacy of persuasive arguments against raw milk.

FINAL PAPER (50 pts): In lieu of a final exam, each student will be required to write a final paper. This is expected to be an in-depth examination of an outbreak not covered in class. Details are in the assignment on Brightspace

Notes on proper citation/use of references:
When writing assignments where you are not using generally known information or your own opinion, you should cite the source where you found the information at the end of EACH sentence, before the period [e.g., (source)]. Summarizing information is always better than quoting; if you summarize, however, you must substantially change the wording, not simply move a word or two around.
Why do I insist on this format?
• If you move information around while revising, you can end up with uncredited information. This is plagiarism.
• Crediting the source of your information, as professionals, allows them to demonstrate that their work has an impact. This is important for your sources’ careers; if you publish professionally, others citing your work is important for your career progression.
• Plagiarism accusations can be career-ending

Extra credit:
At the instructor’s discretion. However, keep in mind that extra credit is no substitute for doing assignments.

Why won’t you give me extra credit? You don’t do regular credit!

Grade Appeals:
If you would like to contest a grade, please follow the procedures outlined in this policy:
https://www.uvm.edu/policies/student/gradeappeals.pdf
**Course Evaluation:**
Course evaluations are critical for improving the course for future students as well as providing anonymous feedback on the instructor for professional development and promotion decisions. I will provide time in class during the final week of class for you to fill out the course evaluations.

**Student Learning Accommodations:**
In keeping with University policy, any student with a documented disability interested in utilizing accommodations should contact SAS, the office of Disability Services on campus. SAS works with students and faculty in an interactive process to explore reasonable and appropriate accommodations, which are communicated to faculty in an accommodation letter. 

**Contact SAS:** A170 Living/Learning Center; 802-656-7753; access@uvm.edu; www.uvm.edu/access

**Religious Holidays:**
Students have the right to practice the religion of their choice. If you need to miss class to observe a religious holiday, please submit the dates of your absence to me in writing by the end of the second full week of classes. You will be permitted to make up work within a mutually agreed-upon time. https://www.uvm.edu/registrar/religious-holidays

**Academic Integrity:**
The policy addresses plagiarism, fabrication, collusion, and cheating. 
https://www.uvm.edu/policies/student/acadintegrity.pdf

**Promoting Health & Safety:**
The University of Vermont's number one priority is to support a healthy and safe community:
Center for Health and Wellbeing: https://www.uvm.edu/health
Counseling & Psychiatry Services (CAPS) Phone: (802) 656-3340
C.A.R.E. If you are concerned about a UVM community member or are concerned about a specific event, we encourage you to contact the Dean of Students Office (802-656-3380). If you would like to remain anonymous, you can report your concerns online by visiting the Dean of Students website at https://www.uvm.edu/studentaffairs