EADP 2030: Climate Change Resilience

Instructor Information

Instructor: Dr. Elyse Zavar **Pronouns:** she/her

Office Hours: Thursday 11-12:30pm or by appointment

Office Location: Chilton Hall 302 E

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Communication Expectations: Canvas is our learning management system and all assignments, lectures, grades and course-related material will be communicated through Canvas. Email is the best contact method. I generally respond within 24-hours during the week (48-hours on the weekend). Graded materials are typically returned within one to two weeks following the due date depending on the length of the assignment. Check your UNT email regularly for updated course information. When sending an email, include a subject line, greeting, the course number, and sign it with your name. By practicing your email communication with your instructors and fellow classmates now, you'll be more prepared for your career after college. Check out these links for help with Writing Professional Emails or Online Communication Tips.

Course Description, Structure, and Objectives

Course Description

Introduction to the study of how communities adapt to and protect against a changing climate. This course explores the impact of climate change on people, infrastructure, and the environment. Emphasis will be placed on climate-induced hazards and disasters and how individuals and communities can increase their resilience to these threats. *No Prerequisites.*

Course Structure

This course will be delivered face to face; however, there are some weeks we will not meet in person, rather students will complete an activity remotely via Canvas (see course calendar for details).

Course Objectives

By the end of the course, successful students will be able to:

- Identify the hazards and disasters changing under a warming climate.
- Outline strategies that communities are implementing to adapt to emerging and shifting hazard risks.
- Explore how communities practice equitable climate adaptation.
- Identify strategies for increasing resilience to climate change and associated hazards.
- Practice data analysis, written communication, and presentation skills.

Required Materials

All assigned readings are required and due dates are listed on the course calendar. Portions of the required readings are meant to augment, not mirror, the lectures and class discussions- which means keep up with the readings regardless of how much time is devoted to them on any one class day.

- Lizarralde, Gonzalo. 2021. Unnatural Disasters: Why Most Responses to Risk and Climate Change Fail but Some Succeed. Columbia University Press.
- Additional and supplemental readings will be posted on course website and are listed in the course calendar.

Technical Assistance

Here at UNT we have a Student Help Desk that you can contact for help with Canvas or other technology issues.

- helpdesk@unt.edu
- 940-565-2324
- In Person: Sage Hall, Room 130 Walk-In Availability: 8am-9pm
- Laptop Checkout: 8am-7pm

For additional support, visit Canvas Technical Help

Technology Disruptions

The University is committed to providing a reliable online course system to all users. However, in the event of any unexpected server outage or any unusual technical difficulty, which prevents students from completing a time sensitive assessment activity, the instructor will extend the time windows and provide an appropriate accommodation based on the situation. Students should immediately report any problems to the instructor and contact the UNT Student Help Desk: helpdesk@unt.edu or 940.565.2324 and obtain a ticket number. The instructor and the UNT Student Help Desk will work with the student to resolve any issues at the earliest possible time.

Supporting Your Success and Creating an Inclusive Learning Environment

Every student in this class should have the right to learn and engage within an environment of respect and courtesy from others. We will discuss our classroom's habits of engagement and I also encourage you to review UNT's student code of conduct so that we can all start with the same baseline civility understanding (Code of Student Conduct).

Rules of Engagement

Rules of engagement refer to the way students are expected to interact with each other and with their instructors. Here are some general guidelines:

- While the freedom to express yourself is a fundamental human right, any communication that utilizes cruel and derogatory language on the basis of race, color, national origin, religion, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information, veteran status, or any other characteristic protected under applicable federal or state law will not be tolerated.
- Treat your instructor and classmates with respect in any communication online or face-to-face, even when their opinion differs from your own.
- Ask for and use the correct name and pronouns for your instructor and classmates.
- Speak from personal experiences. Use "I" statements to share thoughts and feelings. Try not to speak on behalf of groups or other individual's experiences.
- Use your critical thinking skills to challenge other people's ideas, instead of attacking individuals.
- Avoid using all caps while communicating digitally. This may be interpreted as "YELLING!"
- Be cautious when using humor or sarcasm in emails or discussion posts as tone can be difficult to interpret digitally.
- Avoid using "text-talk" unless in an informal drop in office hour setting.
- Proofread and fact-check your sources.

See these Engagement Guidelines for more information.

Assessing Your Work

Grading Scale

A: 90% or greater C: 70-79.9% F: 0-59.9%

B: 80-89.9% D: 60-69.9%

Your grades in this course are earned, at the end of the semester I only report earned credit. I will **not** add any points or tenths of a point to your grade. I will not respond to any emails at the end of the semester asking for unearned points to boost your grade or extra credit opportunities.

Course Requirements/Schedule

15% Assignment 1: Analyzing Extreme Weather over Space & Time

15% Assignment 2: Guest Speaker Discussion

40% Assignment 3: Unnatural Disasters Reading Response

30% Final Project

Assignment 1: Analyzing Extreme Weather over Space & Time

In 2004, researchers calculated how human-caused climate change influenced an extreme weather event, specifically the deadly 2003 heatwave in Europe. While indicated by researcher for years, this article was the first scientific calculation that showed how much worse the extreme event was due to the warmer global temperatures. Since then, hundreds of additional studies across the global have analyzed different extreme weather events to understand how climate changed influenced their severity and impacts. Carbon Brief has collected these studies and mapped them for public use. For assignment 1, use the Carbon Brief data to first summarize how climate change has impacted extreme weather events across the world by event type, geography, and time. Next, select one country and analyze the types of events influenced by climate change, or not, and compare your selected countries' experience with others in the region and globally. See Canvas for assignment details and calendar for specific due dates.

Assignment 2: Guest Speaker Discussion

Throughout the semester, we will welcome guest speakers virtually and/or in-person into the classroom to discuss their experiences related to climate adaptation. Being in attendance for the guest speaker and remaining engaged to their presentation are part of this grade. Prior to each speaker, you will be assigned a reading relevant to their work to prepare for their visit. As part of your preparation, you will write 4 discussion questions for each speaker and submit them ahead of time via Canvas for a grade. The questions should be informed, thoughtful, and relevant to the speaker/class and will be graded on these criteria. Students are expected to ask one question to one guest speaker during the semester for full credit. See Canvas for assignment details and calendar for specific due dates.

Assignment 3: Unnatural Disasters Chapter Reflections

This semester we will read Lizarralde's Unnatural Disasters where he presents his own experiences and case studies set amongst seminal research in the field of disaster science and climate adaptation. Although this book is written for a general pubic audience, he presents many ideas, arguments, and observations rooted in foundational disaster risk reduction research. For this assignment, you will respond to reflection questions for each Unnatural Disasters reading assignment to help guide your readings and reflect on the material. These reflection questions will also serve as a starting point to aid in class discussions on the readings. See calendar for specific due dates.

Final Project

Public outreach and education are a cornerstone of emergency management. For this final assignment, draw on class materials across the semester to develop a public outreach campaign related to climate adaptation to

reduce disaster risk. Working in small groups, you will develop a purpose of the public outreach campaign, targeted audience, messaging, and presentation materials. Using the FEMA Good Ideas Book on public outreach for help in guiding your campaign development. Final deliverables include a 30-second radio clip and 3 graphics for a social media campaign that will be shared with the class via a group PowerPoint. See calendar for specific due dates.

Course Calendar

All assignment due dates are at the beginning of class on the date listed unless otherwise noted. Calendar subject to change with warning-- Note students will be notified by Eagle Alert if there is a campus closing that will impact a class Emergency Notifications and Procedures Policy (PDF)).

Week 1 (Aug 18 & 20): Introduction to Course

- Review of Syllabus
- Class overview, expectations, and rules of engagement
- Due Aug 25: read syllabus

Week 2 (Aug 25 & 27): Climate Change Science

- Introduction to Earth Systems & Feedback Cycles
- Proxy Records and Climate Modeling
- Due Sept 3: Lizarralde Chapters 1 & 2 and reflection

Week 3 (Sept 1): Labor Day- No class

(Sept 3): Hurricane & Floods in a Warming Climate

- Discuss reflection
- hazards of sea level rise and warming atmospheres for coastal communities
- Due Sept 10: read Madagascar Famine

Week 4 (Sept 8 & 10): Drought, Wildfires & Famine as a Climate-induced Disasters

- Hazards of extreme heat, crop loss, and famine fueled by warming climates
- Due Sept 17: Lizarralde Chapters 3 & 4 and reflection

Week 5 (Sept 15 & 17): What is "Resilience"?

- Sept 15: Burning Documentary- Australia bushfires of 2019-2020
- Discuss reflection
- Due Sept 22: Assignment 1 and read How Climate Change May Be Contributing to Our Political Instability

Week 6 (Sept 22 & 24): Climate Change, Political Instability & Terrorism

- Linking political instability and the potential for terrorism with climate change
- Paris 2015 terrorist attacks and COP 21
- The Age of Consequences (2016)
- Due Sept 29: Lizarralde Chapters 5 & 6 and reflection

Week 7 (Sept 29 & Oct 1): Population Impacts & Climate Refugees

- Hazard risk displacing populations
- Planet SOS from Palau to Alaska: Where Will Climate Refugees Go When The Tide Rises? (2019)
- Discuss reflection
- Due Oct 6: read Aircraft turbulence is worsening with climate change

Week 8 (Oct 6 & 8): Reimagining Cities

- Adapting the built environment & relocating infrastructure
- Due Oct 15: Discussion Questions- Parsons

Week 9 (Oct 13 & 15): Adaptation in the Pacific Region

- Oct 15: Dr. Melissa Parsons
- Due Oct 20: Discussion Questions- Gibson

Week 10 (Oct 20 & 22): Coastal Adaptation to Sea Level Rise

- Oct 20: Leah Gibson
- Elevations, Relocations, Managed retreat & Buyouts
- Due Oct 27: Lizarralde Chapters 7 & 8 and reflection
- Due Oct 29: Discussion Questions- Ajibade

Week 11 (Oct 27 & 29): Protecting Ecosystems as Hazard Mitigation

- Green infrastructure and relocating nature
- Discussion reflection
- Oct 29: Dr. Jola Ajibade
- Readings for next week:
 - Sakakibara, Chie. 2008. "'Our Home Is Drowning': Iñupiat Storytelling and Climate Change in Point Hope, Alaska." *Geographical Review* 98(4): 456–75. http://www.jstor.org/stable/40377348.

Week 12 (Nov 3 & 5): Commemoration as Resilience

- Commemorating places lost to climate change
- Due Nov 10: Discussion Questions- Greer
- Due Nov 12: Identify final project groups

Week 13 (Nov 10 & 12): TBD

- Nov 10: Dr. Alex Greer
- Due Nov 17: read Shannon Van Zandt, 2020. Resilience is Rawlsian. In: Engaged Research for Community Resilience to Climate Change, (eds) Shannon Van Zandt, Jaimie Hicks Masterson, Galen D. Newman, Michelle Annette Meyer. pgs 27-40.

Week 14 (Nov 17 & 19): Climate Justice

Protecting the most vulnerable

Week 15 (Nov 24 & 26): Thanksgiving Break- No classes

Week 16 (Dec 1 & 3): Looking to a Resilient Future

Due Dec 8 Final Project Group Presentations & peer contribution review

(Dec 8): Final Exam- Present Final Projects

Attendance and Participation

Research has shown that students who attend class are more likely to be successful. If you run into challenges that require you to miss a class, please contact me as soon as possible. Students are expected to regularly check email/Canvas announcements. Please stay current with the module, the material moves quickly and it is difficult to catch up once you fall behind.

GenAl Course Policy

In this course, I want you to engage deeply with the materials and develop your own critical thinking and writing skills. For this reason, the use of Generative AI (GenAI) tools like Claude, ChatGPT, and Gemini are not permitted. While these tools can be helpful in some contexts, they do not align with our goal of fostering the development of your independent thinking. Using GenAI to complete any part of an assignment, exam, or coursework will be considered a violation of academic integrity, as it prevents the development of your own skills, and will be addressed according to the Student Academic Integrity policy.

Department Policies

End of the Semester Evaluations

<u>Required:</u> The dates students can complete the SPOT assessment are **the final two weeks of the semester.** This is your opportunity to evaluate the instructor. Students can complete the on-line course evaluation at my.unt.edu

Cheating and Plagiarism Policy and Definitions

Department and University regulations regarding academic honesty will be strictly enforced. The <u>UNT Code of Student Conduct and Discipline</u> 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.

Cheating and plagiarism will <u>not</u> be tolerated in this course. A student caught cheating or plagiarizing, or knowingly assisting, will receive a zero on the assignment and an "F" for the course. I also will report the student(s) to the Office of Academic Integrity for further review.

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 Emergency Management and Disaster Science 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 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.

UNT Policies

Academic Integrity Policy

Academic Integrity Standards and Consequences. According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University.

ADA Accommodation Statement

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time; however, ODA notices of reasonable accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information, refer to the Office of Disability Access website (http://www.unt.edu/oda). You may also contact ODA by phone at (940) 565-4323.

 To connect with the <u>Office of Disability Access</u> to begin the registering process visit: https://studentaffairs.unt.edu/office-disability-access

Prohibition of Discrimination, Harassment, and Retaliation (Policy 16.004)

The University of North Texas (UNT) prohibits discrimination and harassment because of race, color, national origin, religion, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information, veteran status, or any other characteristic protected under applicable federal or state law in its application and

admission processes; educational programs and activities; employment policies, procedures, and processes; and university facilities. The University takes active measures to prevent such conduct and investigates and takes remedial action when appropriate.

Emergency Notification & Procedures

UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to Canvas for contingency plans for covering course materials.

Retention of Student Records

Student records pertaining to this course are maintained in a secure location by the instructor of record. All records such as exams, answer sheets (with keys), and written papers submitted during the duration of the course are kept for at least one calendar year after course completion. Course work completed via the Canvas online system, including grading information and comments, is also stored in a safe electronic environment for one year. Students have the right to view their individual record; however, information about student's records will not be divulged to other individuals without proper written consent. Students are encouraged to review the Public Information Policy and the Family Educational Rights and Privacy Act (FERPA) laws and the University's policy. See UNT Policy 10.10, Records Management and Retention for additional information.

Acceptable Student Behavior

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 Dean of Students 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. Visit UNT's Code of Student Conduct (https://deanofstudents.unt.edu/conduct) to learn more.

Access to Information - Eagle Connect

Students' access point for business and academic services at UNT is located at: my.unt.edu. All official communication from the University will be delivered to a student's Eagle Connect account. For more information, please visit the website that explains Eagle Connect and how to forward e-mail Eagle Connect (https://it.unt.edu/eagleconnect).

Student Evaluation Administration Dates

Student feedback is important and an essential part of participation in this course. The student evaluation of instruction is a requirement for all organized classes at UNT. The survey will be made available during weeks 13, 14 and 15 [insert administration dates] of the long semesters to provide students with an opportunity to evaluate how this course is taught. Students will receive an email from "UNT SPOT Course Evaluations via IASystem Notification" (no-reply@iasystem.org) with the survey link. Students should look for the email in their UNT email inbox. Simply click on the link and complete the survey. Once students complete the survey they will receive a confirmation email that the survey has been submitted. For additional information, please visit the SPOT website (http://spot.unt.edu/) or email spot@unt.edu.

Sexual Assault Prevention

UNT is committed to providing a safe learning environment free of all forms of sexual misconduct, including sexual harassment sexual assault, domestic violence, dating violence, and stalking. Federal laws (Title IX and the Violence Against Women Act) and UNT policies prohibit discrimination on the basis of sex, and therefore prohibit sexual misconduct. If you or someone you know is experiencing sexual harassment, relationship

violence, stalking, and/or sexual assault, there are campus resources available to provide support and assistance. UNT's Survivor Advocates can assist a student who has been impacted by violence by filing protective orders, completing crime victim's compensation applications, contacting professors for absences related to an assault, working with housing to facilitate a room change where appropriate, and connecting students to other resources available both on and off campus. The Survivor Advocates can be reached at SurvivorAdvocate@unt.edu or by calling the Dean of Students Office at 940-565- 2648. Additionally, alleged sexual misconduct can be non-confidentially reported to the Title IX Coordinator at oeo@unt.edu or at (940) 565 2759.

Academic Support & Student Services

Mental Health

UNT provides mental health resources to students to help ensure there are numerous outlets to turn to that wholeheartedly care for and are there for students in need, regardless of the nature of an issue or its severity. Listed below are several resources on campus that can support your academic success and mental well-being:

- Student Health and Wellness Center (https://studentaffairs.unt.edu/student-health-and-wellness-center)
- Counseling and Testing Services (https://studentaffairs.unt.edu/counseling-and-testing-services)
- UNT Care Team (https://studentaffairs.unt.edu/care)
- UNT Psychiatric Services (https://studentaffairs.unt.edu/student-health-and-wellness-center/services/psychiatry)
- Individual Counseling (https://studentaffairs.unt.edu/counseling-and-testing-services/services/individual-counseling)

Chosen Names

A chosen name is a name that a person goes by that may or may not match their legal name. If you have a chosen name that is different from your legal name and would like that to be used in class, please let the instructor know. Below is a list of resources for updating your chosen name at UNT.

- UNT <u>Records</u>
- UNT ID Card
- UNT <u>Email Address</u>
- Legal Name

Pronouns

Pronouns (she/her, they/them, he/him, etc.) are a public way for people to address you, much like your name, and can be shared with a name when making an introduction, both virtually and in-person. Just as we ask and don't assume someone's name, we should also ask and not assume someone's pronouns.

You can add your pronouns to your Canvas account so that they follow your name when posting to discussion boards, submitting assignments, etc.

Below is a list of additional resources regarding pronouns and their usage:

- o What are pronouns and why are they important?
- o How do I use pronouns?
- o How do I share my pronouns?
- o How do I ask for another person's pronouns?
- o How do I correct myself or others when the wrong pronoun is used?

Additional Student Support Services

- Registrar (https://registrar.unt.edu/registration)
- Financial Aid (https://financialaid.unt.edu/)
- Student Legal Services (https://studentaffairs.unt.edu/student-legal-services)
- Career Center (https://studentaffairs.unt.edu/career-center)

- Multicultural Center (https://edo.unt.edu/multicultural-center)
- Counseling and Testing Services (https://studentaffairs.unt.edu/counseling-and-testing-services)
- Pride Alliance (https://edo.unt.edu/pridealliance)
- UNT Food Pantry (https://deanofstudents.unt.edu/resources/food-pantry)

Academic Support Services

- Academic Resource Center (https://clear.unt.edu/canvas/student-resources)
- Academic Success Center (https://success.unt.edu/asc)
- UNT Libraries (https://library.unt.edu/)
- Writing Lab (http://writingcenter.unt.edu/)