Instructor Contact Information
Keith D. West, PhD., Associate Professor of Geoscience, Dept. of Natural and Applied Sciences
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Office Hours: Tuesday-Thursday 11:30 am - 12:15 pm. Please contact me by email to make an appointment if you need to talk at another time.

Course Overview
This course will be an examination of very powerful natural processes and events and their impacts on human society and the built environment. These natural forces are often characterized as “hazards” and are frequently linked to human catastrophe, but in themselves, they occur quite indifferently in relation to human activity. In fact, as we will examine, society’s policy and infrastructure decisions often contribute disproportionately to the toll in lives and property. Five fundamental concepts regarding disasters will constitute the framework for this course:

1. Hazards are (generally) predictable through scientific evaluation.
2. Risk analysis is an important component in understanding the impacts of hazardous natural processes.
3. Linkages exist between different natural hazards as well as between hazards and the physical environment.
4. The magnitude and frequency of hazardous events may increasingly be influenced by human activity.
5. Consequences of disasters may be minimized.

Material will be presented through the readings within the text, PowerPoint lectures on relevant topics, and other media intended to illustrate specific concepts. The content of this course is intended to enable you to develop or enhance certain skills (or proficiencies), including the ability to analyze, synthesize, evaluate, and interpret information and ideas.

Catalog Description
Explores the dynamic character of the Earth System by characterizing and understanding the causes and consequences of natural hazards. Hazards considered will include earthquakes, tsunamis, volcanic hazards (local, regional, global scales), meteorological hazards (hurricanes, tornadoes, flooding, coastal erosion), and landslides.

General Education Natural Sciences Learning Outcomes
By the end of this course, students will be able to:
• Explain central principles and theories of physical sciences.
• Describe the inquiry process through which the sciences approach the development of understanding of the physical world.
How to be successful in this course
Keep current with the readings and other course materials. Interact with your classmates and instructor using the electronic communication means provided. Keep an open mind and consider carefully all of the points of view you encounter, especially when they don’t align with your beliefs and opinions. Do all of the assignments by the assigned due date.

Grading Policies
Work carefully and thoughtfully on all coursework and your dedication should be reflected in your grade. The various quizzes and assignments described in this syllabus will totally determine your final grade. Extra credit does not exist. Erase that possibility from your mind.

Letter-grade scale

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<thead>
<tr>
<th>Grade</th>
<th>Percentage Range</th>
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<tbody>
<tr>
<td>A</td>
<td>94+</td>
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<tr>
<td>AB</td>
<td>89-93</td>
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<td>B</td>
<td>82-88</td>
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<td>D</td>
<td>60-68</td>
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<td>F</td>
<td>&lt;60</td>
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Learning Resources
Many Readings are derived from Pidwimy, Michael and Scott Jones. 2015. *Physical Geography: Fundamentals E-Book*. www.physicalgeography.net, and are available on the course Canvas site. More specific articles, video clips and other resources are available on the course Canvas site, also.

Course Organization
The syllabus lists activities for each week (Monday to Sunday) of the summer term. Please pay attention to due dates and times.

Regularly check Canvas for updates.

Graded Assignments
**Quizzes:** Eight quizzes cover the assigned readings, lectures, and videos. Material covered for each quiz is listed below by week. Each quiz is worth 40 points and may contain multiple choice questions, fill in the blank maps or graphics, or short answer identification. You will have one chance to take each quiz so be prepared when you start it. Before you start a quiz, read or view the assigned material. Quizzes are “open book” and must be completed by **11:59 pm** on the assigned due date in order to receive full credit.

Quizzes: (8 @ 40 pts each) = 320 points

**Hazard Assessments:** There are two hazard assessments that reflect specific case studies and other course-related concepts. Please carefully follow the instructions for each assessment.

Discussions: (2 Hazard Assessments x 40 points each) = 40 points

Late work will be penalized 10% for each week it is late. All work must be submitted by **11:59 pm, Sunday, 9 August** in order to receive credit.
## Course Activities by Week

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topic</th>
<th>Assigned readings, films/videos</th>
<th>Assignments Due</th>
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| 1    | 13 – 15 July | Disaster & Response    | **Lecture:** American History of Disaster and Response  
**Reading:** Z. Fitzner, 2019, “Many Animals Use Infrasound”  
**Videos:** Elephants and Infrasound | Quiz 1  
Due: Wednesday, 15 July |
| 1    | 16 – 19 July | Wildfires              | **Lecture:** Fire Ecology  
**Reading:** S. Pyne, 2010, “The Ecology of Fire”  
**Video:** Escaping Paradise | Quiz 2  
Due: Sunday, 19 July |
| 2    | 20 – 22 July | Mass Wasting           | **Lecture:** Mass Wasting  
**Reading:** Hillslope Processes and Mass Movement  
**Video:** Mass Wasting | Quiz 3  
Due: Wednesday, 22 July |
| 2    | 23 – 26 July | Coastal Hazards        | **Lectures:** Coastal Processes; Subduction & Tsunami  
**Readings:** The Rock Cycle; Uniformitarianism  
**Video:** Waves, Beaches & Coasts | Quiz 4  
Hazard Assessment 1  
Due: Sunday, 19 July |
| 3    | 27 – 29 July | Severe Weather         | **Lecture:** Severe Storms  
**Readings:** Thunderstorms and Tornadoes; Tropical Weather and Hurricanes  
**Videos:** Inside the Tornado; Killer Hurricanes | Quiz 5  
Due: Wednesday, 29 July |
| 3    | 30 July – 2 Aug | Flooding              | **Lecture:** Stream Dynamics & Flooding  
**Readings:** Streamflow and Fluvial Processes; Fluvial Landforms  
**Video:** Running Water II – Landform Evolution | Quiz 6  
Due: Sunday, 2 August |
Course Policies

Academic Integrity
Cheating and plagiarism will not be tolerated. Academic dishonesty is grounds for automatic failure of a unit grade. This course will adhere to the University of Wisconsin System Academic Disciplinary Procedures: http://www.uwgb.edu/deanofstudents/policies_procedures/students/pdfs/uws014.pdf.

Disability Services
Consistent with federal laws and the policies of the University of Wisconsin, it is the policy of UW-Green Bay to provide appropriate and necessary accommodations to students with disabilities. If you require any academic accommodations due to a disability, please contact the Disability Services (DS) Director (phone: 920-465-2841; email: dis@uwgb.edu; website: www.uwgb.edu/ds) to register or request services. If you have already established accommodations through the ACCESS program through the DS Office, please communicate your approved accommodations with me at your earliest convenience so we can discuss your needs in this course.