



Hazard Mitigation and Preparedness EADP 3035 (001)



Instructor: Dr. Laura Siebeneck
Semester: Fall 2013
Course Schedule: T 6:00-8:50
Course Location: Sage Hall 231

Office Location: Chilton 204J
Office Hours: M 1-3 T 2-4 pm
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Prerequisite: EADP 3010 or consent of the department.

Course Description

This course provides an overview of hazard mitigation and preparedness planning. Throughout this course, students will be introduced to a variety of hazards, including meteorological, geological, hydrological, and technological hazards and the mitigation and preparedness strategies that can be taken to minimize hazard risk and vulnerability. Students will also become familiar with mitigation and preparedness practices and programs as well as policies at the federal, state, and local government levels that promote long-term community resilience and sustainability. Finally students will gain hands-on experience reviewing a local hazard mitigation plan and will be introduced to the new FEMA Mitigation Plan Guidance and Review Tool.

Course Objectives

The course will provide students with the knowledge and resources to:

1. Identify, profile, and assess hazard risk and vulnerability as necessary for hazard mitigation and preparedness planning.
2. Recognize hazards and develop metrics for estimating potential losses from hazard events.
3. Develop and review local and state hazard mitigation plans.
4. Know the roles that local, state, and federal governments have in hazard mitigation and emergency preparedness.
5. Identify some mitigation and preparedness programs/policies offered by the federal government.

Course Text

There is no assigned textbook for this course. All readings will be posted on Blackboard.

Readings

Students are expected to complete all required readings prior to the corresponding topic's class period. In other words, come to class apprised and prepared to discuss the readings.

Grading Scale

A: $\geq 90\%$ B: 89-80% C: 79-70% D: 69-60% F $< 60\%$

Grading

5% Attendance

5% Assignment 1: Stop Disasters Game: Evaluation

15% Assignment 2: Bridging Theory and Practice Paper

25% Final Project

25% Midterm Exam

25% Final Exam

Total: 100%

Attendance

Attendance will be assessed at least once every class session. Students are expected to arrive at class on time and to stay the entire class. This class meets only once a week and students should be aware that a significant number of absences will make it difficult to pass the course. Students will be allowed 2 absences before their overall grade will be lowered 1% for each additional absence (e.g. from 5% to 4%), up to a total of 5%. Therefore, there are no excused absences. However, this rule may be waived in extreme circumstances, (e.g. serious illness, death in the family, injury, etc.). In these special cases please contact me so I can work with you.

Students will also be penalized for arriving late to class or leaving early. If a student arrives late to class or leaves early from class on more than two occasions, they will be assessed 1 absence. Each additional tardy or leaving early from class will result in one additional absence.

If you have to miss class for any reason, please arrange to get notes from a fellow classmate. All material covered in class is important.

Midterm and Final Exam

To encourage you to keep up with the readings, lectures, and documentaries, a midterm and final exam will be given. The midterm exam is scheduled for **October 15th** and the final exam will be **December 10th from 6:00 to 8:00 p.m.** These exams will consist of a combination of true/false, multiple-choice, short answer, and short essay questions. The final exam is not cumulative. Exams must be completed on the scheduled exam date. Exam make-ups and rescheduled exams will be limited to special circumstances (e.g. illness, death in the family, etc.) and with prior notification only. Make-up exams, if granted, will be different than the one given in class.

Assignment 1: Stop Disasters Game: Learning, Entertainment, or Both?

Studies suggest that game-based learning can serve as a useful educational tool for teaching new concepts and ideas to various populations. For this assignment students will play and write a review of the online computer game, “Stop Disasters Game.” Specific instructions for this assignment are on page 9 of the syllabus. This assignment is due **October 1st**.

Assignment 2: Bridging Theory and Practice Paper

You will be responsible for providing one response paper pertaining to a scholarly journal article. This paper will be due **October 29th**. More information about the response papers are found on page 10 of the syllabus.

Group Project

In this class, you will have the opportunity to apply the concepts and materials covered in this course to review a local or state hazard mitigation plan. The objectives of this project are to (1) demonstrate thorough understanding of the basic requirements of plan, (2) gain experience reviewing a plan, (3) get exposure to what makes a strong plan versus what makes a weak plan and (4) enhance written and oral skills. More details about this project are on page 11 of the syllabus.

E-Mail

Students are welcome – and encouraged – to contact me using e-mail if they have any questions or would like make an appointment to see me outside of scheduled office hours. I generally respond to e-mails within 24 hours of receiving them, however, I may take more time to reply during weekends or holidays.

All students are **REQUIRED** to have a UNT e-mail address. All e-mailed notifications pertaining to this class will be sent through those channels. In other words, if you do not have an account set up at UNT, you may miss out on important information. It is the responsibility of the student to have this account set up.

Students are expected to maintain a high level of professionalism when writing e-mails. E-mails should include a proper salutation, use complete sentences, and conclude with the sender’s signature. Also please indicate what class and section you are in. E-mails should not resemble a text message (i.e. C U L8 R). Students are training to be emergency management professionals who will one day represent UNT and the EADP program. Any e-mails that are informal or unprofessional will not receive a response.

Department Mailbox

If you need to turn in an assignment outside of class time, you may bring the assignment to the Public Administration Office located in Room 204 in Chilton Hall during regular office hours (9-5). Please ask the assistant at the front desk to time stamp the assignment and to place it in the mailbox. It is also a good idea to e-mail me to confirm that I received the assignment. If the assignment is not time stamped and is turned in late,

points will be deducted based on the day I retrieve it from the mailbox.

Cheating and Plagiarism

As future emergency management officials, it is imperative to maintain the upmost level of integrity and honesty. Your actions are not only a reflection of your character, but the reputation of this program and university. Cheating and plagiarism will not be tolerated. The UNT definition and policy on cheating and plagiarism is found at the end of the syllabus. Plagiarism.Org, expands this definition to include:

- Turning in someone else's work as your own
- Copying words or ideas from someone else without giving credit
- Failing to put a quotation in quotation marks
- Giving incorrect information about the source of the quotation
- Changing words by copying the sentence structure
- Copying so many words or ideas from a source that it makes up the majority of the work, whether you give it credit or not (i.e. copying and pasting from a variety of sources and calling it your own, even if you use citations.)

At a minimum, any student caught cheating or plagiarizing on any assignment or exam will receive a zero and a full letter grade reduction in the course. The instructor also reserves the right to assign the student an automatic F in the course. All instances of cheating or plagiarism will be reported to the Department and University for further disciplinary action. Cheating and plagiarism are serious offenses and are unbecoming of future emergency managers and leaders of our communities. Engaging in this behavior not only reflects poorly on the student, but the department and University as well. There are no second chances. Please, if you have any questions about whether you are citing sources correctly or if you are unsure whether you are plagiarizing or not, come see me **before** you hand in the assignment. I am more than happy to help.

Student Behavior

All students are expected to conduct themselves in a professional manner at all times. Students are expected to be respectful to the instructor, fellow classmates, and guest speakers. Any behavior that is disruptive or disrespectful – including but not limited to – talking when the instructor or fellow classmate is speaking, listening to your i-pod, surfing the internet, checking Facebook, texting, talking on your cell phone, sleeping, etc. – will not be tolerated and the student will be asked to correct the behavior and/or asked leave the class. Additionally, no tobacco use of any form is permitted in class. Repeated offenses will result in a meeting with our program director and/or reporting to the College and University.

UNIVERSITY AND DEPARTMENT POLICIES

End of the Semester Evaluations

Required: The dates students can complete the Student Evaluation of Teaching Effectiveness are **November 18- December 8**. This is your opportunity to evaluate the instructor. Students can complete the on-line course evaluation at my.unt.edu

POLICY ON CHEATING AND PLAGIARISM

Notice of this policy shall be given in all public administration classes each semester, and written copies shall be available in the public administration office.

Definitions

The UNT Code of Student Conduct and Discipline defines cheating and plagiarism “as the use of unauthorized books, notes, or otherwise securing help in a test; copying other’s tests, assignments, reports, or term papers; representing the work of another as one’s own; collaborating without authority with another student during an examination or in preparing academic work; or otherwise practicing scholastic dishonesty.”

Penalties

Normally, the minimum penalty for cheating or plagiarism is a grade of “F” in the course. In the case of graduate departmental exams, the minimum penalty shall be failure of all fields of the exam. Determination of cheating or plagiarism shall be made by the instructor in the course, or by the departmental faculty in the case of departmental exams.

Cases of cheating or plagiarism on graduate departmental exams, papers, theses, or dissertations shall automatically be referred to the departmental Curriculum and Degree Programs Committee. Cases of cheating or plagiarism in ordinary course work may, at the discretion of the instructor, be referred to the Curriculum and Degree Programs Committee in the case of either graduate or undergraduate students. This committee, acting as an agent of the Department, shall impose further penalties, or recommend further penalties to the Dean of Students, if they determine that the case warrants it. In all cases, the Dean of Students shall be informed in writing of the case.

Appeals

Students may appeal and decision under this policy by following the procedure laid down in the UNT Code of Student Conduct and Discipline.

POLICY ON DISABILITY ACCOMMODATION

The Department of Public Administration, in cooperation with the Office of Disability Accommodation, complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. Please present your written accommodation request during regular office hours before the 12th class day of regular semesters (4th class day of summer sessions).

POLICY ON LAPTOPS AND CELL PHONES IN THE CLASSROOM

The classroom setting at an institution of higher learning is intended to serve as a venue that permits the transfer of knowledge and facilitates the sharing of ideas. As such, it is imperative that any distractions from these stated objectives be avoided and kept to a minimum. Potential disruptions include modern electronic devices such as laptop computers and cell phones.

Students are allowed to take notes on personal laptop computers to enhance the learning process, but they should not activate their internet browsers during class or use computers for non-academic purposes (as this diverts attention from the lecture/discussion for both the student using it and others nearby). Students should also avoid using cell phones to search the Internet or text while class is in session.

Exceptions to this policy will be at the discretion of the faculty only and may occur if searching the Internet is necessary to find additional information or facts related to the subject being covered on that particular day.

POLICY ON STUDENT BEHAVIOR IN THE CLASSROOM

Student behavior that interferes with an instructor's ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Center for Student Rights and Responsibilities to consider whether the student's conduct violated the Code of Student Conduct. The university's expectations for student conduct apply to all instructional forums, including university and electronic classroom, labs, discussion groups, field trips, etc. The Code of Student Conduct can be found at www.unt.edu/csrr.

TENTATIVE COURSE SCHEDULE AND READINGS

Below is a tentative schedule for the course. Every effort will be made to adhere to this schedule; however, the schedule may change depending on the needs of the class. Any changes to the schedule will be addressed in class.

- September 3** **Introduction to Course, Students
Review of Hazards and Disasters
What is Mitigation and Preparedness?**
- September 10** **Meteorological Hazards**
- September 17** **Meteorological Hazards (cont.) / Geologic Hazards**
- September 24** **Geologic Hazards / Technological Hazards**
- October 1** **Intro to Mitigation and Preparedness Techniques I**
***Assignment 1 Due*
- October 8** **Hazard Mitigation and Preparedness Tools and Techniques II**
Form Project Groups in Class
Exam Review
- October 15** **Midterm Exam**
- October 22** **Risk and Vulnerability Assessment: How to do it and what does it mean for planning?**
- October 29** **Preparing and Reviewing Plans Workshop**
Notify instructor what plan you want to evaluate.
***Assignment 2: Bridging Theory and Practice Paper Due*

- November 5** **Role of the Federal, State and Local Government**
- November 12** **Preparing and Reviewing Plans II**
**** Individual Plan Review Due (*Be sure to turn in both sections)**
- November 19** **Preparedness Policy / Preparing and Reviewing Plans III**
- November 26** **Building a Culture of Prevention / Review**
- December 3** **Class Presentations/ Review**
****Group Final Reports Due**
- December 10** **Final Exam 6:00-8:00 (**2 hour exam, regular class location)**

EADP 3035 Hazard Mitigation and Preparedness
Assignment 1: Stop Disasters Game: Learning, Entertainment, or Both?

Studies suggest that game-based learning can serve as a useful educational tool for teaching new concepts and ideas to various populations. For this assignment students will play and write a review of the “Stop Disasters Game.” The specific instructions for this assignment are as follows:

Step 1: Go to the Stop Disaster Game website at:
<http://www.stopdisastersgame.org/en/playgame.html>

Step 2: Play one of the 5 scenarios using the “Medium Difficulty” level.

Step 3: Write down what your mission is for the game. *You will need this for your evaluation of the game*

Step 4: Print off your final score as proof of completing the game. **Turn this in.**

Step 5: Write and turn in a 1.5 -2 page (double-spaced, 12 pt. Times New Roman, 1 inch margins) paper evaluating the usefulness of the game in educating the public about mitigation and preparedness strategies for the particular disaster scenario you played. Your evaluation should include the following elements:

1. *Introduction* –Briefly describe the setting, hazard, population, scenario, and mission.
2. *Description and Evaluation of Mitigation and Preparedness Tools* – Provide an overview of the mitigation and preparedness strategies presented in your scenario. Is the range of mitigation and preparedness strategies adequate? Why or why not? What other strategies would you include if you were to update the game?
3. *Overall Assessment* – What are the benefits of using a game like this to educate the public about mitigation and preparedness? Who would the appropriate audience be? What are the drawbacks? Would you recommend this game to emergency managers and the public? Why or why not?

This assignment is due at the beginning of class **October 1st**. Any assignment turned in during class after I have collected the papers on the due date will be subjected to a 3% penalty. Late assignments turned in after the due date will be accepted up to 1 week late with a 5% penalty per day (including weekends). No e-mail assignments will be accepted.

EADP 3035: Hazard Mitigation and Preparedness
Assignment 2: Bridging Theory and Practice Paper

One of Yogi Berra's famous quotes states: "In theory there is no difference between theory and practice. In practice there is." While this statement has roots outside the emergency management arena, it resonates with our field of study in that sometimes a disconnect exists between theory and practice. Bridging the gap between theory and practice is essential in our field, as both practitioners and scholars share common goals related to protecting the public from disasters.

For this assignment, you will select and read one scholarly article related to either mitigation or preparedness. The articles you may write your paper on will be posted in a folder named *Assignment 2 Readings* on Blackboard beginning September 10th. However, if you find another journal article you would like to review, you will need to send it to me for approval. Failure to do so may result in a zero on this assignment.

After selecting an article of interest, you will critically analyze the article and discuss how the findings and recommendations of the study can inform mitigation and/or preparedness practice. Your paper must include the following components:

1. A section (1-2 pages max) summarizing the purpose of the article. What is the focus of the paper? What are the research questions? What are the key findings/ points/ arguments the author make?
2. A section discussing the recommendations the authors make for the emergency management community.
3. As a future emergency manager, do you think the findings and recommendations of this study are useful? Are they something that is feasible? Why or why not? Use your knowledge from material covered in class to support your argument.
4. Based on your knowledge of hazards and emergency management, what research questions do you think scholars should pursue that would be useful in the promotion, implementation, and education related to mitigation and/or preparedness?

This paper should be **4-5 pages double spaced** 12-point Times New Roman Font with 1 inch margins all around. You will be graded on the content of the paper (70%), format and length (15%), and your ability to bridge ideas, concepts, and terminology presented in lecture and the readings (15%). Papers must be either stapled or paper-clipped otherwise they will receive a 5% penalty.

You may turn in the paper any class; however the final day to turn in the assignment is **October 29th**. Any assignment turned in during class after I have collected the papers on the final due date will be subjected to a 3% penalty. **E-mailed write-ups will not be accepted**. Assignments will be accepted up to 1 week after the final due however they will be penalized at 5% per day including weekends.

EADP 3035: Hazard Mitigation and Preparedness
Final Project: Hazard Mitigation Plan Review

Project Overview

For this project, you will have the opportunity to apply the concepts and materials covered in this course to review a local or state hazard mitigation plan. The objective of this project is to demonstrate thorough understanding of the basic requirements of a hazard mitigation plan, the context in which a plan is created, and apply concepts discussed in class to improve upon existing plans.

Project Steps

1. Project groups (3-4 students per group) will be formed in class **October 8th**. The instructor will not mediate over any group issues or grievances. However, the instructor may assign / modify the groups as necessary.
2. Each group is responsible for selecting a hazard mitigation plan to review. The instructor will provide some plans to choose from that will be posted on Blackboard. If you would like to review a plan other than one provided by the instructor, you **must** first get approval before continuing with the project. Groups that fail to get their selected plan approved by me will receive a 10% deduction from their final grade.
3. **Individually**, each student will review the plan using the techniques demonstrated in class. Each student will turn in a copy of their individual checklist packets at the beginning of class on **November 12th**. Then, group members will compare and synthesize the reviewed plan.
4. Each group will be responsible for a final report and project presentation described below. Project presentations are scheduled **December 3rd**.

Grading

Your final grade for this project will consist of four components: (1) Individual plan review, (2) Group plan review and report, (3) Group presentation, and (4) Group-member evaluations. Any late work will be accepted up to 1 week after the due date at a penalty rate of 5% per day, including weekends. Below is a breakdown of what each component is worth.

Individual plan review: 40%
Group plan review and report: 40%
Group presentations: 15%
Individual statement of project contribution: 5%

Individual Plan Review

The first part of this project is conducting an individual review of a single jurisdiction local hazard plan. After meeting with your group and selecting a plan to review, students will be required to use the Local Mitigation Plan Review Tool to evaluate a plan. This part of the process must be done individually – students who work as a group on this section will receive a zero for this part of the assignment.

Students will be required to turn in a **photo copy** of their individual Plan Review evaluation to the instructor on **November 12th**

*****Be sure to turn in both Section 1 and Section 2 of the formal plan evaluation. *****

Group Plan Checklist

Upon completion of the individual plan reviews, group members will meet and compare evaluations. The class period on **November 12th** is reserved for groups to complete this requirement. As a group, you will compare plan evaluations and derive one final plan evaluation that you will turn in with your final project. It is expected that there will be differences in evaluation scores and plan comments among group members – that is totally normal and common in the emergency management arena - so each group must then discuss their comments and decide on a final crosswalk for the plan. This final plan will be turned in with your final Group Plan Report (See Section 5 of the Group Plan for details).

Group Plan Report

Along with a copy of the group plan crosswalk, students will work together to create a final report. Specifically, this report must contain the following sections:

1. An introduction page that defines hazard mitigation and describes the purpose of this plan review. You should also identify the locale for which you are reviewing this plan.
2. A section describing your locale (city/county/state). You should include information about where this place is located (maps are encouraged). In addition, you will need to describe the area's demographic characteristics, physical geography, climate, existing infrastructure, economy, etc.
3. A section describing previous disasters events in your area. Be sure to include any Presidential Disaster Declarations that have been issued in your locale. The National Climate Data Center – Extreme Events Database and SHELDUS also include this information.
4. A section describing the hazard mitigation planning process.

- a. To what extent possible, describe how the locale went about creating the plan. In other words, who was responsible for the plan, what agencies assisted in the creation of this plan, when was this plan created, and what steps were taken in the development of this plan.
 - b. Describe the general approach to hazard mitigation planning advocated by FEMA (and discussed in class). How does this plan follow/deviate from this general approach?

5. A section that includes the formal Local Mitigation Plan Review as outlined by the Stafford Act and Title 44 Code of Federal Regulation (CFR) Part 201.
 - a. Here you will include your group's final assessment of the plan using the Local Mitigation Plan Tool (Both Sections 1 and 2).
 - b. A copy of each group member's individual checklists.

6. A section outlining your group's strategy for updating the plan. (2-3 pages)
 - a. If your team was tasked to update this plan how would you do it? What resources would you need? What stakeholders would you bring to the table? How would you engage the public? Where would you get information for conducting the risk and vulnerability assessment? What would be your proposed timeline for getting the draft completed?

FORMAT

There is no required format for the final report, however, the final product should be well organized, typed, in a consistent format, and free of grammatical errors. The final report should be between 10 and 20 pages double spaced. Feel free to include pictures, graphs, charts, maps, or other visuals that enhance the quality of this report (but do cite the sources for this information). Final reports will be due **December 3rd at the beginning of class**. I will provide a copy of my grading rubric for the report on blackboard in the weeks leading up to the project due date.

Group Presentations

The purpose of the group presentations is to share with your fellow students and your instructor the results of your plan review. These presentations will require you to use PowerPoint slides. Each presentation must discuss the 6 sections of the final report. Each group member must participate in this presentation (i.e. have equal speaking parts). Presentations will be given to the class **December 3rd**. The length of the presentation will depend on the number of groups; however expect to give a 10-12 minute presentation. More details about these presentations will be provided in class. I will provide a copy of my grading rubric for the presentation on blackboard in the weeks leading up to the presentations.

Project Contribution Statement

Each member of the group is expected to submit a detailed one-page summary (single spaced) describing his/her contribution and the contributions made by each member of the group. In other words, part of each student's grade on this project will be based on a peer review of group members' contributions to the project that will assess participants' attendance at group working meetings, submission of work as agreed, and useful insights or suggestions. Note that if a student does not adequately participate in group activities, with no genuine reason, he/she will score a **zero** on the group project. This final project contribution statement should not be included in the final report and must be turned in separately at the beginning of class **May 3rd**.