

GEO 2006: Natural Hazards Geography
Department of Geography
College of Liberal Arts & Sciences
University of Florida

Course Syllabus

Course and Instructor Information			
Term	Summer 2025	Instructor	Jawata Saba
Meeting Days	Online asynchronous	Phone Number	N/A
Meeting Times	Online asynchronous	Email	jsaba@ufl.edu
Location	UF Canvas	Messaging	Canvas mail tool, <u>Conversations</u> (expect a response within 24 hours weekdays)
Course Credits	3 hours	Office Hours	By appointment

I. Course Overview

In this course, students will gain an international perspective on the societal and environmental impacts of natural hazards, with the goal of equipping students to contribute to effective policies and decision-making to aid individuals, communities, and even national governments to reduce the impacts associated with hazards and disasters. This course integrates perspectives from geography and cognate social sciences to enhance understanding of how disasters emerge from a complex interaction of social, psychological, cultural, political, and economic forces with extreme meteorological, climatological, and geophysical phenomena. Comparative geographic and historical analyses will be used to explain why, despite investments in warning systems, preparedness and mitigation projects, and emergency response and recovery initiatives, global losses associated with natural hazards have thus far continued to rise.

II. General Education Objectives

This course is both a social and behavioral sciences (S) and international (N) subject area course in the UF General Education Program. *A minimum grade of C is required for General Education credit.*

Social Science courses must afford students an understanding of the basic social and behavioral science concepts and principles used in the analysis of behavior and past and present social, political, and economic issues. Social and Behavioral Sciences is a sub-designation of Social Sciences at the University of Florida.

Social and behavioral sciences courses provide instruction in the history, key themes, principles, terminology, and underlying theory or methodologies used in the social and behavioral sciences. Students will learn to identify, describe, and explain social institutions, structures, or processes. These courses emphasize the effective application of accepted problem-solving techniques. Students will apply formal and informal qualitative or quantitative analysis to examine the processes and means by which individuals make personal and group decisions. Students are expected to assess and analyze ethical perspectives in individual and societal decisions.

The International designation is always in conjunction with another program area. Courses with International should demonstrate that a majority of the course addresses international content and engagement, and it should be a substantial, defining feature of the course.

International courses promote the development of students' global and intercultural awareness. Students examine the cultural, economic, geographic, historical, political, and/or social experiences and processes that characterize the contemporary world, and thereby comprehend the trends, challenges, and opportunities that affect communities around the world. Students analyze and reflect on the ways in which cultural, economic, political, and/or social systems and beliefs mediate their own and other

people's understanding of an increasingly connected world.

In pursuit of the general education requirements, course learning objectives include:

- 1. Explain why disasters occur in terms of risk, vulnerability, and resilience, and how individual and institutional perceptions play key roles in policy initiatives intended to reduce hazard impacts
- 2. Describe world regions that suffered particularly severe societal impacts from hazards and disasters in the past and/or are likely to be severely impacted in the future
- 3. Analyze historical global data and case studies to discern instances in which risk reduction policies have effectively addressed hazard-related problems from those which have been ineffective
- 4. Evaluate recent and ongoing hazard events to understand how negative consequences emerge and propagate through interconnected national and international economic and political systems
- 5. Analyze ethical considerations and competing goals/values inherent in disaster management decisions in local, national, and international contexts

III. Student Learning Outcomes

At the end of this course, students will be expected to achieve the following learning outcomes in content, communication, and critical thinking:

• **Content**: Students demonstrate competence in the terminology, concepts, theories, and methodologies used within the subject area. Students will acquire basic knowledge of how hazards and disasters are conceptualized and managed from a social scientific perspective. Students will also enhance their understanding of global geographic variability of disaster risk reduction capabilities and the societal impacts associated with hazard events and disasters.

Achievement of this learning outcome will be assessed through lecture quizzes, hazard event written summaries/peer reviews, four of the worksheet assignments, and a midterm and final exam.

• Communication: Students clearly and effectively communicate knowledge, ideas, and reasoning in written or oral forms appropriate to the subject area. Students will individually prepare brief written summaries and then participate in peer review activities for five course modules. The written summaries and review participation will be assessed according to the rubric provided on Canvas. Students must communicate their ideas and reasoning about causal factors and potential actions to lessen impacts for recent and ongoing hazard events; then, students will read and provide constructive feedback for other students' summaries. Additionally, students will practice effective written communication as part of worksheet assignments, which will require students to write several paragraphs to answer one or more short-answer or essay questions.

Achievement of this learning outcome will be assessed through the hazard event written summaries/peer reviews and the worksheet assignments.

• Critical Thinking: Students carefully and logically analyze information from multiple perspectives and develop reasoned solutions to problems within the subject area. Students will analyze data and information and will be asked to reason with course content and empirical data in the assignments to develop potential solutions for individuals and institutions to reduce disastrous hazard impacts on society. In addition, event summaries and peer review activities will require students to engage with ongoing debates about potential solutions to reduce short- and long-term health and economic impacts stemming from recent and ongoing hazard events drawn from international examples.

Achievement of this learning outcome will be assessed through the hazard event written summaries/peer reviews and the worksheet assignments.

IV. Materials and Supplies: Desktop or Laptop Computer

This course will be conducted via UF Canvas. *Students must provide their own computer on which to work on quizzes, assignments, and exams during the semester.* Any required software (such as Microsoft Excel) will be available to students through <u>UF Apps</u> or will be freely available for download (open source).

V. Minimum Technology Requirements

The University of Florida expects students entering an online program to acquire computer hardware and software appropriate to his or her degree program. Most computers are capable of meeting the following general requirements. A student's computer configuration should include:

- Webcam
- Microphone
- Broadband connection to the Internet and related equipment (Cable/DSL modem)
- Microsoft Office Suite installed (provided by the university)

Individual colleges may have additional requirements or recommendations which students should review prior to the start of their program.

VI. Minimum Technical Skills

To complete tasks for this course, students will need a basic understanding of how to operate a computer and how to use word processing software.

VII. Materials/Supply Fees

There is no supply fee for this course.

VIII. Prerequisites

There is no prerequisite for this course.

IX. Textbook

There is no textbook for this course. All the necessary materials are in Canvas.

X. Course Format, Activities, and Basis for Evaluation

The class will be conducted online via UF Canvas and in an asynchronous format, meaning that students should work through the modules themselves throughout the semester, paying close attention to the schedule and deadlines. All lectures will be available for viewing via UF Canvas, and students will be able also to download the PowerPoint PDFs and a transcription of each lecture. There will be assignments and/or discussions each module during the semester, and there will also be short lecture quizzes taken via Canvas which must be finished by the end of the week corresponding to the module in which they are assigned. There will be two exams, a midterm and a final exam, both administered via UF Canvas.

Evaluation and Grading: A minimum grade of C is required for General Education credit.

Event Summaries and Discussion: 30% of the final grade will consist of written summaries and online discussion of hazard/disaster events during the five modules in which students participate in these exercises. Students are expected to write brief summaries on recent events, including information describing key geographic event attributes; preparedness and warning systems; relevant social, cultural, economic, and political vulnerabilities; losses and impacts; and post-event response activities. Students will also read and reply to two other summaries written by peers in the class.

Rubric for Evaluation: Written Hazard Event Summaries and Group Activity

(Adapted from two sources: Solan & Linardopoulos 2011, http://jolt.merlot.org/vol7no4/linardopoulos 1211.htm; Reflection/Discussion Critique Rubric, http://www.rcampus.com/rubricshowc.cfm?sp=yes&code=D97AAC&.

Evaluation Category	Standards for Excellent Work	Points
Provide Basic Event Facts	Provides accurate basic facts, including the disaster's location, date/time, type, and maps. Information is complete and detailed, demonstrating thorough research.	/5
Physical Dimensions of Hazard Events	Thoroughly describes the disaster's physical aspects, including magnitude, intensity, spatial distribution, rate of onset,	/10

Evaluation Category	Standards for Excellent Work	Points
	seasonality, climate, and topography if relevant. Includes maps to enhance understanding.	
Societal Vulnerability, Resilience, and Impacts	Provides a detailed analysis of both direct and indirect impacts on society, including population size, demographics, livelihoods, and forecast/warning roles. Discusses societal vulnerability and resilience effectively.	/10
Writing and Communication Proficiency	The summary is well-organized, with a clear introduction, body, and conclusion. Free from spelling, grammar, syntax, and punctuation errors, demonstrating professional writing standards.	/5
Group Discussion Participation	Actively engages with at least two peers' posts, providing substantive feedback, insights, and constructive debate. Questions are posed to deepen understanding.	/20

- Lecture Quizzes: For each module, students are required to complete a lecture quiz. Module videos and slide PDFs should be the primary study materials. These multiple-choice quizzes will be administered through UF Canvas.
- Assignments: These worksheet assignments correspond with the lecture topics. One requires students to write a critique of international hazard reduction policy initiatives. Another involves evaluating a social-scientific approach to understanding individual decision-making for hurricane evacuation. The remaining assignments will require students to analyze and interpret data using Microsoft Excel and mapping software.
- Exams: The exams will be closed book and administered through Canvas. They consist of multiple-choice questions.

Grade Percentages	
Assignments and Exams	Percent of Final Grade
Hazard Event Summaries and	30%
Discussions	
Assignments	30%
Lecture Quizzes	20%
Exam #1: Midterm	10%
Exam #2: Final (not cumulative)	10%

Grading Scale	
A = 92.5 to 100	C = 72.5 to 76.4
A- = 89.5 to 92.4	C- = 69.5 to 72.5
B+ = 86.5 to 89.4	D+ = 66.5 to 69.4
B = 82.5 to 86.4	D = 62.5 to 66.4
B- = 79.5 to 82.4	D- = 59.5 to 62.4
C+ = 76.5 to 79.4	F = below 59.5

- **XI. Important Dates to Remember:** Students should consult the <u>UF Calendar</u> for their term to see important holidays. Due dates for assignments are available from the Canvas calendar, module page, and individual assignment pages.
- **XII. Weekly Topic Schedule, Assignments, and Exams:** Consult the tables on the next two pages for a general overview of the course schedule. Specific due dates may be found in the Canvas calendar, modules page, or individual assignment pages.

Fall/Spring Calendar

Week	Modules	Class Topics	Assessments
Week 1	0	Course Orientation and Introduction	Introduce Yourself DiscussionCourse Orientation Quiz
WEEKI	1	Hazards in the Environment	Module 1 Lectures Quiz
Week 2	2	Geographic Distribution of Natural Hazards	 Module 2 Lectures Quiz Assignment 1: Mapping International Disaster Casualties
Week 3	3	Temporal Characteristics of Natural Hazards	 Module 3 Lectures Quiz Discussion 1: Recent Hazard Event Summary
Week 4	4	Impacts of Natural Hazards	 Module 4 Lectures Quiz Assignment 2: Mapping International Disaster Damages
Week 5	5	Historical Background and Vulnerability Theory	Module 5 Lectures QuizDiscussion 2: Recent Hazard Event Summary
Week 6	6	Resilience, Self-Efficacy, and Cultural Factors	 Module 6 Lectures Quiz Assignment 3: Mapping the World Risk Index
Week 7	7	Risk Perception, Uncertainty, and Decision- Making	 Module 7 Lectures Quiz Discussion 3: Recent Hazard Event Summary
Week 8	8	Risk Assessment and Management	Module 8 Lectures Quiz
Week 9	9	Risk Communication	Module 9 Lectures Quiz Midterm Exam
Week 10	10	Managing Disasters: Mitigation	 Module 10 Lectures Quiz Discussion 4: Recent Hazard Event Summary
Week 11	11	Managing Disasters: Preparedness	 Module 11 Lectures Quiz Assignment 4: Reflection on Sendai Framework
Week 12	12	Managing Disasters: Evacuation and Response	 Module 12 Lectures Quiz Assignment 5: Evacuation Decision Factors and Coping Capacity
Week 13	13	Managing Disasters: Recovery	 Module 13 Lectures Quiz Discussion 5: Recent Hazard Event Summary
Week 14	14	Managing Disasters: Aid and Relief	 Module 14 Lectures Quiz Assignment 6: International Disaster Aid
	15	Integrated Approach to Natural Hazards	Module 15 Lecture Quiz
Exam Week		Final Exam	Study for the Final Exam

Summer A/B Calendar

Week	Modules	Class Topics	Assessments
Week 1	0	Course Orientation and Introduction	Introduce Yourself DiscussionCourse Orientation Quiz
	1	Hazards in the Environment	Module 1 Lectures Quiz
	2	Geographic Distribution of Natural Hazards	 Module 2 Lectures Quiz Assignment 1: Mapping International Disaster Casualties
	3	Temporal Characteristics of Natural Hazards	 Module 3 Lectures Quiz Discussion 1: Recent Hazard Event Summary
Week 2	4	Impacts of Natural Hazards	 Module 4 Lectures Quiz Assignment 2: Mapping International Disaster Damages
	5	Historical Background and Vulnerability Theory	 Module 5 Lectures Quiz Discussion 2: Recent Hazard Event Summary
	6	Resilience, Self-Efficacy, and Cultural Factors	 Module 6 Lectures Quiz Assignment 3: Mapping the World Risk Index
Week 3	7	Risk Perception, Uncertainty, and Decision- Making	 Module 7 Lectures Quiz Discussion 3: Recent Hazard Event Summary
	8	Risk Assessment and Management	Module 8 Lectures Quiz
	9	Risk Communication	Module 9 Lectures Quiz Midterm Exam
Week 4	10	Managing Disasters: Mitigation	 Module 10 Lectures Quiz Discussion 4: Recent Hazard Event Summary
Week 4	11	Managing Disasters: Preparedness	 Module 11 Lectures Quiz Assignment 4: Reflection on Sendai Framework
Week 5	12	Managing Disasters: Evacuation and Response	 Module 12 Lectures Quiz Assignment 5: Evacuation Decision Factors and Coping Capacity
	13	Managing Disasters: Recovery	 Module 13 Lectures Quiz Discussion 5: Recent Hazard Event Summary
Week 6	14	Managing Disasters: Aid and Relief	 Module 14 Lectures Quiz Assignment 6: International Disaster Aid
	15	Integrated Approach to Natural Hazards	Module 15 Lecture Quiz Final Exam

XIII. Course Policies: Attendance, Make-Ups, and Grades

Attendance and Make-up Assignments or Exams: Requirements for class attendance and make-up exams, assignments, and other work in the course are consistent with university policies. See UF Academic Regulations and Policies for more information regarding the University Attendance Policies.

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: Students can access scores at any time using the Grades 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/UGRD/academic-regulations/grades-grading-policies/.

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

Late Work: Late work is generally not permitted. Students wishing to make up an assignment should discuss their circumstances with the instructor via Canvas message or during office hours.

XIV. Course Policies: Technology and Media

Email: Each student has a UF email address. It is vital that they maintain an active UF email account and check it often. This tentative syllabus is subject to change, and any changes will be transmitted via the 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. A response can be expected within about 24 hours during weekdays; on holidays or weekends, a response can be expected 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. Students will also find all due dates and grades on Canvas. To use Canvas, students must activate their UF GatorLink account. If assistance is needed in learning how to perform various tasks related to this course or other courses that utilize Canvas, students should consult the above webpage. They 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 professional and respectful feedback on the quality of instruction in this course by completing online evaluations via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <u>Gator Evals</u>. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via the <u>Gator Evals website</u>. <u>Summaries</u> of course evaluation results are available to students.

Recordings and Notes: It is not permitted to sell or distribute 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.

Netiquette and Communication Courtesy

It is important to recognize that the online classroom is, in fact, a classroom, and certain behaviors are expected when students communicate with both their peers and their instructors. These guidelines for online behavior and interaction are known as netiquette. Students should review the <u>UF Netiquette Guide</u> to acquaint themselves with the basics.

Getting Help

For help with technical issues or difficulties with Canvas, please contact the UF Computing Help Desk at:

- UF Help Desk Website
- 352-392-HELP (4357)
- Walk-in: HUB 132
- Any requests for make-ups (assignments, exams, etc.) due to technical issues should be accompanied by the ticket number received from the UF Computing Help Desk when the problem was reported. The ticket number will document the time and date of the problem. Students should email their instructor within 24 hours of the technical difficulty if they wish to request a make-up.

XV. Disabilities Statement

Students with disabilities who experience learning barriers and would like to request academic accommodation should connect with the Disability Resource Center. See the "Get Started With the DRC" webpage on the Disability Resource Center site. It is important for students to share their accommodation letter with their instructor and discuss their access needs as early as possible in the semester.

XVI. Academic Honesty and Conduct Policy

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code." On all work submitted for credit by students 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." The Conduct Code specifies a number of behaviors that are in violation of this code and the possible sanctions. See the UF Conduct Code website for more information. If students have any questions or concerns, they should consult with the instructor.

XVII. Use of Artificial Intelligence

It is an essential part of students' intellectual development that they synthesize information themselves rather than relying on technology. For this reason, any and all use of machines that emulate human capabilities (ChatGPT, Stable Diffusion, DALLE, etc.) to perform assignments or other works in the course is prohibited. The use of AI to check grammar (using programs such as Grammarly) is allowed on a limited basis, but AI should not be used to create entire sentences or paragraphs of writing.

XVIII. Campus Resources for Students

Academic Resources

E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 or via email at helpdesk@ufl.edu.

Career Connections Center: For career assistance and counseling services, visit the <u>UF Career Connections Center</u> website or call 352-392-1601.

Library Support: For various ways to receive assistance concerning using the libraries or finding resources, visit the UF George
A. Smathers Libraries Ask-A-Librarian website.

Teaching Center: For general study skills and tutoring, visit the <u>UF Teaching Center</u> website or call 352-392-2010.

Writing Studio: For help with brainstorming, formatting, and writing papers, visit the <u>University Writing Program Writing Studio</u> website or call 352-846-1138.

Academic Complaints: Office of the Ombuds; visit the Complaint Portal for more information.

Enrollment Management Complaints (Registrar, Financial Aid, Admissions); visit the <u>Student Complaint Procedure</u> page for more information.

Health and Wellness Resources

U Matter, We Care: If you or someone you know is in distress, please email umatter@ufl.edu, call 352-392-1575, or visit <u>U</u> <u>Matter We Care</u> to refer or report a concern, and a team member will reach out to the student in distress.

Counseling and Wellness Center: Visit the <u>UF Counseling & Wellness Center</u> website or call 352-392-1575 for information on crisis services and non-crisis services.

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the <u>UF Student Health Care Center</u> website.

University Police Department: Visit the UF Police Department website or call 352-392-1111 (or 9-1-1 for emergencies).

UF Health Shands Emergency Room/Trauma Center: For immediate medical care in Gainesville, call 352-733-011 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608. Visit the UF Health Shands Emergency Room/Trauma Center website for more information.

XIX. Privacy and Accessibility Policies

For information about the privacy policies of the tools used in this course, students should see the links below:

- Adobe
 - Adobe Privacy Policy
 - Adobe Accessibility
- Instructure (Canvas)
 - o <u>Instructure Privacy Policy</u>
 - o Instructure Accessibility
- Microsoft
 - o <u>Microsoft Privacy Policy</u>
 - Microsoft Accessibility
- Sonic Foundry (Mediasite Streaming Video Player)
 - o Sonic Foundry Privacy Policy
 - Sonic Foundry Accessibility (PDF)

- YouTube (Google)
 - o YouTube (Google) Privacy Policy
 - o YouTube (Google) Accessibility
- Zoom
 - o Zoom Privacy Policy
 - o Zoom Accessibility

XX. Disclaimer

This syllabus represents the instructor's current plans and objectives. As we go through the semester, those plans may need to change to enhance the class's learning opportunities. Such changes, communicated clearly, are not unusual and should be expected.