URPL 6645: Disaster and Climate Change Planning

Spring 2026 | Tuesdays 9:30 am - 12:15 pm | CU Building (CAP) Rm TBD

Instructor Info

Instructor: Shelley McMullen, PE, MPA, MURP, PhD Candidate
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Office hours: By appointment (on campus or Zoom)

Overview and Learning Objectives

How can planning policy help make households and communities more resilient to natural hazards and climate extremes? In this class, we will examine the theories, policies, and planning tools that are the foundation disaster and climate change planning. This course will mainly focus on planning in the United States context but includes some international cases. By the end of the semester, students will be able to:

1. Describe and operationalize theories and models of disaster and climate risk;
2. Understand the historical processes that produce contemporary geographies of risk;
3. Characterize the natural hazards that threaten communities;
4. Appreciate the interdisciplinary nature of disaster management;
5. Critically evaluate common planning tools and programs for hazard mitigation;
6. Evaluate the connections between local government land-use planning and long-term risk and resilience to natural hazards.

Acknowledging the Moment (and the Topic)

Disaster management and policy is continuously evolving, particularly during changes in governance and after catastrophic events. Topics/materials in this course may change slightly throughout the semester to explore current events related to disaster and climate policy and their implications on planning.

Many people choose to study or work in disaster management because they have personally experienced or have been impacted by a disaster. I ask that we all extend grace and kindness to one another whenever possible, particularly when addressing topics that may be sensitive. Please keep any shared stories confidential within the discussion of our classroom. If you have any concerns or feel uncomfortable with any topics, please contact me. Additionally, the Counseling Center is a valuable resource for students and provides ten free sessions to CU Denver students.

Required Textbooks and Materials

There are no required textbook purchases for this class. I will post PDFs of all assigned readings to the "Readings" folder (and linked in the syllabus below), which you can find in the Files section of this Canvas site. There is one documentary that you will need to rent from a streaming

site for less than $10. If this is a problem for anyone, I can set up a viewing time outside of class.

Class Structure, Schedule, and Time Commitment

Each week of this seminar will cover different topics related to natural hazards and climate change planning. While I will present slides, lectures will encourage seminar style discussion. Student participation will include instructor and student led seminar discussions, in-class activities, small group discussions, and engagement with guest lecturers. *On average, you should expect to spend 8-10 hours per week on this course.*

Assignments, Grading and Evaluation

This course requires you to complete a combination of weekly reading materials, writing assignments and serve once as a discussion lead. Details and specific instructions for the different assignments are described in their specific page on Canvas but are summarized below.

- Weekly discussion leads (10%): **Due by 9:30 am on the Monday** before the class to which you are assigned.
    - Each of you will be tasked with leading the class discussion based on that week's topic and assigned materials. Depending on the final size of the class, students will present in groups of 2 to 3.
    - Present a synthesis of the assigned readings with a brief power point (5 minutes). The PowerPoint should be uploaded to Canvas the Monday before class.
    - Engage other members of the class in a discussion of the topic through facilitation or a class activity (20-25 minutes).
- What went wrong? (10%): **Due to Canvas by February 9th**
    - Write a 500-750 word essay that describes a disaster event of your interest. Briefly describe what happened. Why does the event qualify as a disaster? Describe the disaster in terms of the physical forces involved (the hazard itself) as well as the human, environmental and economic impacts. Most important, what went wrong? What were the lessons learned?
- FEMA/Converge Trainings **Due to Canvas by February 23rd**
    - Please complete the **Broader Ethical Considerations for Hazards and Disaster Researchers** from Converge **and two more trainings of your choice from Converge or FEMA Incident Command 100 and 200**.
- Community resilience assessment: This 3-part, cumulative assignment will ask you to assess the natural hazard and climate risk of a community that you find interesting and propose land-use planning interventions that are well-suited to the local government context. You may also choose to focus on greenhouse gas emissions and mitigation planning. Further details in Canvas.
    - Part I (Due to Canvas by **March 4th** will ask you to complete a hazard identification for your community, using local sources of information and state hazards planning tools;
    - Part II (Due to Canvas by **April 6th** will ask you to analyze demographic and spatial data about socially vulnerable populations in your community;

    - Part III (Due to Canvas by **May 9th** will ask you to propose big- and small-picture land-use planning interventions that could mitigate the impacts of natural hazards and climate change in your community.
- Attendance and participation (30%): Because this course will be structured as a seminar that relies on active student participation, you are expected to attend and arrive promptly at each class, prepared to discuss the assigned materials and engage with guest lecturers. **If you do need to miss a class due to illness or emergency, please email me prior to class.**

Your final grade will be determined by:

Assignment	**Grade Share**
Discussion Lead	10%
What Went Wrong	10%
Converge/FEMA Training	5%
Community Resilience Assessments: Part I Part II Part III	 15% 15% 20%
Attendance and Participation	25%

Canvas

We will use Canvas as our central hub for all course-related materials and assignments, including:

- Inbox: You can use the Inbox to message me or you can email me directly. I respond more quickly to emails.
- Files: All course-related files will be stored in the Files section.
- Announcements: I will send time sensitive information through Announcements on Canvas. Make sure you have notifications turned on so that you see them.

Formatting

All writing assignments should be submitted with citations and formatting per APA Publication Manual 7th Edition (i.e., APA 7). Use 1.5 or double spacing and 11- or 12-point in any standard font style (Arial, Calibri, Times New Roman, etc.). Other specifics will be provided in the assignment page. I **highly encourage** using resources from the writing center on campus to help with editing your papers.

Late Assignments

I do not accept late assignments unless an extension is discussed prior to the assignment due date. Life happens! I just ask that you communicate early with me if you are struggling to meet a

deadline and I will work with you on an extension. In return, I will provide feedback on assignments within two weeks of submission.

Academic Honesty

The following is from the University Policies: "Students are expected to know, understand and comply with the ethical standards of the university." These standards include prohibitions against *academic dishonesty*, defined as a student's use of "unauthorized assistance with intent to deceive an instructor or other such person who may be assigned to evaluate the student's work in meeting course and degree requirements." Examples of academic dishonesty include, but are not limited to the following: plagiarism, cheating, fabrication and falsification, multiple submissions without faculty approval, misuse of academic materials, and complicity in academic dishonesty.

Bottom-line: cite your sources and be honest with your instructors and classmates. If you have any questions or concerns about plagiarism or academic dishonesty, please contact me.

Policy on using Artificial Intelligence Tools

I discourage the use of ChatGPT or other AI platforms/language models for this course but do not prohibit it. I fully recognize that it is both an accepted and powerful tool for tasks in other courses; however, I would like you to consider some of the ethical issues that are particularly relevant to this course. Inspired by the thinking of Olivia Stowell, a professor at the University of Michigan, below are some reasons why you might not want to refrain from using these platforms:

REASON 1: This course is designed to improve your writing skills. If you're not writing, you're not improving. Also, writing generates critical thinking and provides a deeper understanding of the topic. You are more likely to forget what you've learned if you aren't fully engaging.

REASON 2: Using Al opens up academic honesty issues, both because it raises the question of whether the work is actually "your" work, and also because tools like Claude and ChatGPT rely on uncompensated labor by lifting material from work produced by scholars (like your hardworking professors*).*

REASON 3: Using Al does not produce reliably accurate results. In fact, it is often downright incorrect.

REASON 4: AI has serious negative environmental impacts, particularly in relation to power, water and land use (see here, here, and here). This class explores potential devastating outcomes of negative environmental impacts.

REASON 5: OpenAI has exploited thousands and thousands of workers from the Global South, especially folks in prisons and refugee camps and workers in Kenya, the Philippines, Colombia, and elsewhere (see here, here, here, here, here, and here).

To put it more bluntly, there are thousands of people in the world who would love to be in your position: getting to be a student at a US research university with relatively small class sizes and prestigious faculty. Education like this is not available to everyone. Furthermore, someone is paying for you to be here (whether that's yourself, parents/relatives, scholarships/grants, loans, etc.). If you choose to spend this incredible -- and incredibly expensive -- opportunity to learn by trying to avoid doing the work and learning through the use of Al tools, you are only cheating yourself…oh, and knowingly contributing to deep environmental harms and labor exploitation in the process.

If after reading this, you nevertheless decide to use AI platforms/tools in your work, I require that you cite its use both in the sources/reference list and in the text itself. An in-text reference could say something like: (This paragraph/section was generated with the use of ChatGPT on January 1, 2025).

Professional Conduct

During this course I will expect students to treat each other with respect, and you should expect the same from me.

Accommodations

The University of Colorado Denver is committed to providing reasonable accommodation and access to programs and services to persons with disabilities. If you need accommodations due to a disability, please let me know and I will do my best to assist you, or find the right person to help reach the accommodations you need. Students with disabilities in-need of academic accommodations should register with Disability Resources and Services (DRS)

Weekly Topics and Assignments – Summary

Following is an overview of the weekly class topics, readings and assignments. The week-by-week modules include detailed information on each part of the class.

**Subject to change slightly depending on guest lecture availability.*

Week	Topic(s)	Assignments Due (See Canvas for weekly readings)
1 - Jan 19	Introduction	Introductory Questionnaire
2 - Jan 26	Disaster Thinking Across Time	Sign up for Discussion Lead
3 - Feb 2	Vulnerability	
4 - Feb 9	Resilience	What Went Wrong Essay
5 - Feb 16	US Disaster Management	
6 - Feb 23	Local Disaster Management	FEMA/Converge Trainings
7 - March 2	Recovery Planning *Guest Lecture - Colorado Governor's Office of Recovery* *Guest Lecture - A/C Disaster Recovery Consultant*	Community Resilience Part I
8 - March 9	Mitigation – Policies, Plans and Incentives *Guest Lecture - Colorado Disaster Housing Recovery Manager from DOLA (Colorado Department of Local Affairs)*	
9 - March 16	Land Use Planning for Hazards	
10 – March 23	Spring Break - NO CLASS	
11 – March 30	Global Climate Frameworks and Mitigation- Greenhouse Gas Emissions *Guest Lecture - Mitigation Planning Consultant*	Community Resilience Part II
12 - April 6	Mitigation – Storms, Floods and Sea Level Rise	
13 - April 13	Mitigation – Fire *Guest Lecture – Louisville Fire Marshall*	
14 - April 20	Mitigation – Heat and Drought *Guest Lecture*	
15 - April 27	Climate Adaptation – Planning for Resilience *Guest Lecture*	
16 – May 4	Course Wrap-up	Community Resilience Part III