



ARIZONA STATE UNIVERSITY
GENERAL STUDIES COURSE PROPOSAL COVER FORM

Course information:

Copy and paste current course information from Class Search/Course Catalog.

Academic Unit SGSUP Department Geography
 Subject GPH Number 267 Title Extreme Weather and Climate Units: 3
 Is this a cross-listed course? No
 If yes, please identify course(s) _____
 Is this a shared course? (choose one) If so, list all academic units offering this course _____
 Course description: _____

Requested designation: Literacy and Critical Inquiry-L
 Note- a separate proposal is required for each designation requested

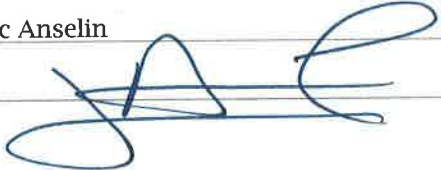
Eligibility:
 Permanent numbered courses must have completed the university's review and approval process.
 For the rules governing approval of omnibus courses, contact the General Studies Program Office at (480) 965-0739.

Area(s) proposed course will serve:
 A single course may be proposed for more than one core or awareness area. A course may satisfy a core area requirement and more than one awareness area requirements concurrently, but may not satisfy requirements in two core areas simultaneously, even if approved for those areas. With departmental consent, an approved General Studies course may be counted toward both the General Studies requirement and the major program of study.

- Checklists for general studies designations:**
 Complete and attach the appropriate checklist
- Literacy and Critical Inquiry core courses (L)
 - Mathematics core courses (MA)
 - Computer/statistics/quantitative applications core courses (CS)
 - Humanities, Fine Arts and Design core courses (HU)
 - Social and Behavioral Sciences core courses (SB)
 - Natural Sciences core courses (SQ/SG)
 - Global Awareness courses (G)
 - Historical Awareness courses (H)
 - Cultural Diversity in the United States courses (C)

- A complete proposal should include:**
- Signed General Studies Program Course Proposal Cover Form
 - Criteria Checklist for the area
 - Course Syllabus
 - Table of Contents from the textbook, and/or lists of course materials

Contact information:
 Name Erin Saffell Phone 5-7533
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Department Chair/Director approval: (Required)
 Chair/Director name (Typed): Luc Anselin Date: 8/17/12
 Chair/Director (Signature): 

Arizona State University Criteria Checklist for
LITERACY AND CRITICAL INQUIRY - [L]

Rationale and Objectives

Literacy is here defined broadly as communicative competence in written and oral discourse. **Critical inquiry** involves the gathering, interpretation, and evaluation of evidence. Any field of university study may require unique critical skills which have little to do with language in the usual sense (words), but the analysis of spoken and written evidence pervades university study and everyday life. Thus, the General Studies requirements assume that all undergraduates should develop the ability to reason critically and communicate using the medium of language.

The requirement in Literacy and Critical Inquiry presumes, first, that training in literacy and critical inquiry must be sustained beyond traditional First Year English in order to create a habitual skill in every student; and, second, that the skills become more expert, as well as more secure, as the student learns challenging subject matter. Thus, the Literacy and Critical Inquiry requirement stipulates two courses beyond First Year English.

Most lower-level [L] courses are devoted primarily to the further development of critical skills in reading, writing, listening, speaking, or analysis of discourse. Upper-division [L] courses generally are courses in a particular discipline into which writing and critical thinking have been fully integrated as means of learning the content and, in most cases, demonstrating that it has been learned.

Students must complete six credit hours from courses designated as [L], at least three credit hours of which must be chosen from approved upper-division courses, preferably in their major. Students must have completed ENG 101, 107, or 105 to take an [L] course.

Notes:

1. ENG 101, 107 or ENG 105 must be prerequisites
2. Honors theses, XXX 493 meet [L] requirements
3. The list of criteria that must be satisfied for designation as a Literacy and Critical Inquiry [L] course is presented on the following page. This list will help you determine whether the current version of your course meets all of these requirements. If you decide to apply, please attach a current syllabus, or handouts, or other documentation that will provide sufficient information for the General Studies Council to make an informed decision regarding the status of your proposal.

Proposer: Please complete the following section and attach appropriate documentation.

ASU - [L] CRITERIA			
TO QUALIFY FOR [L] DESIGNATION, THE COURSE DESIGN MUST PLACE A MAJOR EMPHASIS ON COMPLETING CRITICAL DISCOURSE--AS EVIDENCED BY THE FOLLOWING CRITERIA:			
YES	NO		Identify Documentation Submitted
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>CRITERION 1: At least 50 percent of the grade in the course should depend upon writing, including prepared essays, speeches, or in-class essay examinations. <i>Group projects are acceptable only if each student gathers, interprets, and evaluates evidence, and prepares a summary report</i></p>	<p>Syllabus GPH267 70% of course grade comes from writing assignments.</p> <p>40% Hazard Reports/Final Report; 20% Reflections; 10% Mid-Term Essay.</p>
<p>1. Please describe the assignments that are considered in the computation of course grades--and indicate the proportion of the final grade that is determined by each assignment.</p>			
<p>2. Also:</p> <div style="border: 1px solid black; border-radius: 50%; padding: 10px; text-align: center;"> <p style="background-color: yellow;">Please circle, underline, or otherwise mark the information presented in the most recent course syllabus (or other material you have submitted) that verifies this description of the grading process--and label this information "C-1".</p> </div> <p style="text-align: center;">C-1</p>			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>CRITERION 2: The composition tasks involve the gathering, interpretation, and evaluation of evidence</p>	<p>Syllabus GPH 267. Hazards Reports/Final Report; Reflections; Mid-Term Essay.</p>
<p>1. Please describe the way(s) in which this criterion is addressed in the course design</p>			
<p>2. Also:</p> <div style="border: 1px solid black; border-radius: 50%; padding: 10px; text-align: center;"> <p style="background-color: yellow;">Please circle, underline, or otherwise mark the information presented in the most recent course syllabus (or other material you have submitted) that verifies this description of the grading process--and label this information "C-2".</p> </div> <p style="text-align: center;">C-2</p>			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>CRITERION 3: The syllabus should include a minimum of two substantial writing or speaking tasks, other than or in addition to in-class essay exams</p>	<p>Syllabus GPH 267. Hazard Reports/Final Report; Reflections; Mid-Term Essay.</p>
<p>1. Please provide relatively detailed descriptions of two or more substantial writing or speaking tasks that are included in the course requirements</p>			

ASU - [L] CRITERIA

2. Also:

Please **circle, underline, or otherwise mark** the information presented in the most recent course syllabus (or other material you have submitted) that verifies **this description** of the grading process--and label this information "**C-3**".

C-3

ASU - [L] CRITERIA			
YES	NO		Identify Documentation Submitted
<input checked="" type="checkbox"/>	<input type="checkbox"/>	CRITERION 4: These substantial writing or speaking assignments should be arranged so that the students will get timely feedback from the instructor on each assignment in time to help them do better on subsequent assignments. <i>Intervention at earlier stages in the writing process is especially welcomed</i>	Syllabus GPH 267. Hazard Reports/Final Report; Reflections; Mid-Term Essay.
1. Please describe the sequence of course assignments--and the nature of the feedback the current (or most recent) course instructor provides to help students do better on subsequent assignments			
2. Also:			
<p>Please circle, underline, or otherwise mark the information presented in the most recent course syllabus (or other material you have submitted) that verifies this description of the grading process--and label this information "C-4".</p>			
C-4			

Course Prefix	Number	Title	Designation
GPH	267	Extreme Weather and Climate	L

Explain in detail which student activities correspond to the **specific** designation criteria.
Please use the following organizer to explain how the criteria are being met.

Criteria (from checksheet)	How course meets spirit (contextualize specific examples in next column)	Please provide detailed evidence of how course meets criteria (i.e., where in syllabus)
<p>Criterion 1: At least 50 percent of the grade in the course should depend upon writing, including prepared essays, speeches, or in-class essay examinations.</p>	<p>The majority of class assignments involve the development and improvement of critical writing skills and are directly linked to the course objectives. Only a small fraction of the final grade comes from objective module quizzes and introductory assignments.</p> <p>Of the 70% of the final grade that depends upon writing, the largest portion (40%) comes from the Hazard Reports/Final Report assignments.</p> <p>Hazard reports are submitted every other week. The student identifies significant details about a recent extreme weather or climate event and provides a meaningful recommendation toward mitigation. The Final Report is built from the Hazard Reports and analyzes the top ten extreme weather and climate events from the semester. Together, these tasks are worth 40% of the final grade.</p> <p>Reflection papers are submitted every other week and are worth 20% of the student's grade. The reflection is a one-page critique of a current article or video on various aspects of extreme weather and climate hazards. The student must also critique a colleague's reflection, providing formal feedback for their colleague.</p> <p>The Mid-Term Essay (four to six</p>	<p>Syllabus GPH 267: 70% of course grade comes from writing assignments.</p> <p>40% Hazard Reports/Final Report; 20% Reflections; 10% Mid-Term Essay.</p>

	<p>pages) requires a written critical response to a writing prompt, worth 10% of the final grade.</p>	
<p>Criterion 2: The composition tasks involve the gathering, interpretation, and evaluation of evidence.</p>	<p>Hazard Reports require the student to identify, evaluate, and discuss the impacts of extreme weather or climate events that occur during the semester. Reflections provide opportunities to hone critical reading skills, increase proficiency in analytical writing, and investigate and apply key course concepts in concise written analyses. Additionally, the student must critique their colleagues' reflections, providing feedback regarding the content, organization, style, and accuracy of the work.</p> <p>The Mid-Term Essay allows the student to synthesize their learning from the textbook, supplemental materials, lectures, and discussions. Based on a writing prompt, the student gathers and presents evidence substantiating their opinion of a question or issue (e.g. regarding the colloquial usage of the terms hazard, disaster, and catastrophe), demonstrating their mastery of course concepts.</p> <p>The Final Report builds on the data gathered in the Hazard Reports and requires the student to verify the completeness of the records, compile the hazard reports, assess the consequences, and propose a critical appraisal of mitigation for each event.</p>	<p>Syllabus GPH 267: Hazard Reports/Final Report; Reflections; Mid-Term Essay.</p>
<p>Criterion 3: The syllabus should include a minimum of two substantial writing or speaking tasks, other than or in addition to in-class essay exams.</p>	<p>Seventy percent of the final grade is culled from four substantial tasks: Hazard Reports, Final Report, Reflections, and Mid-Term Essay.</p> <p>Hazard Reports and Reflection papers are submitted within each learning module (six learning modules are provided). The assignments are written weekly during the semester and worth a substantial portion of the final</p>	<p>Syllabus GPH 267: Hazard Reports/Final Report; Reflections; Mid-Term Essay; Final Report.</p>

	<p>grade. These iterative tasks allow the student to reflect upon and refine their opinion, develop observational proficiency, and build analytical skills. For the Hazard Report, the student investigates current extreme weather and hazard events, verifying the location, cause, and impacts, and then formulates a specific, detailed suggestion on mitigation for the reported event and location. A Reflection paper is based on a critique of current literature (e.g. Spatial Patterns of Natural Hazard Mortality, Borden and Cutter.), or other applicable materials regarding the nature of extreme weather and climate events.</p> <p>The Mid-Term Essay (four to six pages in length) is written outside of the classroom and is designed to allow the developing writer to extend their analytical reach with a more complex formal writing assignment. The Mid-Term Essay is initiated through a writing prompt (e.g. Explain the colloquial usage of the terms hazard, disaster, and catastrophe, providing evidence for your justification), allowing the student to synthesize their learning and research applicable historical events.</p> <p>Ongoing research during the semester (Hazard Reports) culminates in a meaningful written discussion of the most extreme weather and climate events of the semester (Final Report). Each page of the Final Report is composed as a more comprehensive Hazard Report, with detailed information and analysis about the event, coupled with a meaningful discussion regarding mitigation of consequences.</p>	
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<p>Criterion 4: These substantial writing or speaking assignments should be arranged so that the students will get timely feedback from the instructor on each assignment in time to help them do better on subsequent assignments.</p>	<p>Graded written assignments (Hazard Reports and Reflections) are submitted weekly allowing for multiple opportunities to revise and reinforce writing skills. Not only does the instructor provide guidance on these written assignments, the student also receives formal feedback from their colleagues several times during the semester.</p> <p>This Mid-Term Essay permits an evaluation of skills attained to that point in the semester, allowing the student to identify areas of strength and build strategies for improvement prior to a more lengthy assignment (Final Report).</p> <p>As it is initiated from the module Hazard Reports, the Final Report is monitored and critiqued at six different checkpoints during the semester. Additionally, an organized small-group discussion prefaces the Final Report, allowing the student to gather feedback on structure, organization, and content.</p>	<p>Syllabus GPH 267: Hazard Reports/Final Report; Reflections; Mid-Term Essay.</p>
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JUSTIFICATION FOR LITERACY AND CRITICAL INQUIRY DESIGNATION

This course provides a non-technical survey of extreme weather and climate processes. Coupled with human interactions, these atmospheric-driven events are increasingly producing catastrophes that devastate local populations, depress the global economy, and provide fodder on the nightly news or even the popular culture. In recent years, human, economic, social, and other damages from natural events have ravaged communities worldwide, including the April 2011 tornado outbreak in the United States (875 preliminary tornado reports, 369 fatalities, thousands of injuries) and Typhoon Talas, the deadliest typhoon to hit Japan since 2004 (making landfall at an especially vulnerable time in Japan’s recovery from the 9.0 Honshu Earthquake). Never before has a knowledgeable and literate citizenry been so crucial in deciding how to minimize billion-dollar and deadly consequences.

A primary goal of this class is to create an informed citizenry that can effectively communicate their newly synthesized knowledge. Thus, successful completion of introductory English coursework is required (ENG 101, 105, or 107) as a prerequisite. The learning outcomes of this course are to improve critical thinking, reading, and writing skills and to enhance the global, cultural, and historical perspective of extreme weather and climate events so that the student will be able to think critically and form opinions that are substantiated with evidence. This class provides the context and tools necessary to develop and enhance these skills.

Course Catalog Description GPH 267

An introductory survey of extreme weather and climate processes and the often disastrous consequences at the intersection of human operations.

GPH 267 Extreme Weather and Climate

Fall, 2012

Instructor: Dr. Erinanne Saffell

Office Hours: In Person: Coor 3368, Friday noon-2PM, and by appointment. Please email me to arrange an appointment outside of office hours.

Email: saffell@asu.edu (please use GPH267 in the subject for all class correspondence)

Schedule: GPH267 is offered entirely online within the Blackboard learning management system

Introduction

The issues surrounding extreme weather and climate hazards, disasters, and catastrophes exemplify the complex interplay between physical and cultural geographic processes. Extreme weather and climate events only become hazardous at the intersection of human operations. The magnitude of these responses are now producing catastrophes that devastate local populations, depress the global economy, and provide fodder on the nightly news or even the popular culture. In recent years, human, economic, social, and other damages from natural events have ravaged communities worldwide, including the April 2011 tornado outbreak in the United States (875 preliminary tornado reports, 369 fatalities, thousands of injuries) and Typhoon Talas, the deadliest typhoon to hit Japan since 2004 (making landfall at an especially vulnerable time in Japan's recovery from the 9.0 Honsho Earthquake). Never before has a knowledgeable and literate citizenry been so crucial in deciding how to minimize billion-dollar and deadly consequences.

Catalog Description

Extreme Weather and Climate provides a non-technical survey of extreme weather and climate processes. Coupled with human interactions, these atmospheric-driven events are increasingly producing hazards, disasters, and catastrophes. Extreme weather and climate hazards are inherently geographic, tend to be repetitive, and can be exacerbated or mitigated through cultural practices. As such, a cultural, historical, and global perspective is essential in understanding the consequences of natural events. Additionally, the application of theory and scientific research will provide useful insights for informing real-world decisions.

A primary goal of this class is to create an informed citizenry that can effectively communicate their newly synthesized knowledge. Thus, successful completion of introductory English coursework is required (ENG 101, 105, or 107) as a prerequisite.

Ultimately, the ability to make critical and informed decisions while understanding the consequences of our actions will serve to build a more sustainable world.

Outcomes

The outcomes of this course are 1) to improve your critical thinking, reading, and writing skills and 2) to enhance your global, cultural, and historical perspective of natural events so that 3) you will be able to think critically and form opinions that are substantiated with evidence.

Specifically, upon completion of this course, you will be able to:

1. Describe what constitutes a hazard, disaster, or catastrophe
2. Explain the physical processes creating extreme weather and climate events
3. Identify the locations and scale of atmospheric-driven natural hazards
4. Outline the structure and roles of governments and citizens managing natural hazards
5. Identify human actions that intersect with natural processes (e.g. development of coastal regions)
6. Analyze cultural and historical aspects of risk (e.g. population density, growth)
7. Apply probabilities and the scientific method in hazard risk analysis
8. Critically assess (historical to current) local, national, global preparedness and response
9. Identify linkages between natural events (e.g. hurricanes can produce floods)
10. Analyze service functions (benefits) of natural processes (e.g. hurricanes can reduce drought)
11. Demonstrate effective communication skills

Prerequisites

Successful completion of English 101, 105, or 107 (grade of C or better)

Course Materials

Textbook (required): *Extreme Weather and Climate*, 1st Edition, Ahrens and Samson, ISBN: 0-495-11857-5

Supplemental Readings and Materials (supplied in class)

Borden, KA. and Cutter, SL. 2008. *Spatial Patterns of Natural Hazard Mortality in the United States*. *International Journal of Health Geographics*. 7:64. 1-13.

Colten, CE. 2006. *Mired in New Orleans: One Year After Katrina*. <http://hnn.us/articles/29056.html>

Cutter, SL., et al. 2003. *Social Vulnerability to Environmental Hazards*. *Social Science Quarterly*, 84:2. 242-261.

White, GF. *Human Adjustment to Floods*. University of Chicago, Department of Geography. (Thesis PhD). 1945. 225pp.

Online Videos

American Experience. Surviving the Dust Bowl. Online at: <http://www.pbs.org/wgbh/americanexperience/films/dustbowl/>

Nature. Can Animals Predict Disaster? Online at: <http://www.pbs.org/wnet/nature/episodes/can-animals-predict-disaster/introduction/130/>

Nova. Megabeasts' Sudden Death. Online at: <http://www.pbs.org/wgbh/nova/clovis/>

Instructor and Student Obligations

- Respect each person's individuality as a learner.
- Be open to feedback from fellow class participants.
- Give constructive feedback to class participants.
- Support academic honesty and integrity.

Online Learning

Participants are responsible for managing their time in regards to assignments and planned (or unplanned) Blackboard outages. Please be aware that technology occasionally fails, and you should budget your time with this in mind. Unplanned Blackboard outages will be handled on a case-by-case basis. WHEN YOU HAVE TECHNICAL PROBLEMS, please follow the instructions listed in our class Technical Support button. It is a good idea to become familiar with what to do BEFORE you have a technical issue.

This course takes place online through the use of Blackboard. Become familiar with the class interface before the session begins and seek help as necessary. All ASU campuses have resources available to help you with this task. A lack of Blackboard knowledge is not an acceptable excuse for late work. See asuonline.asu.edu for more information about online courses at ASU. If you need help learning more about Blackboard, visit the ASU Blackboard Student Help section http://help.asu.edu/sims/selfhelp/SelfhelpKbView.seam?parature_id=8373-8193-5953.

Please note that the new version of Blackboard, Bb v9.1, was released in 2011. The majority of Blackboard v9.1 will work in the same way as previous versions, but many areas have a new look and feel. Visit <http://ondemand.blackboard.com> to learn more about this version of Blackboard.

This course uses various public virtual environments as part of the curriculum. At times you will be prompted to leave Blackboard and access course materials on the internet. The activities are required, so you should notify your instructor IMMEDIATELY if you have any questions or concerns regarding the use of public virtual environments.

General Course Policies

Each day runs from 12:00AM to 11:59PM MST (AZ time). Deadlines for assignments and projects are always at 11:59PM MST (AZ time), unless otherwise specified.

Due to the nature of the course, you can expect to work on course requirements for several hours each week, which can break down into 1-4 hours each day, depending upon how quickly you pick up certain technologies and information. A typical 3-credit hour course during the semester requires three hours in the classroom each week, and approximately twice that amount of time working outside of class. This will not be an easy class, but you will leave this class fully versed in the material!

Academic Integrity

The ASU student academic integrity policy lists violations in detail. These violations fall into five broad areas that include but are not limited to: cheating on an academic evaluation or assignment, plagiarizing, academic deceit, such as fabricating data or information, aiding academic integrity policy violations and inappropriately collaborating, or falsifying academic records. Each student must act with honesty and integrity, and must respect the rights of others in carrying out all academic assignments. For more information about the ASU student academic integrity policy, please use the following web link: <http://provost.asu.edu/academicintegrity/policy/StudentObligations>.

Discussion Board

Discussion Board postings are interactive activities that all class participants must perform. All discussion is due before 11:59PM MST (AZ time) on the assigned day. You are encouraged to complete initial discussion posts early to allow time for more responses to your posts. Instructions for each required discussion are included in each module.

A note on mechanics: While we are all somewhat used to casual terms and lingo, you are expected to use formal language and structure for all of your Discussion Board activities.

Please be aware that I will judge the links and comments on their appropriateness, and remove any information not submitted in the spirit of learning. This may include extremely profane, vulgar, or offensive material that is not applicable to this community's learning. Inappropriate content will result in a failure of this class. Disruptive, threatening, or violent behavior or communication toward any member of this learning group will not be tolerated, per the Student Services Manual.

Course Format

An online course necessitates a proactive and organized approach to your learning. To assist you in your efforts, you will complete six specific inquiry modules containing multiple activities that will allow you to participate, know, understand, apply, analyze, reflect, and check your learning (MODULE assignments). You will also have introductory assignments at the beginning of the semester to become familiar with the course and your fellow students (GETTING STARTED assignments), a mid-term assessment (MID-TERM ESSAY), and a final assessment at the end of the semester (FINAL REPORT).

This course deals with the processes and impacts of severe weather and climate. I will occasionally show films or introduce other materials that may portray graphic or violent images in a realistic manner. If you have any concerns regarding this portion of the class, please contact me during the first week of the semester.

Late-Work Policy

Late work is not accepted in this class. If you need accommodation due to religious observances/practices or official ASU events that may potentially disrupt your class management, please contact me prior to the scheduled due date in question.

Attendance Policy

Attendance in this course is measured through your participation and the submission of course assignments. If an emergency occurs and you are unable to complete assignments, sufficient documentation that demonstrates your inability to complete an online assignment must be submitted (i.e., documentation showing that you are physically unable to get to or use a computer and complete an assignment). Remember that you will have two weeks to complete the module assignments and that one module will be dropped at the end of the semester. If you need accommodation due to religious observances/practices or official ASU events that may potentially disrupt your class management, please contact me prior to the scheduled due date in question.

Grading

Your final grade provides an indication of your ability to understand, critically assess, and synthesize the course materials by forming complete and cogent written arguments that are substantiated with evidence.

70% C-1

Twenty percent of your grade comes from one-page reflection papers. You will write a reflection every other week during the semester. Your reflection is a critique of current literature or other applicable materials regarding the nature of extreme weather and climate events. Reflections provide opportunities to hone your critical reading skills, increase your proficiency in analytical writing, and investigate and apply key course concepts. Additionally, you will also provide formal feedback to your colleagues regarding the content, organization, style, and accuracy of their reflections, further strengthening your own analytical skills. C-2, C-3, C-4

C-2,
C-3,
C-4

Ten percent of your grade comes from a five-page mid-term essay written outside of our learning environment. You will synthesize your learning from the textbook, supplemental materials, lectures, and discussions, gathering and presenting evidence substantiating your opinion of a question or issue. This assignment allows you to extend your analytical reach with a more complex formal writing assignment, and is timed so that you acquire feedback on longer compositions before you submit your Final Report. C-2, C-3, C-4

C-2,
C-3,
C-4

Forty percent of your grade comes from ongoing research (Hazard Reports) during the semester that culminates in a meaningful discussion of the ten worst events of the semester (Final Report). The Hazard Reports require that you identify, evaluate, and discuss the impacts of the extreme weather and climate events that occur during the semester; you will write a Hazard Report every other week (total of six). I will evaluate your Hazard Reports for accurate reporting and thoughtful analysis, providing an opportunity for you to revise and resubmit before you incorporate your work in your Final Report.

C-2,
C-3,
C-4

Since it is initiated from the module Hazard Reports, the Final Report is monitored and critiqued at six different checkpoints during the semester. For the Final Report, you will verify the completeness of your records, assess the consequences to the local and/or global community, and propose a critical appraisal toward mitigation for each reported event (total of ten). Additionally, an organized small-group discussion prefaces the Final Report due date, allowing you to gather feedback on the structure, organization, and content of your work. C-2, C-3, C-4

Thirty percent of your grade comes from introductory assignments and weekly quizzes. The introductory assignments allow you to learn how to use the online tools in this class, and the weekly quizzes allow you to check your content learning on a regular basis.

Extra Credit

Extra Credit is available in each module in the form of a Participation Assignment. The Extra Credit applies only to that specific module and cannot exceed 100%, but it is counted toward your final grade.

The class is a summation of your GETTING STARTED, MODULE, MID-TERM, and FINAL assignments, and is worth a total of 500 points. This is a standard grading course, as follows:

A: 500-450 pts B: 449-400 pts C: 399-350 pts D: 349-300 pts E: 299 pts and below

GETTING STARTED 50 points total

The purpose of the **How to Use Online Resources** assignment is to learn how to use the internet to find legitimate and accurate reporting on natural hazards because you will be prompted to conduct specific research on recent hazards this semester. 20 points

The purpose of the **Personal Introduction** assignment is to learn how to use the class Discussion Board because you will be reporting hazard events on the discussion board this semester. You will also meet your fellow students and develop interpersonal connections through a personal introduction. 15 points

The purpose of the **Check your Course Knowledge** quiz is to help you identify certain aspects of the course and learn how to take an online quiz. The quiz questions come from the syllabus, lecture, and the online resources assignment. 15 points

MODULE checklist 300 points total

These assignments will give you the opportunity to strengthen your critical reading skills, increase your proficiency in analytical writing, and investigate and apply key course concepts.

You will complete six learning modules this semester. Each module focuses on different extreme weather and climate hazards, yet you will perform the same types of assignments in each module, improving your skills through the semester. The module assignments total 60 points per module. I will drop your lowest total module score at the end of the semester (not the individual lowest assignment scores, but the lowest total module score).

KNOW Textbook readings, lectures	For each module, you will read the assigned chapters in the textbook and view the narrated lectures and supplemental videos. As you read and listen, you should outline, organize, and describe the information.	0 points	} C-2, C-3, C-4
UNDERSTAND Practice activities	After you have arranged and ordered the module instructional material, you will evaluate and restate the information in online practice activities. These practice activities identify specific learning objectives to guide your understanding.	0 points	
APPLY Hazard Reports C-2, C-3, C-4	As an application of your learning, you will identify, evaluate, and discuss the impacts of extreme weather and climate hazards that occur globally during the semester. These interactions will take place on the Hazard Discussion Board and will serve to inform your Final Report. For each module, you will post detailed information about a recent hazard and an idea toward the mitigation of the event. Obviously, duplicate hazard reports are not accepted.	20 points	
REFLECT Personal Reflections C-2, C-3, C-4	You will reflect on and connect theory to the real world. In each module, you will be prompted to evaluate articles or videos on various aspects of extreme weather and climate hazards and then post your analysis on the Reflection Discussion Board. Your one-page response is designed to give you the opportunity to develop your analytical and communication skills. To facilitate critical thought and discussion, you will reply to one colleague reflection posting, providing your critical assessment of their reflection.	20 points	
CHECK Module quiz	You will check your learning from the textbook, supplemental materials, and lectures through an online, timed, multiple-choice module quiz.	20 points	

MID-TERM and FINAL 150 points total

A goal of this course is to have you think critically and form opinions that are substantiated with evidence. At the mid-point and end of the semester, you will have opportunities to demonstrate your mastery and synthesis of the material through the completion of written assignments.

Mid-Term Essay: 50 points C-2, C-3, C-4
 You will synthesize your learning from the textbook, supplemental materials, lectures, and discussions, and demonstrate your mastery of the material through a mid-term essay. Your mid-term essay will be 1300-1500 words in length based on your response to a writing prompt.

Final Report: 100 points C-2, C-3, C-4
 This assignment will broaden your global and cultural awareness as you track the extreme weather and climate hazards that occur this semester. In each module, there will be a required Hazard Discussion Board checkpoint providing feedback for this semester-long project. After you have assembled, compiled, and verified your hazard event data, you will write a final report that analyzes the ten worst disasters of the semester. You will describe the cause(s) and effect(s) of each disaster, assess the consequences, and provide a critical appraisal of mitigation. Your Final Report will be minimally 10 pages in length, with a maximum page length of 15.

Writing Rubric

A writing rubric is available for each writing assignment. You are encouraged to consult and review the rubric before you submit your assignments or postings.

Course Schedule

The schedule is tentative and subject to change.

Week	Topics	Activities Due	Readings/Materials
1	Threats from the Sky: Atmosphere. Importance, Historical Perspective, and Benefits of Natural Hazards	Getting Started How to Use Online Resources Personal Introduction Check your Course Knowledge quiz	What is Geography? Chapter 1
2	The Geography of Extreme Weather and Climate: Location, Spatial and Temporal Scale. Hazard Risk Analysis: Scientific Method, Probabilities, Linkages, Minimize Consequences	Module One Practice activities Personal Reflection Critical reply	Spatial Patterns of Natural Hazard Mortality in US
3	Energy that Drives Events: Rock, Tectonic, Energy, Hydrologic, Biogeochemical Cycles	Module One Hazard Report Module quiz	Chapter 2
4	Temperature and Humidity Extremes: Diurnal and Annual Variation; Heat Waves and Oppressive Weather	Module Two Practice activities Personal Reflection Critical reply	Chapter 3 Social Vulnerability to Environmental Hazards
5	Wind Systems: Global and Local Circulation; Jet Stream and Turbulence; Local (Geographic) Winds; Teleconnections	Module Two Hazard Report Module quiz	Chapters 7, 8
6	Thunderstorms: Development; Gust Fronts and Squall Lines; Derechos; Microbursts and Straight-line Winds; Lightning	Module Three Practice activities Personal Reflection Critical reply	Chapter 11 Nature: Can Animals Predict Disaster? PBS
7	Tornadoes: Life Cycle; Occurrence and Distribution; Outbreaks; Supercell vs. Non-supercell formation	Module Three Hazard Report Module quiz	Chapter 12
8		Mid-Term Essay	
9	Mid-Latitude Cyclones: Air Masses and Fronts; Backdoor Cold Fronts; Nor'easters; Great Plains Blizzards; Storm of the Century	Module Four Practice activities Personal Reflection Critical reply	Chapters 9, 10
10	Tropical and Coastal Processes: Cyclone Development; Storm Surge, Winds, and Inland Precipitation; Statistical Analysis; Locations at Risk; Rip Currents and Runup Maps	Module Four Hazard Report Module quiz	Chapter 13 Mired in New Orleans: One Year After Katrina
11	Extreme Precipitation and Drought: Types of Precipitation; Wildfire as a Process; Benefits to Ecosystems; Mitigation	Module Five Practice activities Reflection Critical reply	Chapters 5, 6 American Experience: Dust Bowl. PBS
12	Floods and River Systems; Discharge and Floodplain Processes; Land-use Changes; Perception of Flood Hazards Mass Movements and Slope Processes	Module Five Hazard Report Module quiz	Human Adjustment to Floods
13	Climate Change Caused by Natural Events and Human Activities: Plate Tectonics, Solar Variation, Urban Heat Island	Module Six Practice activities Personal Reflection Critical reply	Chapter 15
14	Space Weather: Impacts and Mass Extinctions	Module Six Hazard Report Module quiz	Nova: Megabeasts' Sudden Death PBS
15	Feedback on Final Report structure, organization		
Finals		Final Report	

Accommodations

Please contact me personally during the first week of class to discuss any special needs that you may have in this class. Reasonable accommodations are available for students with limitations due to documented disabilities. If you require specific accommodations, you will also need to contact and register with the ASU Disability Resources Center.

Establishing Eligibility for Disability Accommodations: Students who feel they will need disability accommodations in this class but have not registered with the Disability Resource Center (DRC) should contact DRC immediately. Their office is located on the first floor of the Matthews Center Building. DRC staff can also be reached at: 480-965-1234 (V), 480-965-9000 (TTY). For additional information, visit: www.asu.edu/studentaffairs/ed/drc. Their hours are 8:00 AM to 5:00 PM, Monday through Friday.

General Writing Guidelines

A note on style: You will NOT be graded on your dramatic response. You will be graded on your *critical response*. A critical response is not a *negative* response. To be critical is to exercise or involve careful judgment or judicious evaluation (Merriam-Webster). To be critical is to evaluate any inconsistencies and not just restate facts. To be critical is to analyze the implications of the message, not just accept without question.

A note on accuracy: All information that you present should be completely factual. When you cite statistics or supporting detail, make sure to provide documentation.

A note on ideas: When you are asked to incorporate your own ideas, your thoughts should be made with depth and detail, substantiated with sufficient evidence. Your thoughts should be your OWN. If you wish to include other ideas as a foundation for your argument, make sure to FULLY cite the owners of these ideas. Plagiarism means to falsely represent not only exact words from someone else, but also to claim their ideas as your own.

A note on mechanics: While we are all somewhat used to casual terms and lingo, you are expected to use formal language and structure for all of your assignments. Your work should be very well organized with an evident structure. One idea or sentence should follow another in a logical sequence with clear transitions. There should be no spelling, punctuation, capitalization, grammar, or usage errors that distract from your meaning. All work is based on double-spacing templates.

Please be aware that I will judge all comments on their appropriateness, and remove any information not submitted in the spirit of learning. This may include extremely profane, vulgar, graphic, or offensive material that is not applicable to the community's learning. Inappropriate content will result in a failure of this class.

How to Perform the Reflection Assignment C-2, C-3, C-4

In each module, you will have links to reflection materials that you will observe, evaluate, describe, and critique. A REFLECTION PROMPT will guide you in forming your one-page personal reflection. You will post your personal reflection on the class discussion board, and then reply to a colleague critiquing their reflection. Your response to a colleague must provide sufficient evidence for your opinion regarding the content, organization, style, and accuracy of their reflections.

You must write a minimum of one page (300-500 words, NOT including your name and other supporting information like a bibliography), but do NOT exceed two pages (not more than 700 words). This means that you must be concise and efficient in your response. Highlight the issue and discuss specific details thoroughly. Your analysis should be thoughtful and insightful, and your focus should be evident, well-stated, and maintained throughout your discussion. All information must be accurate and completely factual.

C-2,
C-3,
C-4

How to Perform the Hazard Report Assignment C-2, C-3, C-4

In each module, you will submit a Hazard Report. The extreme weather or climate hazard must have occurred **this semester**, and there can be NO DUPLICATE hazard reports (e.g. if there is an EF5 tornado in Phoenix this semester, there can only be one posting of that specific event). Your hazard report should include basic geographic information, cause, and impacts from your reported event.

Analyze how this event affected the local, regional, and/or global community. Remember that natural events often have far-reaching implications through space and time. Then, discuss your meaningful ideas and suggestions on what might mitigate the consequences or perhaps prevent future occurrences of this hazard.

C-2,
C-3,
C-4

How to Perform the Final Report C-2, C-3, C-4

Your module Hazard Reports provide a means for you to track the extreme weather and climate events that occur this semester and receive feedback from the instructor on their content, accuracy, and analysis. Each page of the Final Report is composed as a more comprehensive Hazard Report, with detailed information and analysis about the top TEN worst extreme weather and climate events this semester.

The term "worst" is somewhat subjective, but usually the events that cause catastrophic loss of life or economic impacts would qualify. You will make the decision on the ordering of the events, from "worst" to "least", providing evidence and justification for your conclusion. You may collaborate with colleagues, but must turn in your own work. For the purpose of fostering discussion regarding the events of the semester, you may post your thoughts, ideas, and considerations regarding the rankings of these events on a non-graded discussion board called **Final Thoughts**.

C-2,
C-3,
C-4

You should have minimally one page per each event that includes specific details about the event, including geographic information, cause, and overall scope. You should also include a detailed discussion toward the mitigation of the event, specific to its geographic setting.

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