

# **GEOG 3340/5340: Geography of Disasters & Emergency Management**

\*\*\*\*\* DRAFT: Subject to change by Aug 22. \*\*\*\*\*

Fall 2023      Units: 3      Prerequisites: none

**Lectures:**      M/W 1:25 pm – 2:45 pm, GC 4700

**Instructor:**    Tom Cova  
                      Email: cova@geog.utah.edu  
                      Office: GC 4730, Phone: 581-7930  
                      Office Hrs: TBD

**Text:** Haddow, G.D., Bullock, J.A., Coppola, P.P. (2021) *Introduction to Emergency Management*. Oxford: Elsevier.  
*Additional readings assigned via Canvas.*

## **Course description**

From 9/11 to the *COVID-19 Pandemic*, 21<sup>st</sup> Century disasters continue to expose strengths and weaknesses in our ability to prepare and respond to unexpected adverse events. As populations grow in all hazardous areas and new threats arise, the ability to reduce the impact of disasters is becoming ever more critical and challenging. *Emergency Management* is the application of science, technology, and management to the protection of life and property. The goal of emergency management is to reduce disaster losses by providing a framework that can be applied at all scales to identify, analyze, consider, implement and monitor a wide range of measures to ameliorate the impact of disasters. This is typically tied to four phases: *mitigation, preparedness, response and recovery*. The focus of the mitigation phase is reducing the impact of disasters before they happen. The emphasis in the preparedness phase is developing operational capabilities to respond to disasters. The response phase involves activating prior plans (in addition to significant improvisation), and the recovery phase is concerned with getting people safely home and rebuilding communities following a disaster.

This course will review the geography of historic and recent state, national and international disasters and introduce students to the rapidly evolving discipline of *Emergency Management*. Topics will include hazard processes, hazard assessment, human response to disasters, and the role of emergency management. An emphasis will be placed on geospatial technology and social media in managing disasters and the amazing pace with which it is changing (e.g. GPS, GIS, remote sensing, social media).

## **Grading**

Participation:	10% (on-line exercises)
Field trips (2):	10% (these will be virtual)
Assignments (5):	25%
Midterm:	20%
Project proposal	5%

Project presentation 10%  
Term paper/project: 20%

### **General guidelines:**

- 1) Exams must be taken at the time specified unless a valid, documented excuse is provided before the date of the exam.
- 2) Regular class attendance is required. The readings are designed to supplement the material presented in lectures. Attendance is necessary for the participation grade.
- 3) The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you need accommodations in this class, reasonable prior notice needs to be given to the instructor and the Center for Disabled Student Services, 581-5020 (voice of TDD).

GEOGR 5340 Credit: Students registering for 5000-level credit are required to complete an additional essay question on the midterm, and the final project will be held to a higher standard.

### **Term paper guidelines**

**Subject:** The term paper subject will be agreed upon by each student and instructor as indicated by the feedback received from the term paper proposal (see below). While it is possible to deviate from the proposed topic specified in the proposal, this should only be done after consultation with the instructor, and a new proposal will need to be submitted.

**Length:** The term paper should be between 15 and 20 pages in length (double-spaced), including tables, figures, and bibliography.

**Sources:** A good variety of sources should be used in developing the paper, including secondary sources such as books, articles, reports, and census data, as possible primary sources if appropriate (e.g. interviews, field surveys, GPS data).

### **Papers are due by Friday, December 11<sup>th</sup>, 5:00 pm**

**Proposal:** A written project/paper proposal must be turned in on **October 29<sup>th</sup>**. This should be typed, double-spaced, and at most two pages in length. It should contain a description of the topic, a tentative outline of the paper, and 3-5 sources (e.g books, articles, reports). The topic of the term paper is your choice but should follow one of the formats below:

- 1) Select a particular disaster and review the event from an emergency management perspective. What happened and why? How was it managed? What mitigation was done before (if any) and after the disaster (if any)? What took place during each of the

four phases of emergency management? What could have been done better? What has been implemented since because of the event?

- 2) Choose a particular theme within emergency management (e.g. protective actions, geospatial tools, urban search and rescue, insurance, disaster resilient communities) and review the historical developments, current state of the art and future of this thematic area.
- 3) Propose something else – new ideas for projects are welcome. If you would like to use skills acquired in other courses (e.g. GIS, cartography, field work, organizational behavior, social network analysis), that's great but verify your project idea in advance.

### **Course Outline**

### **Readings (Haddow) (more reading via Canvas)**

Introduction to emergency management	Chapter 1
Natural and Technological Hazards & Risk Assessment	Chapter 2
Mitigation	Chapter 3
Preparedness	Chapter 4
Crisis and Risk Communication	Chapter 5
Response	Chapter 6
Recovery	Chapter 7
International Disaster Management	Chapter 8
Terrorism and Homeland Security	Chapter 9
The Future of Emergency Management	Chapter 10

**Safety & Wellness:** The University of Utah values the safety of all campus community members. To report suspicious activity or to request a courtesy escort, call campus police at 801-585-COPS (801-585-2677) this number will get you to a dispatch officer at the University of Utah Department of Public Safety (DPS; [dps.utah.edu](http://dps.utah.edu)). You will receive important emergency alerts and safety messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit [safeu.utah.edu](http://safeu.utah.edu).

The University of Utah seeks to provide a safe and healthy experience for students, employees, and others who make use of campus facilities. In support of this goal, the University has established confidential resources and support services to assist students

who may have been affected by harassment, abusive relationships, or sexual misconduct. A detailed listing of University Resources for campus safety can be found at <https://registrar.utah.edu/handbook/campussafety.php>  
Your well-being is key to your personal safety. If you are in crisis, call 801-587-3000; help is close.

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**ADA Statement:** The Americans with Disabilities Act. The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. If you will need accommodations in this class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, (801) 581---5020. CDS will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in an alternative format with prior notification to the Center for Disability Services. \*

**Sexual Misconduct:** Addressing Sexual Misconduct. Title IX makes it clear that violence and harassment based on sex and gender (which Includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran’s status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801--- 581---8365, or the Office of the Dean of Students, 270 Union Building, 801---581---7066. For support and confidential consultation, contact the Center for Student Wellness, SSB 328, 801-581--7776. To report to the police, contact the Department of Public Safety, 801-585--2677(COPS).

**Code of conduct:** Students must produce their own assignments, as well as their own proposal, presentation, and final paper. The Student Code for the University of Utah can be found at: <http://regulations.utah.edu/academics/6---400.php>

**Student names/pronouns:** Class rosters are provided to the instructor with the student’s legal name as well as “Preferred first name” (if previously entered by you in the Student Profile section of your CIS account, which managed can be managed at any time). While CIS refers to this as merely a preference, I will honor you by referring to you with the name and pronoun that feels best for you in class or on assignments. Please advise me of any name or pronoun changes so I can help create a learning environment in which you, your name, and your pronoun are respected. If you need any assistance or support, please reach out to the LGBT Resource Center.  
[https://lgbt.utah.edu/campus/faculty\\_resources.php](https://lgbt.utah.edu/campus/faculty_resources.php)

**Diversity/inclusivity:** It is my intent that students from all diverse backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally or for other students or student groups. In addition, if any of our class meetings conflict with your religious events, please let me know so that we can make arrangements for you. (Source: University of Iowa College of Education)

**Undocumented students:** Undocumented Student Support. Immigration is a complex phenomenon with broad impact—those who are directly affected by it, as well as those who are indirectly affected by their relationships with family members, friends, and loved ones. If your immigration status presents obstacles to engaging in specific activities or fulfilling specific course criteria, confidential arrangements may be requested from the Dream Center. Arrangements with the Dream Center will not jeopardize your student status, your financial aid, or any other part of your residence. The Dream Center offers a wide range of resources to support undocumented students (with and without DACA) as well as students from mixed-status families. To learn more, please contact the Dream Center at 801.213.3697 or visit [dream.utah.edu](http://dream.utah.edu).

**Faculty and student responsibilities:** The students and instructor are expected to attend class each week and complete the in-class assignments. Students can also ask questions of each other remotely or through Canvas, as well as to the instructor of course (best email is [cova@geog.utah](mailto:cova@geog.utah)).