

GE CRT SCI 101: How to live in a changing world? (CRN 47010)

Topic: Nature's Fury

Instructor Information

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Catalog Information

UMKC Catalog www.umkc.edu/catalog; Pathway Login <http://pathway.umkc.edu>

Catalog Number: GE CRT SC 101

Course Title: How to Live in a Changing World: Nature's Fury

Prerequisites: none

Credit hours: 3

Attributes: Critical Thinking in the Natural and Physical Sciences UMKC Essentials and EUREka Undergraduate Research

Course Format: Lecture

Course Instructional Mode: Online Synchronous

Course Restrictions: None

Catalog Description: This course will explore the natural and physical science through the question "How do I live in a changing world?". Students will propose a hypothesis, discovery or invention and propose methods, collect and analyze data and draw evidence-based conclusions. This section will explore Nature's Fury and investigate questions and problems related to natural hazards and their impacts.

Textbook: None. Readings will be posted on canvas and will vary by semester to reflect current events.

Other materials: 1) Students will be expected to use Canvas and access materials online. Please make note of the 6 general computer labs on campus <https://www.umkc.edu/is/labs/hourslocations/> 2) Students will be required to print posters for their semester project. Large format printing is available from some locations on campus, Office Depot or FedEx Store.

Student Learning Outcomes for Critical Thinking Courses of UMKC Essentials

In this course, students will:

- i. identify a topic, problem, or issue to be addressed,
- ii. locate relevant information representing various points of view,
- iii. evaluate alternative points of view,
- iv. synthesize diverse points of view, and
- v. draw a conclusion that is a logical inference from the evidence.

Note: in science, we are concerned with facts rather than opinions, thus, we can interchange “lines of evidence” or “interpretations of observed phenomena” to mean points of view in the above SLOs.

Nature’s Fury Course overview:

This course focuses on the processes of understanding and challenges of living with natural hazards. This means you will conduct research on a question related to the class theme, and participate in activities that deal with the complexities of preparing for, and responding to natural hazards. There are several critical assignments throughout the semester that build to this final project and the end of semester Poster Symposium, December 8 in Pearson Auditorium.

Course Structure:

Process of Science weeks: 1-4

Engaging in Science: weeks 5-10

Project Completion: weeks 11-15

Town Hall:

A Town Hall is a meeting between politicians or government agencies with their citizens and stakeholders to evaluate and determine a course of action. The class will hold a Town Hall meeting based on a relevant scenario, where you as students will represent different members of government or stakeholders as assigned by the instructor. Each individual will develop a position statement related to the scenario to advocate for a specific action. Each group will then select a speaker to present the position of the group. This requires preparation and participation during class. By the end of the Town Hall, an action plan will be selected based on the contributions and votes of the stakeholders. The instructor will moderate the Town Hall.

Semester long project:

All students will participate in a semester long group project to answer a question related to natural hazards. The instructor will select the focus topic (earthquakes, hurricanes etc.), but the group is responsible for identifying the question, collecting data, analyzing the data, and answering the question. At the end of the semester all GE CRT SCI 101 sections will participate in a Symposium, showing off the results of their group projects. Assignments throughout the semester will help build towards the final project. Group members will also be responsible for individual reflections and evaluations of the group.

Grading and Evaluation:

Breakdown	
Homework	10 at 35 each (350 points)
Town Hall	100 points
Exams (2)	100 points each (200 points) Open book
Project Poster	100 points presentation, 200 points content (300 points)
Reflections	50 points
Total	100% 1000 points

Percentage to Letter Grade Conversion:

A 93-100%	C+ 77-79%
A- 90-92%	C 74-76%
B+87-89%	C- 70-73%
B 84-86%	D 60-69%
B- 80-83%	F < 60%

Incomplete Grade: The instructor may assign the grade of I (incomplete) to students who have been unable to complete the work of the course because of illness or serious reasons beyond their control. An incomplete grade is appropriate only when enough work in the course has been completed for students to finish the remaining work without re-enrolling in the course or attending additional classes. This means the student should be in good standing (C or above) and not have unexcused absences prior to the petition. The work must be completed within one calendar year or the incomplete grade will automatically lapse to an F. Students should not re-enroll in a class for which they earned an incomplete. Students may not earn a degree or graduate with an incomplete on their transcript.

General Policies for UMKC Courses

Important UMKC Resources and Policies are applicable to every course and every student at UMKC. These are located in the Canvas site for this course by clicking the Help question mark on the left side of the screen, and then selecting 'UMKC Resources and Policy Statements'. As a UMKC student, you are expected to review and abide by these policies. If you have any questions, please contact your instructor for clarification.

Maintaining accurate enrollment records throughout the term is a partnership between instructors and students. Instructors are responsible for verifying student attendance and participation within the first three weeks (16 week course) through the Attendance Verification Survey (administered through UMKC Connect) as well as maintain records of participation throughout the term so that the last date of attendance for students with recorded "F" or "W" final grades may be submitted. Because student plans for enrollment sometimes change prior to the semester start, students not engaging in courses through the initial weeks of each course may be administratively dropped. For more detailed information regarding the policy see: <https://catalog.umkc.edu/undergraduate-academic-regulations-information/registration/administrative-drop-policy/>

Instructor(s) may record class sessions for the sole purpose of sharing the recording with students who can't attend class. Instructor(s) will take care not to disclose personally identifiable information from the student education records during the recorded lesson. Students are not permitted to record class sessions without written consent from the course instructor.

This course follows the "Faculty allowing recording" option of the Academic Inquiry, Course Discussion and Privacy policy. Faculty allowing recording - University of Missouri System Executive Order No. 38 lays out principles regarding the sanctity of classroom discussions at the university. The policy is described fully in Section 200.015 of the Collected Rules and Regulations. However, the redistribution of any audio or video recordings of statements or comments from the course to individuals who are not students in the course is prohibited without the express permission of the faculty member and of any students who are recorded, including those recordings prepared by an instructor. Students found to have violated this policy are subject to discipline in accordance with provisions of Section 200.020 of the Collected Rules and Regulations of the University of Missouri pertaining to student conduct matters.

You will need access to the computing resources necessary to complete this course through personal and/or University channels (e.g., computer labs). Our course will take place within the Canvas LMS and utilizing various software technologies that facilitate interaction and communication. We can make alternate arrangements should your reason for being without computer access warrant an accommodation (note: travel for vacation/work does not necessitate accommodations). Below is a list of some helpful computer requirements for full participation in this online class:

- [The latest version of Java](#)
- [The latest version of QuickTime](#)
- [The latest version of Adobe Reader](#)
- A current version of word processing software
- A headset with microphone
- A webcam
- Google Chrome, Firefox, or Edge for Windows computers
- Google Chrome, Firefox, or Safari for Apple computers

Broadband Internet connection is preferred. Examples of broadband Internet connection are high-speed DSL or a Cable modem.

The links below will connect you with answers and information for the most common technical questions and issues students experience.

UM System Keep Learning: <https://keeplearning.umsystem.edu/students>

UMKC Instructional Design/Technology: <https://idt.umkc.edu/support>

Additional important information about UMKC's policies and resources can be found at: <https://online.umkc.edu/support-policies>

COVID-19 Policies

UMKC's mask/face-coverings policy is available at <https://www.umkc.edu/coronavirus/>

Any student requesting an ADA accommodation for the University mask/face covering policy should contact Scott Laurent the Office of Disability Services as soon as possible by calling (816) 235-5696 or via email at laurentr@umkc.edu. Any student seeking COVID-related academic accommodations should

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Up to date information and FAQs regarding COVID-19 may be found on the UMKC COVID website: <https://www.umkc.edu/news/coronavirus.html>

College of Arts & Sciences Course Policies & Resources

Please refer to the following webpage and the linked resources for critical information regarding course policies and resources. <http://cas.umkc.edu/CPR/>

Other Policies: Students should assume that University policies apply at all times to this class, even if not explicitly covered in this syllabus. Students are referred to the Undergraduate or Graduate Catalog and other relevant documents for references to policies that may not be covered in this document.

Graettinger's specific course policies

***Late Assignments*:** All assignments are due in Canvas by the due date (they vary from the day of class to before class). A penalty of 24% per day will be assessed to any unexcused late work. A day is calculated as 24 hrs from the due date. In other words, turning in an assignment 96 hrs late will result in a 100% penalty. In some cases, it may be in your best interest to turn in work that would be worth 0%, as assignments build on each other; failure to turn in an assignment in such a sequence could result in a 0% given to all subsequent assignments in that series. Remember, group work requires that all members pull their weight. Keep in communication with your group mates AND the instructor when challenges arise.

***Use of Email*:** Due to FERPA regulations, I am unable to discuss this course, particularly your grades, via email to a non-UMKC email address. As a result, please ensure that you are checking your UMKC email regularly, and that you have a sufficiency of space below your quota to receive new incoming emails.

Curving: No.

Extra Credit: No.

Food and Drink: The policy matches that of the classroom. If snacks are allowed, please be courteous and clean up after yourself. If food behaviors are disruptive or disrespectful to other students or the department the privilege of bringing food to the class will be revoked.

Evaluation: At the end of the semester, all students will have the opportunity to evaluate this course (This information is valuable to me as an instructor and to my department). These evaluations, conducted online through RooEval, will remain anonymous and will not be shared with faculty until after the final grades are turned in.

Link to RooEval: <https://net3.umkc.edu/intapps/rooeval>

Semester Dates: Monday, December XX to Friday, December XX (closes at 11:59 pm)

Netiquette

According to "The Core Rules of Netiquette" by Virginia Shea, Netiquette (known as "Internet etiquette") is a catch-all term for the conventions of politeness and respect recognized in live chats, discussions, and emails. In online learning, Netiquette includes a set of guidelines that everyone should follow to promote appropriate online communication. Here are a few guidelines to follow when posting in online chats, discussions, and emails:

- **Maintain a positive tone:** When communicating online, we often forget that we are communicating with other human beings because we only see a computer screen. You do not see facial expressions, body language, or hear the tone of voice when you read messages. It's easy to misinterpret your correspondent's meaning, so always stop and think about your response before hitting submit. Always ask yourself, "Would I say that to a person's face?"
- **Use appropriate grammar and structure:** In other words, avoid using "R U" instead of "are you." There are some students in class that may not understand this type of communication and it does not enhance anyone's writing or vocabulary skills. Emoticons are fine as long as they are appropriate. A smile :) is welcome, anything offensive is not.
- **Never use all CAPS:** In online communication, caps are known as shouting, so refrain from using them.
- **Avoid personal attacks and flames:** Do not respond to personal attacks or flames when responding online. If you believe that you are being attacked, please email your instructor.
- **Avoid Offensive language:** Cursing, racial slurs, and other types of language that would not be appropriate in a face-to-face class are also inappropriate online.
- **Be respectful:** Always be polite and respectful in your discussions. Discussions are constructed so that they will allow you to think critically and offer theory plus opinion. There will be differences in opinions. There will be many viewpoints. Remember: Students taking online courses come from different parts of the country or even other countries. Cultural differences allow us to appreciate different perspectives.

To learn more, watch this helpful video [on what netiquette is and why it is important](#).

Adapted from the following website:

Albion.com & Ross, S. T. (2011). The Core Rules of Netiquette. Retrieved on July 11, 2013.

Tentative schedule, subject to change. The most up to date schedule will be on Canvas.

Date	Subject	Homework	Exams
Aug 25	Natural Disasters?		
Aug 27	How do we keep track of them?	Essential vocabulary	
Sept 1	Resources- finding		
Sept 3	Resources- evaluating	Reading	
Sept 8	Hazards vs. disasters		
Sept 10	Hazards vs. disasters	Elevator Speech	
Sept 14	Planning		
Sept 16	Town Hall	Town Hall preparation	
Sept 22	Methods- How to study changing Earth		
Sept 24	<i>Exam 1</i>	<i>Hazards vs. disasters</i>	<i>Exam 1</i>
Sept 29	Winds (tornadoes and hurricanes)		
Oct 1	Floods	Project proposal	
Oct 6	Wildfires/Drought/Heat Wave		
Oct 8	Volcanoes	Data analysis practice	
Oct 13	Winter Storms		
Oct 15	Earthquakes/Landslides	Progress update (1of2)	
Oct 20	Mitigation/Planning		
Oct 22	Group time	Progress update (2of2)	
Oct 27	Recovery		
Oct 29	<i>Exam 2</i>	<i>How we study hazards</i>	<i>Exam 2</i>
Nov 3	What makes a good figure?		
Nov 5	What makes a good presentation?	Draft graph/figure/table	
Nov 10	Climate and hazards		
Nov 12	Telling a story	Bullet list of trends	
Nov 17	Ethical challenges		
Nov 19	Future of natural hazard studies		
Nov 24	Thanksgiving Break		
Nov 26	Thanksgiving Break		
Dec 1	Poster review- conclusions	Final poster due	
Dec 3	Planning for the future	Project Reflection	
December 8: Poster Symposium (Virtual)			