GEO 6938: Geographic Perspectives on Hazards
Department of Geography
College of Liberal Arts & Sciences, University of Florida

COURSE SYLLABUS

I. Course Overview
In this course, we will take a comprehensive and global look at what we know about the physical and human impacts of natural hazards with the goal being to equip students to contribute to policy development and decision-making to aid individuals, communities, and even national governments to reduce the societal impacts of hazard events. This course will not use a simple hazard-by-hazard approach, but will integrate perspectives from the physical and social sciences to identify and describe principles that can enhance our understanding of the physical, social, psychological, technical, political, and economic forces inherent to extreme meteorological, climatological, and geophysical events. Geospatial and temporal analyses will be used to explain why, in spite of increasing investments in mitigation projects emergency management initiatives, losses from natural hazards continue to rise.

The course begins by defining natural hazards and introduces the ideas and arguments to be discussed in subsequent weeks. This is followed by an extensive consideration of the physical characteristics of these hydro-meteorological and geophysical events, focusing on such common measures as their magnitudes, durations, and frequencies, and the synthesis of these concepts in formal risk analysis and assessment. The human dimension will then be addressed through consideration of the concepts of vulnerability and resilience, which can be applied to study both individuals and communities. We will further explore human dimensions by learning about perceptions of these events, including discussion about the effects of different attitudes and values on behaviors and response, outlining strategies to communicate about hazard risk, and delving into the ways that hazard losses are tabulated and archived. This will lead to an investigation of hazard policy and the emergency management cycle, including mitigation, preparedness, response, and recovery. The course concludes with discussion of conceptual frameworks that encompass and integrate the course topics into a coherent and holistic understanding of how humans interact with hazards in the natural environment and how these interactions can result in disastrous consequences.

Course Objectives
By the end of the course, students will:

- Demonstrate basic understanding of the physical dimensions of natural hazards and disasters
- Identify and apply theoretical social science concepts to explain past and current disasters around the world
- Synthesize various theoretical frameworks and constructs in order to interpret principal causes and impacts associated with disasters in a variety of socio-cultural contexts
- Discover how global interdependencies shape the experiences of communities and individual before, during, and after hazard and disaster events
- Analyze and interpret hazard and disaster data for historical case studies and for very recent or even ongoing events
- Compare and contrast hazard and disaster event and impact trends in regional, national, and international contexts
II. Student Learning Outcomes
Through the course assignments and exams, students will learn to:

• Recognize and empathize with common human experiences by being able to place themselves in the shoes of survivors of disasters from around the world
• Define and appropriately apply key terms in concepts used in emergency/disaster management, risk assessment and communication, and disaster risk reduction contexts in the United States and internationally
• Download and analyze hazard and disaster data on human and economic losses both within the United States and globally
• Assess local and/or global impacts of planned actions when addressing diverse cultural issues or situations by recognizing and appreciating how differential human vulnerabilities are created by culture and values, beliefs and attitudes, political systems, and behavioral actions that either mitigate or exacerbate disaster outcomes
• Incorporate multiple perspectives into decision-making when addressing global/cultural issues or situations by creating a resilience framework that builds on differential vulnerabilities and the roles of culture, beliefs, behaviors, and political viewpoints
• Write a professional book review
• Communicate analysis findings in written, verbal, cartographic, and graphical formats
• Converse intelligently with hazard and disaster experts and professionals from diverse backgrounds, fields, and locations

III. Materials and Supplies: Laptop Computer
This course will be held in TUR 3012, which is a classroom with no computer terminals. Students must provide their own laptop computer on which to work on assignments and exams during and/or outside of class. Any required software will be available on students’ laptops through UF Apps at https://info.apps.ufl.edu.

IV. Required Texts and Useful Online Resources
The required text for this course is Natural Hazards: Explanation and Integration by Montz, Tobin, & Hagelman, published in 2017 (2nd Edition). Students will also be required to read The Ostrich Paradox by Meyer & Kunreuther, published in 2017. The instructor will also assign additional academic readings on a weekly basis and these will be available via Canvas.

V. Course Format, Activities, and Basis for Evaluation
The class will meet twice per week for formal lectures and less formal, but in-depth, discussions. On Mondays, the first portion of each class period will consist of a presentation by the instructor about key concepts and examples related to the day’s topic. On Wednesdays, the class period will again primarily consist of lecture presentation by the instructor. Lecture presentations will be made available to students via Canvas on Monday mornings before class begins. This will give students the opportunity to download the presentation to their own laptop and write notes directly into the file during the presentation. On Mondays, there will be a 15 minute break from about 10:25 to 10:40 am. We will reconvene at 10:40 am for the discussion portion of the class. Readings will be assigned from the two required texts and additional scholarly papers. Students are expected to read and study the materials prior to the class period in which they will be presented and discussed. The class participation component is a large portion of the course grade, and will consist of attendance and active engagement in discussions. There will be two exams, a midterm and a final exam; they will both be closed book and will consist of short answer and essay questions. There will be four additional assignments throughout the semester through which students will be evaluated: a collaborative global disaster journal, a state hazard profile, a country hazard profile, and a book review.

Evaluation and Grading

Class Participation: Class participation will be evaluated based on two components. The first is attendance which will count for 5% of the final grade. Students are expected to attend the lecture and discussion portion of the class for 90% of the 24 days of class during the semester. Students may be excused from absences with appropriate documentation according to the university policy (more information provided in Section VIII below). The other 5% of class participation will be discussion of the weekly readings in class during the dedicated discussion periods. Students are expected to come to class prepared for
discussion, having read and made notes on the readings as well as any recent hazard and/or disaster events which students will be cataloging in the collaborative journal.

**Discussion Sessions (typically on Mondays but not exclusively!):** Students will be required to address the topics introduced from the lecture materials and the weekly readings, as well as develop ideas accumulating from the collaborative disaster journal. Each student will lead the discussion at least once during the semester.

**Collaborative Global Disaster Journal:** Students will be required to contribute to a collaborative global disaster journal, updated on a rolling basis (as event occur), during the semester starting from January 9, 2019 until April 22, 2019. The journal will comprise a detailed listing of disaster events, information on losses and impacts, and a brief analysis of response activities. Students will set the events within the context of themes developed in class such as: physical dimensions of hazards/disasters; spatial and temporal characteristics of hazards/disasters; perception and behavioral aspects; community attitudes and responses; disaster management policies; economic impacts; risk assessment; vulnerability (exposure, sensitivity, and coping or adaptive capacity); disaster resilience including through preparedness, response, recovery, or mitigation. Each student will be required to contribute weekly to the journal, as the assignment will account for 15% of the final grade. Additional guidance will be provided on the first day of class.

**State Hazard Profile:** In this assignment, students are required to focus on the hazardousness of one particular state within the United States of America. Students will register their chosen state with the instructor, and only one person can focus on a particular country. The research must incorporate some of the principles of natural hazards research found in the readings and discussed in class. The assignment will account for 15% of the final grade in the course. More detailed instructions will be given early in the semester.

**Country Hazard Profile:** This assignment is similar to the State Hazard Profile, but is unique in that students are required to focus on the hazardousness of one particular country, and students must choose a country other than the United States of America. Again, students will register their chosen country with the instructor, and only one person can pick each country. The research must incorporate the principles of natural hazards research found in the readings and discussed in class. This assignment will require students to write longer and more detailed profiles than for the State Hazard Profiles, and students will be required to present their findings in both presentation format and in written format that will require more details. Thus, the assignment will account for 25% of the final grade. Additional instructions will be provided later in the semester.

**Book Review:** Students will read and write a review of the short book published in 2017 by Meyer and Kunreuther entitled *The Ostrich Paradox*. The review will be approximately 1000 words in length, and one class period will be dedicated to discussion of the book in which students will be expected to debate its strengths and weaknesses. The book review will comprise 15% of the course final grade.

**Exams:** In total, the two exams will account for 20% of the final grade, 10% each for the Midterm and Final exams. The exams will be administered in class via Canvas and will consist of short answer and essay questions. The exams will be closed book/notes.

<table>
<thead>
<tr>
<th>Assignments and Exams</th>
<th>Percent of Final Grade</th>
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<tbody>
<tr>
<td>Class Participation &amp; Discussion</td>
<td>10%</td>
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<tr>
<td>Collaborative Global Disaster Journal</td>
<td>15%</td>
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<tr>
<td>State Hazard Profile</td>
<td>15%</td>
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<tr>
<td>Country Hazard Profile</td>
<td>25%</td>
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<tr>
<td>Book Review</td>
<td>15%</td>
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<tr>
<td>Exam #1: Midterm</td>
<td>10%</td>
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<tr>
<td>Exam #2: Final (not cumulative)</td>
<td>10%</td>
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VI. **Important Dates to Remember**: The due dates below are tentative and can be changed at the discretion of the instructor.

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Class Topics &amp; Assignments</th>
<th>Read Before Class</th>
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<tbody>
<tr>
<td>Jan 7</td>
<td>M</td>
<td>Course Introduction</td>
<td>None</td>
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<tr>
<td>Jan 16</td>
<td>W</td>
<td>Physical Dimensions of Natural Hazards</td>
<td>Montz et al. 2017, pp 59-69</td>
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<tr>
<td>Jan 21</td>
<td>M</td>
<td><em>Martin Luther King Day, No Class</em></td>
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<tr>
<td>Jan 23</td>
<td>W</td>
<td>Physical Dimensions of Natural Hazards</td>
<td>Montz et al. 2017, pp 70-73</td>
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<tr>
<td>Jan 28</td>
<td>M</td>
<td>Physical Dimensions of Natural Hazards</td>
<td>Montz et al. 2017, pp 73-84</td>
</tr>
<tr>
<td>Jan 30</td>
<td>W</td>
<td>Physical Dimensions of Natural Hazards</td>
<td>Montz et al. 2017, pp 84-101</td>
</tr>
<tr>
<td>Feb 4</td>
<td>M</td>
<td>Spatial &amp; Temporal Characteristics of Natural Hazards</td>
<td>Montz et al. 2017, pp 102-124</td>
</tr>
<tr>
<td>Feb 6</td>
<td>W</td>
<td>Spatial &amp; Temporal Characteristics of Natural Hazards</td>
<td>Montz et al. 2017, pp 124-142</td>
</tr>
<tr>
<td>Feb 11</td>
<td>M</td>
<td>Perception Studies: The Individual in Natural Hazards</td>
<td>Montz et al. 2017, pp 143-163</td>
</tr>
<tr>
<td>Feb 13</td>
<td>W</td>
<td>VORTEX-SE Workshop in Tuscaloosa, AL; No Class, work on your state hazard profile</td>
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<tr>
<td>Feb 15</td>
<td>F</td>
<td><em>State Hazard Profile Papers Due</em></td>
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VII. **Weekly Topic Schedule, Assignments, and Exams** *(Schedule is provisional and subject to change)*
VIII. Course Policies: Attendance, Make-Ups, and Grades

Attendance: Students are expected to attend each and every class period. Absences can be excused with proper documentation according to university policy. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

Late Work: All assignments submitted after their respective deadlines will be assessed a penalty: ten percentage points if one day late, fifteen percentage points for 2-3 days late, and 30 percentage points for 4-7 days late. Assignments will not be accepted if overdue by more than seven days.

Examination Policies and Reading Days: Course policies are consistent with University policies on during-term exams, final exams, reading days, and make-up exams. Students must notify the instructor as soon as possible in case of absence during an exam and provide documentation as to the reason for the absence. If deemed an excused absence, the student will be permitted a reasonable amount of time to make up the missed exam. More details can be found at https://catalog.ufl.edu/UGRD/academic-regulations/examination-policies-reading-days/.

Grade Dissemination: You can access your scores at any time using the Grade function in Canvas. The instructor will post grades within about one week of the due date of each assignment and the mid-term exam.

Grading Policies for Assigning Grade Points: Information on current UF grading policies for assigning grade points may be found at https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx.

Grades of "Incomplete": The current university policy concerning incomplete grades will be followed in this course. An incomplete grade may be assigned at the discretion of the instructor as an interim grade for a course in which you have completed a major portion of the course with a passing grade, been unable to complete course requirements before the end of the term because of extenuating circumstances, and obtained agreement from the instructor and arranged for resolution of the incomplete grade. Instructors are not required to assign incomplete grades.
IX. Course Policies: Technology and Media

Email: Each of you has a UF email address. It is vital that you maintain an active UF email account and that you check it often. This tentative syllabus is subject to change, and any changes will be transmitted to you via your UF email account and Canvas (see below). Students should email the instructor if they have questions about any of the lectures, readings, assignments, or exams. You should expect a response within about 24 hours during weekdays. On holidays or weekends, expect a response on the next business day. The instructor will reasonably expect similar time frames for responses to emails sent to students.

Canvas: Course materials such as lectures, readings, the syllabus, and assignment instructions will be available through Canvas (https://elearning.ufl.edu). You will also find all due dates and grades on Canvas. Students must activate their UF GatorLink account in order to use Canvas. If you need help learning how to perform various tasks related to this course or other courses that utilize Canvas, please consult the above webpage. You may also contact the UF Computing Help Desk at (352) 392-HELP(4357) or helpdesk@ufl.edu.

Online Course Evaluation: Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/.

Recordings and Notes: It is not permitted to sell notes or recordings from this class without written consent of the instructor. Nor are students permitted to disseminate recordings of the instructor lecturing or post copies of assignments or exams on the internet.

X. Course Policies: Student Expectations

Disabilities Statement: Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Academic Conduct Policy: As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity.” You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: http://www.dso.ufl.edu/SCCR/honorcodes/honorcode.php.

XI. Campus Resources for Students:

Academic Resources

E-learning technical support, 352-392-4357 (select option 2) or email to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml.

Library Support, http://cms.uflib.ufl.edu/ask. Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 352-392-2010 or 352-392-6420. General study skills and tutoring. http://teachingcenter.ufl.edu/


Health and Wellness Resources

U Matter, We Care: If you or a friend is in distress, please contact umatter@ufl.edu or 352-392-1575 so that a team member can reach out to the student.

Sexual Assault Recovery Servies (SARS), Student Health Care Center, 352-392-1161. More information on resources to help students with sexual violence issues at www.umatter.ufl.edu/sexual_violence

Sexual Harassment, Information on UF policies, awareness, reporting, and counseling at www.hr.ufl.edu/manager-resources/policies-2/sexual-harassment/

Counseling and Wellness Center, http://counseling.ufl.edu/cwc/Default.aspx, 352-392-1575;

University Police Department, 352-392-1111 (or 9-1-1 for emergencies). http://www.police.ufl.edu/