Session No. 1

Course Title: Disaster Planning and Policies

Session 1: Course Introduction: Orientation, Scope, Objectives, and Requirements

Time: 3 hrs

Learning Objectives:

1.1 Instructor Introduction
1.2 Describe and discuss the introductory documentary clip.
1.3 Describe the questions the instructor can raise and discuss with students about the documentary clip.
1.4 Discuss the course overview, purpose, and overall objectives.
1.5 Discuss the different phases of disaster management.
1.6 Discuss the importance of planning for disasters.
1.7 Discuss (overview of) policies and the roles of the local, state, and federal government.
1.8 Discuss the course modules and objectives.
1.9 Describe the course requirements and the criteria for evaluation
1.10 Discuss the instructional methodologies the instructor will employ and the reason for selecting them.
1.11 Describe and discuss the policies for the course and assignments.

Scope:

The first session is when the instructor introduces herself/himself to the class, conducts student introductions, goes over the main objectives for the class, presents the main issues and material that will be addressed in the class, describes assessment criteria and establishes clear expectations for student participation and conduct, including the completion of assigned work and evaluation criteria.
Student Reading:
Course texts and assigned readings are included for individual class sessions. Do not expect that students will have completed any assigned readings for this “course Introduction” class.

General Requirements:

The instructor developed course syllabus should be distributed to the students at the start of the class and will be referred to in the discussion of the objectives of the course. The syllabus should also be placed on Blackboard or an appropriate course website.

1.1 Instructor Introduction:

The instructor should introduce her/himself to the students and provide a brief background of her/his areas of teaching and research. The instructor can also upload this information before the start of the course on the course website.

Focus: Hazards and Disasters: Range, Scope and Social Implications

Recommended Readings For the Instructor:


- Articles from the Public Administration review special issue: Public Administration Review, Vol. 45, Special Issue: Emergency Management: A Challenge for Public Administration (Jan., 1985). Includes the following articles:
  - Emergency Management: A challenge for Public Administration. WJ Petak
  - A Framework for Integrated Emergency Management : D McLoughlin
  - Managing the Emergency response : TE Drabek
1.2 Describe and discuss the introductory documentary clip.

As an introduction to the course, the instructor can show a short video from either of the two clips (url links) given below, which are excerpts from a documentary by FEMA on mitigation planning.

Both videos discuss the importance of hazard mitigation planning before disasters strike, so that the recovery time is less and it also helps to unite the communities. The four phases of mitigation planning are discussed.

To illustrate these points, the first clip focuses primarily on hazard mitigation planning, what it means, how it can be undertaken, why it is important, and the benefits, both direct and indirect of such planning (i.e. uniting communities and inclusion of opinions, better preparation and more resiliency, with shorter recovery times).

http://www.youtube.com/watch?v=YzjWvn9oEBg

The second clip (url link below) also focuses on these issues and gives examples of ‘lessons learned’ from Florida (after Hurricane Andrews and Opal and other storms), Tulsa, Oklahoma (after a series of tornadoes), Napa, California (after a number of flood events), and in the city of Kingston, North Carolina (after floods); it discusses the steps they took to mitigate against future disasters. The Disaster Mitigation Act of 2000 and its main provision for mitigation planning is also addressed, along with a discussion on the benefits of planning.

http://www.youtube.com/watch?v=FH4rwKjlbac&feature=related

1.3 Describe the questions the instructor can raise and discuss with students about the documentary clip.

Based on these videos, you can raise and discuss as appropriate, the following questions with students?

1) What is hazard mitigation?

   Answer: Mitigation seeks to reduce, minimize or eliminate the risk to people and property from the effects or impacts of various hazards. Mitigation activities (such as moving properties out of a flood zone) are best if taken before a disaster. However, they are increasingly incorporated during the post-disaster period.
2) Why is planning important for mitigation?

Answer: Refer to video and the example of the family shown in the video. For the second clip, reference can be made to the devastation caused by hazards in the different states (for instance, by Hurricane Andrew/tornadoes), and how planning prior to the disaster could have helped. Also discuss how these disasters prompted mitigation planning in the post-disaster period.

3) What are the benefits of mitigation planning?

Answer: The benefits of mitigation planning, such as: (i) faster recovery from disasters; (ii) unity of communities; and (iii) engagement in a thorough (more inclusive) approach; and (iv) reduction of insurance premiums.

4) What are some of the possible challenges faced by communities in planning?

Answer: Issues can be brought up here that were not discussed specifically in the video clips. Starting with the example of the family shown in the clips, points can be raised asking students to think about why individuals/families might not plan in advance and then the example can be extended to the government or institutional level. Issues such as time, money (for mitigation), policy obstacles (lack of political will) can be raised, along with issues that students might bring up on individual or community challenges.

5) What kinds of policies could be adopted to help increase and incentivize planning?

Answer: Reference can be made to the second video clip, which discussed the steps taken in Florida after Hurricane Andrew in mitigation planning with funds provided by the Hazard Mitigation Grant Program (HMGP). A brief explanation can be given to students that this was a program initiated by the federal government to provide incentives to states to undertake mitigation planning. As discussed in the second clip, Florida used part of that money to plan and set up new programs after Hurricane Andrew. Also, discuss the Disaster Mitigation Act of 2000, which requires communities and governments to engage in mitigation planning as a condition of receiving grant money.

Let students know that these and a number of issues related to this discussion will be studied and analyzed in more detail during the course.

1.4 Discuss the course overview, purpose, and overall objectives.

Course Overview:
Refer to the course syllabus and provide the following overview that emphasizes what has led to increased vulnerabilities and what we can do reduce such vulnerabilities:

a. Demographic changes, human settlement patterns, land-use decisions, and political and social policy dynamics have increased vulnerability to natural and man-made disasters.

b. Planning and policy processes and interventions can help reduce disaster vulnerabilities and increase resilience at every stage of the disaster management cycle: disaster mitigation, preparation, response, and recovery.

**Purpose (see supplementary considerations section below):**

- Explain to students that vulnerability is a complex issue with multiple facets. Refer them to week 5 of the syllabus where you will focus on “Social, Economic and Political Vulnerabilities”

**Overall Objectives of the course:**

Refer to the course syllabus and review the eleven course objectives with the students:

1) Understanding of the roles of the various phases of disaster management and issues concerning planning and policies in those phases.
2) Understanding of comprehensive emergency management from a planning and policy perspective
3) Understanding of the role of federal, state, and local governments in disaster planning and policies.
4) Knowledge of mitigation planning and policy strategies.
5) Understanding of comprehensive emergency management and related plans
6) Understanding of factors affecting short and long-term recovery and rebuilding and the role of planners and policy-makers.
7) Understanding of the factors that give rise to disaster vulnerabilities (e.g. natural, physical, social, economic, policies, and governance).
8) Understanding of the factors that give rise to differential vulnerabilities and levels of community resilience
9) Knowledge and capabilities to assess and manage these vulnerabilities through disaster planning and policy-making.
10) Data, methods, tools, and geospatial techniques (including GIS) that can enhance vulnerability assessments and knowledge building.
11) Competencies to utilize mapping in mitigation planning and response operations
Supplemental Considerations:

- You can have students introduce themselves at this point. It is important that they say what their academic degree focus is if you have a multidisciplinary group. Otherwise, you can have each student say why they are interested in this type of course.
- If appropriate, you can build upon your earlier introduction by telling students how you became interested in the topic and the importance of diverse perspectives and approaches when dealing with disaster management and planning.
- Some of the students are hearing terms like vulnerability for the first time. Let them know that vulnerability matters and must be accounted for in all phases of disaster management.
- Let them know that vulnerability is defined differently based on the emphasis placed on the physical and/or socioeconomic dimensions – let them know that more on this topic is forthcoming in the class session that focuses on “Social, Economic and Political Vulnerabilities”
- You can also engage in a discussion about whether there are differences in vulnerability (differential vulnerability) among communities, families, home owners versus renters, and businesses.

1.5 Discuss the different phases of disaster management.

Remarks: This course is divided into four modules that correspond to the four traditional phases of disaster management. Have them flip through the syllabus to see the way the course content is organized as follows:

- Module 1: Disaster Mitigation: weeks 2-4
- Module 2: Preparedness and Planning: weeks 5-8
- Module 3: Disaster Response: weeks 9-11
- Module 4: Disaster Recovery and Rebuilding: weeks 12-15

Overview: Let students know that some people also refer to the four phases of disaster management as the four phases of emergency management

A. Definitions
   - Mitigation seeks to reduce, minimize or eliminate the risk to people and property from the effects or impacts of various hazards. Mitigation activities (such as moving properties out of a flood zone) are best if taken before a disaster. However, they are increasingly incorporated during the post-disaster period. The logic is that the post-disaster period is a window of opportunity to prepare for the next disaster event.
   Refer students back to the video clip which focused on the benefits of mitigation
planning, such as: (i) faster recovery from disasters; (ii) unity of communities; and (iii) engagement in a thorough (more inclusive) approach.

- Preparedness includes planning or preparation activities (such as disaster drills) to save lives and to help in response and rescue operations. An evacuation plan is an example of a preparedness plan.
- Response includes activities such as emergency sheltering, search and rescue and damage assessment. These actions can save lives. Recovery includes actions taken to return to normal to a safer and better situation following the disaster. The term is used interchangeably with reconstruction, rehabilitation and post-disaster redevelopment.
- Challenges and ongoing discussions – (i) moving beyond recovery as physical recovery of the damaged physical environment; accounting for societal recovery; small business recovery environmental recovery; (ii) indicators of community recovery and should communities return to the way they were before the disaster?

Supplemental Considerations --
Make mention of important national initiatives so that students appreciate the multi-governmental dimensions of these topics.

- Disaster Mitigation Act of 2000: “DMA 2000 (Public Law 106-390) provides the legal basis for FEMA mitigation planning requirements for State, local and Indian Tribal governments as a condition of mitigation grant assistance”. For more details, see http://www.fema.gov/library/viewRecord.do?id=1935

- Pre-Disaster Mitigation Grant Program: – “The Pre-Disaster Mitigation (PDM) program provides funds to states, territories, Indian tribal governments, communities, and universities for hazard mitigation planning and the implementation of mitigation projects prior to a disaster event”. For more details see http://www.fema.gov/government/grant/pdm/

- National Response Framework:– “presents the guiding principles that enable all response partners to prepare for and provide a unified national response to disasters and emergencies”. For more details, see http://www.fema.gov/emergency/nrf/

- National Disaster Recovery Framework Initiative: “The framework builds on scalable, flexible, and adaptable coordinating structures to align key roles and responsibilities, linking local, state, tribal and federal governments, the private sector, and voluntary, faith-based and community organizations that play vital roles in recovery”. For more details, see http://www.fema.gov/recoveryframework/
1.6 Discuss the importance of planning for disasters.

Overview:

A. What is planning? According to the American Planning Association, “Good planning helps create communities that offer better choices for where and how people live. Planning helps communities to envision their future. It helps them find the right balance of new development and essential services, environmental protection, and innovative change”. For more details on what planners do and the various specializations, see http://www.planning.org/aboutplanning/whatisplanning.htm

B. Why plan for disasters?
- Make reference to the video and the reference to planning in the following contexts:
  - Planning ahead of time allows communities to strengthen themselves against hazards
  - Planning is critical to successful growth and change of communities
  - Planning is a process; it does not end.
  - Additionally, planning and policy processes and interventions can help reduce disaster vulnerabilities and increase resilience at every stage of the disaster management cycle: disaster mitigation, preparation, response, and recovery.

C. What are some of the plans and implementation tools utilized?
- Plans (such as comprehensive plans, local emergency recovery plans)
- Development regulations (e.g. zoning ordinances)
- Building standards (e.g. building codes)
- Property acquisition (e.g. acquisition of damaged buildings)
- Critical and public facilities policies (e.g. location requirements for critical facilities)
- Taxation (e.g. impact fees)
- Information dissemination (e.g. public information program)

See Cooperating With Nature (Chapter 5) for more details

Supplemental Considerations: with a focus on challenges
- Multiple stakeholders and enabling true public involvement in the plan making processes
- The myriad of plan-making activities at the local levels (e.g. land use, transportation, evacuation, economic development etc.) and the need to consider local, state and federal initiatives and regulations. It is important to integrate disaster planning and
especially hazard mitigation planning in the broader context of community comprehensive planning efforts.

- Utilization of appropriate technologies such as Geographic information Systems, and having the most updated datasets

1.7 Discuss (overview of) policies and the roles of the local, state, and federal government.

Remarks: Several actors and institutions play a role in adopting, devising, and implementing policies in disaster management. Understanding the different players and their roles is important. Briefly discuss the following with regard to policies and the roles of different levels of government.

- To understand how policies developed in this field, explain that the Cold War had a profound and major impact on the development of emergency management as a government function and as a profession; the biggest threat was the prospect of a nuclear war. Damage and devastation caused by a succession of major hurricanes and earthquakes in the 1960s and 1970s encouraged more attention to natural disasters and in part were responsible for the creation of FEMA in 1979. Some of the issues that arose in making this new agency effective were the problems of coordination and effective leadership, which changed in the 1990s with the appointments of more experienced emergency management professionals in that decade. The focus in the 1990s was on hazard mitigation. In 2001, the terrorist attacks on 9/11 had a tremendous impact on the profession and the practice of emergency management, when the emphasis changed to battling terrorism. However, the importance of natural disaster management was revived and rediscovered after Hurricanes Katrina, Wilma, and Rita and the response that those hurricanes engendered. Issues related to the capacity, will, and competence to deal with catastrophic disasters of all sorts arose and the role of manager, mayors, governors, and presidents was recognized as being critical. More recent disasters such as the 2010 Deep Horizon oil spill introduced new concerns about the role of the private sector and its interaction with state and local government. Also, the growing emphasis on climate changes issues and its potential as a slow-onset disaster has led to increasing attention by local, state, and federal governments on the importance of hazard mitigation and disaster resiliency.

- There is a saying that “all disasters are local.” Point out that local governments and agencies are the first responders to disasters and for that reason, local capacity and capabilities are critical. There is also intended to be a bottom-up link in responses, going from the local to the state, and then to the federal level. However, point out that there is a wide variation across local agencies in terms of their organization, number of personnel, and size of operations. They range from having part-time coordinators
and volunteers with very few resources to local governments and agencies that are large, highly professional organizations with experienced and trained staff and bigger budgets.

When local governments get overwhelmed and the size of the emergency and disaster is beyond their capacity to handle or they need technical assistance or resources for mitigation, they call for assistance from state emergency management officials. The unevenness of local capabilities means that this varies across local governments and states and across disasters.

- States have more resources and power than local governments and state emergency management agencies are responsible for all phases of hazard mitigation and disaster preparedness, response, and recovery. The authority and responsibilities of state and local agencies are typically detailed in state law. For the most part, state emergency management agencies are responsible for coordinating the activities of other state and local agencies during disasters and assisting the governor in the exercise of his or her emergency powers. Governors are very important players as they are responsible for a number of issues, among them declaring and ending states of emergency, during which agencies are granted extraordinary powers to assure public safety. They also typically make requests to the federal government for assistance.

- Since the capacities and capabilities of state governments also vary, along with the type of disasters they face, they request federal assistance when damage exceeds their capacities or if other kinds of support and assistance are needed. To receive federal assistance and aid, it is the responsibility of the governor to send a formal request for that aid, which needs to specify the kinds of aid that are needed and to provide a reasonable damage assessment. To do so, the governor needs to work in concert with affected local communities and with local and state agencies.

- At the federal level, if need for assistance is adequately documented, the president may issue a **presidential disaster declaration** (PDD) that makes available a wide variety of federal aid and loan programs. The approval process for a PDD is political as well as administrative. The Federal Emergency Management Agency (FEMA) serves as the coordinating agency for federal aid and assistance. FEMA assumes the responsibility for setting up disaster assistance centers to deliver the aid in the affected communities. FEMA works with other federal agencies such as Housing and Urban Development (HUD) to aid local and state governments in response and recovery issues. FEMA and other federal actors also play a role in mitigation and preparedness phases of disaster management.

- Overall, coordination and cooperation in all dimensions, horizontal (among different agencies, governmental actors, the private and non-profit sectors and individuals) and vertical (among different levels of government) is critical for effective disaster management in all phases.
Supplemental considerations:

In addition to the national initiatives mentioned earlier, make mention of the National Incident Management System (NIMS), to highlight the multi-governmental dimensions and different players involved in disaster management.

-National Incident Management System (NIMS): “The National Incident Management System (NIMS) provides a systematic, proactive approach to guide departments and agencies at all levels of government, nongovernmental organizations, and the private sector to work seamlessly to prevent, protect against, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity, in order to reduce the loss of life and property and harm to the environment. NIMS works hand in hand with the National Response Framework (NRF). NIMS provides the template for the management of incidents, while the NRF provides the structure and mechanisms for national-level policy for incident management.” For more information, refer to http://www.fema.gov/emergency/nims/AboutNIMS.shtm.


1.8 Discuss the course modules and objectives.

As discussed earlier, the course modules reflect the four phases of disaster management.

Module 1: Disaster Mitigation: weeks 2–4.
Week 2: U.S. Disaster Policies: History and Institutions
Week 3: Mitigation Planning and Policy Strategies: Local, State, and Federal Level
Week 4: Measuring and Mapping Vulnerability

Objectives and description: You can briefly describe the objectives of this module and issues that will be covered. You can point out that this module covers issues related to disaster mitigation. To place disaster mitigation (and the different phases of emergency/disaster management) in context, the module begins with an overview of U.S. disaster policies, the history of U.S. disaster management, and the various institutions and actors involved. The second week of the module should focus on mitigation planning and policy strategies at the local, state, and federal level. The objective here is for the students to understand the importance of mitigation planning at all levels and how such planning relates to the other phases of disaster
management. The third week of this module transitions from mitigation planning to assessments of hazards and vulnerability that are needed for mitigation plans.

Module 2: Preparedness and Planning: weeks 5-8
Week 5: Social and Economic Vulnerabilities
Week 6: Community Resilience
Week 7: Emergency Management Planning
Week 8: Communication and Risk Management (Policies and Plans)

Objectives and Description: Students can flip to the pages covering this module to review the topics and material. The focus of this module is on the preparedness and planning phase. Preparedness and planning requires an understanding of a community’s vulnerability and the different dimensions and facets of vulnerability. While vulnerability concerns are important in all phases of disaster management, in Week 5, the different dimensions of the concept (social, economic, physical, and political) will be examined in more detail and their implications for disaster policies and planning will be discussed. Related to the concept of vulnerability is resilience. In Week 6, the definitions of this concept, its facets (such as social, economic, physical dimensions), measurements, and levels of resilience (individual, community, and institutional) will be discussed, with an emphasis on how resilience can affect all phases of disaster management and ways in which it can be fostered. Weeks 7 and 8 of this module will focus on planning for emergency management and developing communication and risk management plans. A sample emergency management plan will be reviewed and potential types of emergency management plans and their integration, application, and implementation will be discussed. The importance of communication and risk management for preparedness and other phases of disaster management will be highlighted and analyzed in Week 8. Good communication of risks and disasters both pre- and post-event is likely to have positive effects on public trust and confidence in leadership, and influence public expectations of government. Communication and coordination between organizations and different levels of government are also critical to the effective management of disasters. An example or two from recent disasters can be used to highlight these issues.

Module 3: Disaster Response: weeks 9-11
Week 9: Emergency Planning
Week 10: Supporting Emergency Response Operations Using Geospatial Techniques
Week 11: Coordination and Collaboration in Emergency Response Planning and Management
Objectives and Description: Disaster response includes activities such as search and rescue, debris clearance, emergency sheltering, and damage assessment. These responses can be critical in saving lives. This module will focus first on emergency planning for response and discuss guidelines for emergency response plans and standards for evaluation. A class visit/field trip to the local Emergency Operations Center (EOC) with a tour and guest lecturer from the EOC is recommended so students can develop an understanding of how these operations will operate. Damage assessment is increasing undertaken using geospatial techniques and some of these techniques will discussed and described in class. The last session of this module will discuss the needs for collaboration and cooperation in emergency response planning and management, analyze the challenges in doing so, and discuss the implications of collaboration and coordination (or the lack thereof) for the response and other phases of disaster management.

Module 4: Disaster Recovery and Rebuilding: weeks 12-15

Week 12: Recovery Time Frames and Differential Recovery Rates
Week 13: Long-Term Recovery
Week 14: Post-Disaster Recovery Planning and Reconstruction
Week 15: Post-Disaster Housing Planning

Objectives and Description: Students can be reminded again about how this phase links to the other phases of disaster management. Recovery as discussed earlier includes actions taken to return to normal to a safer and better situation following the disaster and the term is used interchangeably with reconstruction, rehabilitation and post-disaster redevelopment. In week 12, the readings and materials focus on issues in disaster recovery planning, restoration of infrastructure and lifelines, recovery of businesses, livelihoods, and schools, and differential recovery rates affected by pre- and post-disaster vulnerabilities and levels of resilience. In week 13, the focus is on long-term recovery and on the different factors that affect long-term recovery of communities. Over the long-term, recovery can change communities and issues of displacement, potential gentrification, degradation, and blight will be discussed. The readings and material for week 14 focus on how communities can build back better in looking at post-disaster reconstruction and planning. The discussion includes issues of holistic disaster recovery, social and psychological recovery, mitigation, and the creation of a national disaster recovery assistance framework. In week 15, issues related to post-disaster housing planning and policies are addressed, along with how lessons learnt from disaster lead to policy changes in the recovery period. You can also point out that this session will be used to conclude the discussion on the main materials for the course and to discuss the overall importance of disaster planning and policies.
Week 16: Final Exam: This should be discussed in the context of course requirements given below.

1.9 Describe the requirements for students and the criteria for evaluation.

Remarks: Refer to the section of the syllabus on “Class requirements”. Make sure that it is understood by the students. We recommend the following evaluation criteria and percentage points:

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<thead>
<tr>
<th>Grading Category</th>
<th>Percentage points</th>
<th>Comments</th>
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<tbody>
<tr>
<td>Class Participation</td>
<td>10%</td>
<td>Let students know that you will discuss this in more detail in a while</td>
</tr>
<tr>
<td>Quizzes</td>
<td>30%</td>
<td>Two in-class quizzes in Weeks 5 and 11. Quizzes can be structured as multiple-choice questions set for 20 minutes of class time.</td>
</tr>
<tr>
<td>Applied Research Project (15-20 pages) and 5-10 minute final presentation</td>
<td>30%</td>
<td>Review the applied research project as specified in “Class Requirements” section of syllabus. To be handed out during week 4 and handed in during week 16. Let students know that they will be required to present their projects in 5-10 minutes during the last week of the course.</td>
</tr>
<tr>
<td>Final Examination (short essay questions)</td>
<td>20%</td>
<td>Will be take-home exam handed out in 15 and due in week 16. The exam will be a combination of multiple choice and short essay answers, to cover course material during the full semester.</td>
</tr>
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1.10 Discuss the instructional methodologies the instructor will employ and the reason for selecting them.

Refer to the syllabus (Class Format). Instructors can structure the classes as a mix of lectures, class discussions, and student presentations depending on the level at which it is being taught. They could also request select guest speakers and a site visit to the local Emergency Operations Center for the topic on Emergency Operations Planning would benefit students. Instructors can also use e-portals such as Blackboard to post the syllabus, related websites, and other class
materials on a class website. Emphasize that student participation through reading, class discussion and submission of materials in time ensures a constructive and rewarding semester for all students.

1.11 **Describe and discuss the policies for the course and assignments.**

**Remarks: Refer to the sections of the course syllabus referring to:**

1) **Class participation** – Reinforce the following from the syllabus.
Points for class participation are not simply guaranteed by attendance; participation consists of being present in class, reading all assignments prior to the beginning of class, and being an active member in class discussions and presentations.

2) **Academic Honesty**

All the work that you submit must be your own. Plagiarism is a serious violation of the student honor code and will not be tolerated. Plagiarism will result in an “F” on the plagiarized paper, a possible “F” in the course, and may also lead to dismissal from the University. Refer students to university guidelines and provide the link/url: for example, the guidelines at [http://www.fau.edu/caupa/pdf/ethics_student_guidelines.pdf](http://www.fau.edu/caupa/pdf/ethics_student_guidelines.pdf).

3) **Students with Disability**

Remind students that if they require special accommodations due to a disability that they must register with the appropriate campus office. (Note: Most campuses have an Office for Students with Disabilities (OSD) or equivalent).

To end the session, students can be reminded about their tasks for the next session and the topic to be covered.