EADP 2030: Climate Change Resilience

Instructor Information

Instructor: Dr. Elyse Zavar  
Pronouns: she/her  
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Teaching Assistant: Wesley Lysaght (WesleyLysaght@my.unt.edu)  
Pronouns: he/him

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 and 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.
• Additional and supplemental readings will be posted on course website and are listed in the course calendar.

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](https://deanofstudents.unt.edu/conduct))

Assessing Your Work

**Grading Scale**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>90% or greater</td>
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<tr>
<td>B</td>
<td>80-89.9%</td>
</tr>
<tr>
<td>C</td>
<td>70-79.9%</td>
</tr>
<tr>
<td>D</td>
<td>60-69.9%</td>
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<tr>
<td>F</td>
<td>0-59.9%</td>
</tr>
</tbody>
</table>

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

10% Assignment 1: Leeside Climate Haven - A Resident’s Perspective  
15% Assignment 2: Grow Smart  
15% Assignment 3: Commemoration as Resilience  
20% Discussion Questions  
20% Midterm  
20% Final

**Assignment 1: Leeside Climate Haven - A Resident’s Perspective**  
Using the fictional town of [Leeside, USA](https://www.example.com) in 2057, students will analyze the climate adaptation strategies used to create a “Climate Haven” and the challenges of the process. After reading the history of Leeside and the embedded links, you will assume the perspective of two difference stakeholders, both residents of Leeside: a long-term resident and a newly relocated resident termed a “climate refugee.” Informed by the fictional historical account and the embedded links of real-world examples that informed the creation of this Climate Haven scenario, assume a first-person perspective to discuss the challenges and successes of the different strategies used by the Leeside community in a mini essay (~500 words). I encourage you each to draw on your own personal backgrounds and experiences to shape the personas you adapt in the essay. See calendar for specific due dates.

**Assignment 2: Grow Smart**  
For many coastal communities, land management is paramount for balancing new development with changing hazard risk. For this assignment, you will write a 1000 word essay describing how Grow Smart Cape Cod is tackling this issue. Based on your class readings, especially Pilkey⁸, discuss the challenges of sea level rise, the associated hazards, and how communities pit economic development against hazard risk reduction measures. Then, using the [Grow Smart Cape Cod project](https://www.growsmart.org) discuss how this plan addresses these challenges. Finally critique the project, consider who benefits (or does not) from Grow Smart projects and opportunities to expand these benefits across the socio-ecological community. See calendar for specific due dates.

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Assignment 3: Commemoration as Resilience- Evaluating Heritage Climate Plans
Recognizing that some places will be altered or lost to sea level rise and other climate-induced hazards, this project considers commemoration as a resilience strategy. Students will select one place of cultural, historical, or environmental importance (often termed heritage sites, conservation sites, museums, parks, etc.) and examine their risk to climate change and evaluate the sites’ plans for adaptation to and/or protecting from hazards. Students will deliver their findings in a 8-10 minute PowerPoint presentation. See calendar for specific due dates.

Discussion Questions
Throughout the semester, we will welcome guest speakers virtually into the classroom to discuss their experiences related to climate adaptation. 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. The TA and Instructor will select several questions to lead the discussion with the guest speaker. See calendar for specific due dates.

Exams
Over the course of the semester, there will be two exams as listed on the course calendar. Material for exams will be taken from lecture presentations, guest speakers, readings, and activities. Exams will be conducted in Canvas and consist of essays. You may use your notes on the exams, but will have limited time allotted for each exam. See calendar for specific exam dates.

Technical Assistance
At UNT we have a Student Help Desk that you can contact for help with Canvas or other technology issues including technology disruptions. In the event of any unexpected server outage or any unusual technical difficulty, which prevents students from completing a time sensitive assessment activity, I 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
- 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 (https://community.canvaslms.com/docs/DOC-10554-4212710328)

Course 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 (Jan 16 & 18): Introduction to Course
- Review of Syllabus
- Class overview, expectations, and rules of engagement
- Readings for next week: Syllabus & FEMA Resources for Climate Resilience Report

Week 2 (Jan 23 & 25): Climate Change Science
- Introduction to Earth Systems & Feedback Cycles
- Proxy Records and Climate Modeling
- Readings for next week: Read Pilkey Chpt 1-2
Week 3 (Jan 30 & Feb 1): Hurricane & Floods in a Warming Climate
- The hazards of sea level rise and warming atmospheres for coastal communities
- Readings for next week:
  - Madagascar Famine

Week 4 (Feb 6 & 8): Drought, Wildfires & Famine as a Climate-induced Disasters
- Hazards of extreme heat, crop loss, and famine fueled by warming climates
- Burning documentary- Australia bushfires of 2019-2020
- Activities due for next week:
  - Assignment 1 (Feb 15)
- Readings for next week:
  - How Climate Change May Be Contributing to Our Political Instability
  - Climate change ‘aggravating factor for terrorism’: UN chief

Week 5 (Feb 13 & 15): 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)
- Readings for next week:
  - Pilkey Chpt 9

Week 6 (Feb 20 & 22): Population Impacts & Climate Refugees
- Hazard risk displacing populations
- Planet SOS from Palau to Alaska: Where Will Climate Refugees Go When the Tide Rises? (2019)
- Readings for next week:
  - Pilkey Chpt 8
  - Read https://populationconnection.org/resources/population-and-climate/ and submit 5 discussion questions for our speaker by Feb 26 11:59pm.

Week 7 (Feb 27 & 29): Reimagining Cities
- Feb 27: Hannah Evans, Senior Analyst, Population Connection
- Adapting the built environment & relocating infrastructure

Week 8 (Mar 5 & 7): Midterm Exam (REMOTE)
- The midterm will open in Canvas on Mar 5 at 12:01 am and is due by 11:59pm on Mar 7 (note: you have two hours to complete the exam in Canvas).

Week 9 (Mar 12 & 14): Spring Break- No Class

Week 10 (Mar 19 & 21): Protecting Ecosystems as Hazard Mitigation
- Green infrastructure and relocating nature
- Readings for next week:
  - Pilkey Chpt 6-7
Week 11 (Mar 26 & 28): Coastal Adaptation to Sea Level Rise
- Elevations, Relocations, Managed retreat & Buyouts
- Activities due for next week:
  o Assignment 2 (April 4)
- Readings for next week:

Week 12 (Apr 2 & 4): Commemoration as Resilience
- Commemorating places lost to climate change
- Readings for next week:
  o Submit topic for Assignment 3 by April 11

Week 13 (Apr 9 & 11): Resilience & Climate Justice
- Protecting the most vulnerable
- Readings for next week:
  o Pilkey Chpt 11
  o Read https://www.georgetownclimate.org/adaptation/state-information/california/overview.html and submit 5 discussion questions by April 15th at 11:59 pm.

Week 14 (Apr 16 & 18): Looking to a Resilient Future
- April 16th: Krystian Murray from H20Partners
- Activities due next week:
  o Assignment 3 Presentations

Week 15 (Apr 23 & 25): Assignment 3 Presentations

Week 16 (Apr 30 & May 2): Assignment 3 Presentations
- May 2: Review for final exam

(May 7): Final Exam (REMOTE)
- Final Exam opens in Canvas May 7 at 12:01 am and is due by 11:59 p.m on May 7 (note: you have two hours to complete the exam in Canvas).

Attendance and Participation

Research has shown that students who attend class are more likely to be successful; however, I recognize that issues may arise especially given the on-going pandemic. If you run into challenges that require you to miss a class, please contact me and our TA. There may be some flexibility we can offer to support your academic
success including virtual class attendance. Please email the instructor and TA as soon as possible. Emails sent within two hours prior to class time may not be received in time to accommodate virtual attendance. 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.

Attendance and health:
Students are expected to attend class meetings regularly and to abide by the attendance policy established for the course. It is important that you communicate with the professor and the instructional team prior to being absent, so you, the professor, and the instructional team can discuss and mitigate the impact of the absence on your attainment of course learning goals. Please inform the professor and instructional team if you are unable to attend class meetings because you are ill, in mindfulness of the health and safety of everyone in our community. If you are experiencing any symptoms of COVID (https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html) please seek medical attention from the Student Health and Wellness Center (940-565-2333 or askSHWC@unt.edu) or your health care provider PRIOR to coming to campus. UNT also requires you to contact the UNT COVID Team at COVID@unt.edu for guidance on actions to take due to symptoms, pending or positive test results, or potential exposure.

Department Policies

End of the Semester Evaluations
Required: 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 UNT Code of Student Conduct and Discipline (www.unt.edu/csrr) 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 not 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 Office of Disability Access 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)
- Individual Counseling (https://studentaffairs.unt.edu/counseling-and-testing-services/services/individual-counseling)

**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/)