URPL 6645: Disaster and Climate Change Planning

URPL 6645 introduces graduate students to the concepts and debates that shape disaster and climate change planning. Students will learn how we can reduce risk and increase community resilience through plans and policy-making at the local, state, and federal level. The course has a lecture and workshop component. During lectures, students will learn about disaster history and theory; what defines vulnerability, risk, and resilience; the actors and institutions central to disaster management; programs that drive disaster management decisions, like the Disaster Mitigation Grant Program; tools and policies planners use to help communities plan for, and recover from disasters; and the linkages between disaster recovery and climate change adaptation, among other topics. In the workshop portion of the class, students will learn various hands-on skills for disaster and climate change planning, discuss readings, view relevant films, and work to complete class assignments.

Learning Objectives

If you fully engage in this course, meaning that you 1) read and reflect on assigned materials, 2) actively participate in seminar discussions, activities, and community engagements, and 3) complete your assignments with care, you should be able to:

1. Describe the foundations and key dimensions of disaster management;
2. Command a precise vocabulary for discussion and analysis of environmental hazards, disasters and climate change;
3. Understand the evolution of thought about disasters and their impacts on human populations;
4. Appreciate the interdisciplinary nature of the field of disaster management and recognize that disaster studies is necessarily an interdisciplinary endeavor;
5. Describe the social dimensions of vulnerability and resilience and understand the “progression of vulnerability” from root causes to unsafe conditions;
6. Evaluate public policy related to disaster management, and situate disaster management policy within broader discussions of sustainability, economic development, environmental planning and natural resource management;
7. Understand the hazards that most commonly affect communities in Colorado and the Mountain West, and major planning and policy approaches to them;
8. Describe the disaster recovery process and the interaction of local, state, and national institutions and policies in disaster recovery;
9. Understand the core elements of resilience theory and best practices in the areas of resilience planning.

Course Materials
All course readings are available on Canvas (ucdenver.instructure.com/login) or through links provided in the syllabus.

Course Requirements

Attendance: As a member of this seminar, you will be expected to attend each class and to arrive on time and well prepared. If you cannot attend class because of an illness or emergency, please email me before the beginning of class.

Participation: Your participation in seminar discussions, activities, small group discussions, peer-review sessions, and course evaluations is critical to the success of the class. I expect you to participate in ways that you find comfortable and rewarding. I also expect you to treat other seminar participants with courtesy and respect, and you should expect the same from me.

Assignments

1. What Went Wrong?

Write a 500-750 word essay that describes the disaster event you began researching in-class. Briefly, what happened? Why does the event qualify as a disaster? Describe the disaster in terms of the physical forces involved (the hazard) and its human, material, and economic impacts. Most important, what went wrong? What lessons were learned? Consult at least five sources of information and include a properly formatted bibliography.

2. Case Study in Hazard Mitigation and Resilience in Colorado

Choose one of the following communities in Colorado: Boulder, Colorado Springs, Evans, Grand Junction, Jamestown, or Estes Park. Write a 1,500-2,000 word paper that answers the following questions:

1. Briefly, what are the basic demographic characteristics of the community? Where is it located, what is the population, what is the chief economic activities, etc. This section should be no longer than 250 words.

2. Review your community's hazard mitigation plan (whether stand-alone or as part of a larger county/regional plan). What hazards pose the greatest threat to the community? If there have been historic disaster incidents in the community, you might briefly summarize them.

3. Choose one of the hazards that pose the greatest threat to your community. What assets (housing, infrastructure, critical facilities, historic and cultural resources, businesses, or population) are at risk? Make sure to describe your methodology. For example, if you overlay 100-year floodplain data on satellite imagery to determine flood risk, describe the steps you took and where you found your data.

4. Finally, make three recommendations for how your community might reduce disaster risk through planning, design, or community development. Make sure to justify your recommendations - how would the action or policy work to reduce risk and increase resilience?
For students from outside of planning, you may focus on recommendations based on your own disciplinary background and interests.

3. Research Paper & Presentation

Write a 3,500-4,000 word research paper (exclusive of references) on some aspect of disaster and/or climate change planning. The paper is an opportunity for you to conduct independent research that is relevant to your own academic/professional background, training, or area of interest. While you are free to choose any topic you find interesting, you will be assessed partly on how well you were able to integrate some of the course readings, lectures, and activities into your paper.

Your research paper should be formatted according to the guidelines in the syllabus and include a full bibliography.

4. Participation and Engagement

Your participation and engagement is crucial to the success of this seminar. We will discuss the details of participation more fully in class, but in general your participation will be evaluated based on your overall preparation, engagement, and contribution for class discussion and activities and timely completion of small assignments.