Syllabus for UWXGE170 Disasters: Living on the Edge

NOTE: This syllabus document contains the basic information of this course. The most current syllabus is available in the full course.

Course Description

Study of various environmental hazards, their causes, impacts on humans, and mitigations. Core topics are natural hazards (earthquakes, flooding, volcanic eruptions, tsunami, tornadoes, hurricanes, mass movements, extraterrestrial impacts), and anthropogenic hazards (climate change).

Prerequisite(s)

None

Course Outcomes

Upon completing this course, you will be able to do the following:

- Describe how the tectonic motion of Earth's lithosphere leads to geologic disasters such as volcanoes, earthquakes, landslides, and tsunamis.
- Explain how global atmospheric circulation and Earth's hydrologic cycle create weather-related disasters such as hurricanes, floods, and droughts.
- Analyze specific geologic risk factors that can be used to determine the probability of natural disasters occurring in a specific region.
- Identify how geologic disasters impact our everyday lives

Course Requirements/Components

Lab Activities (~200 Points)

The lab activities will be conducted 100% online. They will utilize online programs like Google Earth, Google Maps, and Virtual Geology Labs. You will submit worksheets for your labs on Canvas.

Reading Quizzes (~100 Points)

Each lesson has at least one reading "quiz", which is an untimed, multiple choice worksheet that covers the main topics in the learning resources for that lesson.

Discussions (30 Points)

There are two class discussions. The discussions have two components: the initial post and the replies. Each component has a separate due date. The first due date is the date by which your initial post should be submitted. The initial

post is your answer to the discussion prompt. The replies are your responses to me and your fellow students. It is recommended to respond to at least three other students.

Risk Assessments (~150 Points)

Risk assessments are projects completed in several lessons and include conceptual and critical thinking questions from the entire lessons. These assignments are meant to be challenging and to encourage you to think more deeply about the material. You might need to be creative or think beyond the material you have previously encountered.

Exploratory Assignments (~300 Points)

Students will explore some key concepts introduced in the readings in greater detail. These assignments are untimed, open note online worksheets. Not all lessons include exploratory assignments.

Grading

The following grading scale will be used to evaluate all course requirements and to determine your final grade: (examples below)

| Grade | Percentage |
|-------|------------|
| | Range |
| Α | 93% - 100% |
| A- | 90% - 92% |
| B+ | 87% - 89% |
| В | 83% - 86% |
| B- | 80% - 82% |
| C+ | 77% - 79% |
| С | 73% - 76% |
| C- | 70% - 72% |
| D+ | 67% - 69% |
| D | 60% - 66% |
| F | 0 - 59% |

| Assignment | Points |
|-------------------------|--------|
| Discussions | 30 |
| Lab Activities | ~200 |
| Reading Quizzes | ~100 |
| Risk Assessments | ~150 |
| Exploratory Assessments | ~300 |
| Total Points | |