Title: Climate Change and Water Resources

Instructor: Katherine
Office: TNR 244

Virtual Office Hours: Monday 9:30-10:30, Thursdays 9-10 (see canvas for zoom links)

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Course Description: With global warming and increased population, the demands upon world water resources have passed a critical level. In this course, past and present climatic trends are presented using case studies of diverse global regions. Through these case studies we will explore how the availability of water has shaped culture, agriculture, and diet. In addition, we will examine how past and present stressors on available water have been dealt with in different regions.

Learner Outcomes After attending lectures, participating in online discussions and the assessments, students will be able to do the following:

- Describe how climatic proxies (i.e. tree rings) are used to interpret climate change and evaluate evidence of climatic change and global warming.
- Explain the differences between global warming, greenhouse effect, enhanced greenhouse effect, and greenhouse gases.
- Describe how climate change has affected various global regions differently in the past millennium.
- Relate how water management strategies will either exacerbate or mitigate future climate change.

Required Reading:

Climate Science Special Report (Fourth National Climate Assessment, Vol 1) https://science2017.globalchange.gov/

Additional ONLINE course content is on MetEd (you will need to register and login) https://www.meted.ucar.edu/

Quiz Information and Schedule (for details on the extra credit quizzes see the syllabus)

You will need to register to access the Met Ed site. It is free and simple to do. If you have difficulty, then make sure you review the PowerPoint called "getting started" in the content section called "Getting Started"

SCHEDULE

The weeks have companion dates in the canvas calendar. Please check canvas for specific dates.

Week: Date	Topic (online)
1	Major Topics in Climate Change, Greenhouse effect
2	Greenhouse Gases
3	Proxies, Past Climates and
	Glaciations/ Discussion
4	Anthropogenic Global Warming
5	Exam 1
6	Water Resources and Water allocation
7	Climate Impacts to Fresh and marine water
	environments/ Discussion
8	Floods and Droughts

9	Spring break
10	Exam 2
11	Kyoto Protocol and other Climate Change
	Polices
12	Climate Models
13	IAMs/ Discussion
14	Environmental Policies that Impact the
	Climate
15	Exam 3
Final Exam:	Cumulative final exam

POLICIES AND OTHER CONSIDERATIONS

I. UWSP Community Bill of Rights and Responsibilities

UWSP values a safe, honest, respectful, and inviting learning environment. In order to ensure that each student has the opportunity to succeed, a set of expectations have been developed for all students and instructors. This set of expectations is known as the Rights and Responsibilities document, and it is intended to help establish a positive living and learning environment at UWSP. For more information go to: http://www.uwsp.edu/stuaffairs/Pages/rightsandresponsibilites.aspx.

The Rights and Responsibilities document also includes the policies regarding academic misconduct, which can be found in Chapter 14. A direct link can be found here: http://www.uwsp.edu/stuaffairs/Documents/RightsRespons/SRR-2010/rightsChap14.pdf.

II. Americans with Disabilities Act

The Americans with Disabilities Act (ADA) is a federal law requiring educational institutions to provide reasonable accommodations for students with disabilities. For more information about UWSP's policies, check here: http://www.uwsp.edu/stuaffairs/Documents/RightsRespons/ADA/rightsADAPolicyinfo.pdf.

If you have a disability and require classroom and/or exam accommodations, please register with the Disability Services Office and then contact me at the beginning of the course. I am happy to help in any way I can. For more information, please visit the Disability Services Office, located on the 6th floor of the Learning Resource Center (the Library). You can also find more information here: http://www4.uwsp.edu/special/disability/.

III. Participation

Professional behavior is expected toward your classmates and instructor. It is highly unusual that there is a problem of this nature, but I will not tolerate such behavior. Slurs against a person's gender, race, religion, sexual orientation, political affiliation or essentially attacks against a person are not tolerated in this class or on this campus (and in professional settings). This requirement does not restrict your freedom of speech associated with expressing your opinion. Learning how to express opposing opinions without becoming emotive or insulting is an excellent skill to acquire.

If the behavior is identified in the online class environment or via email and it is not corrected, then it may be followed by removal of your extra credit and/or a deduction of 10 percent of your final grade. Extreme measures can result in a discussion with the Dean of Students.

IV.a Grade Calculations

Grade Distribution:

Weekly Quizzes: 4pts each for a total of 10, 40 pts (drop two three quizzes)

Discussions: 20 points each, four discussions for a total of 80 pts Three best unit exams out 4 (including final exam) 300 pts

Total Points=420

C+

Grade Percent Grade Percent
A 94-100% C 70-74%
A- 90-93% C- 65-69%
B+ 87-89% D+ 62-64%
B 83-86% D 55-61%
B- 80-82% F < 55%

IV.b Grading and Late Policy

75-79%

Quiz answers will be released one week after the due date. You may not take a quiz after this date. To deal with issues, such as illness, etc, I will drop the two lowest 4-point quizzes. If you require special consideration due to unique circumstances, you need to contact me in a timely manner.

After the due date, you may incur a 2-point penalty per day the discussion is late. Late assignments slow down feedback to students, increase the burden to professors, and introduce unnecessary chaos in a class.

If you are struggling, then please seek my help.

V. Exam/Test Policy

Tests are open notes. You may not work with another person. Your lowest test score is dropped (this includes the final). Failure to take a guiz or an exam will be recorded as a zero.

VI. Quizzes

Quizzes are online are open notes and open book, but you may not work with another person. Do not take a quiz while logged into another person's computer. Do not take quizzes side by side with another classmate. Do not involve yourself in behavior that gives the appearance of cheating.

The best place to take quizzes is on campus because of the fast internet connection. If this is not possible, then choose a location where you will not be disturbed. The quizzes will time out after a while, and this will count as a quiz trial. For example, I do not recommend that you take quizzes at work if you will be called away or disturbed for long periods of time. If you need help finding a suitable location to take your online quiz, then let me know.

VII. Discussions

Discussion are 2 parts. First, you are required to post something. Second, you are required to respond to other posts. Failure to meet the post deadline will result in an automatic deduction of 3-5 pts (why 3 to 5 points? First time is 3, second time is 4, third time is 5). Students who post late, hold up other students from being able to get their responses done. Please contact me if you are having serious difficulties (personal, health, family, etc.). Discussions are further graded on accuracy of content, grammar and spelling, and civility.

Thus far, incivility has never been a problem. Please remember that you do not have to agree with the person, but NO MATTER WHAT you may not insult other classmates. Slurs against a person's gender, race, religion, sexual orientation, political affiliation or essentially attacks against a person are not tolerated in this class or on this campus (and in professional settings). This requirement does not restrict your freedom of speech associated with expressing your opinion. Learning how to express opposing opinions without becoming emotive or insulting is an excellent skill to acquire.

Course Technology Requirements

- View this website to see minimum recommended computer and internet configurations for Canvas.
- You will also need access to the following tools to participate in this course.
 - o computer
 - o printer
 - o a stable internet connection (don't rely on cellular)

UWSP Technology Support

- Visit with a Student Technology Tutor
- Seek assistance from the <u>IT Service Desk</u> (Formerly HELP Desk)
 - o IT Service Desk Phone: 715-346-4357 (HELP)
 - o IT Service Desk Email: techhelp@uwsp.edu

Canvas Support

In canvas, Click on the



button in the global (left) navigation menu and note the

options that appear:

Support Options	Explanations
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Ask Your Instructor a Question Submit a question to your instructor	Use Ask Your Instructor a Question sparingly; technical questions are best reserved for Canvas personnel and help as detailed below.
Chat with Canvas Support (Student) Live Chat with Canvas Support 24x7!	Chatting with Canvas Support (Student) will initiate a text chat with Canvas support. Response can be qualified with severity level.
Contact Canvas Support via email Canvas support will email a response	Contacting Canvas Support via email will allow you to explain in detail or even upload a screenshot to show your particular difficulty.
Contact Canvas Support via phone Find the phone number for your institution	Calling the Canvas number will let Canvas know that you're from UWSP; phone option is available 24/7.
Search the Canvas Guides Find answers to common questions	Searching the <u>Canvas guides</u> connects you to documents that are searchable by issue. You may also opt for <u>Canvas video guides</u> .
Submit a Feature Idea Have an idea to improve Canvas?	If you have an idea for Canvas that might make instructions or navigation easier, feel free to offer your thoughts through this Submit a Feature Idea avenue.

All options are available 24/7; however, if you opt to email your instructor, I may not be available immediately.

• Self-train on Canvas through the <u>Self-enrolling/paced Canvas training course</u>