

**Title: Climate Change and Water Resources****Instructor:** Katherine**Office:** TNR 244**Virtual Office Hours:** Monday 2-3, Wednesday 10-11**Book an appointment:**

<https://outlook.office365.com/owa/calendar/DrKatherineClancy@uwspedu.onmicrosoft.com/bookings/>

**Office Telephone:** 7153463429**E-mail:** [kclancy@uwsp.edu](mailto:kclancy@uwsp.edu)

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 more details.

<b>Week: Date</b>	<b>Topic (online)</b>
1	Major Topics in Climate Change, Greenhouse effect
2	Greenhouse Gases
<b>3</b>	Proxies, Past Climates and Glaciations/Discussion
4	Anthropogenic Global Warming
<b>5</b>	<b>Exam 1 (Sept 27-Oct 1<sup>st</sup>)</b>
6	Water Resources and Water allocation
7	Climate Impacts to Fresh and marine water environments/ Discussion
<b>8</b>	Floods and Droughts
<b>9</b>	<b>Spring break</b>
10	<b>Exam 2 (1-5)</b>
11	Kyoto Protocol and other Climate Change Polices
12	IPCC scenarios and management strategies/Discussion
13	Kyoto and Montreal Protocols
14	<b>Climate Solutions and Review</b>
15	<b>Exam 3 (Dec 6-10)</b>
Final Exam:	<b>Cumulative final exam will be available from December 13-16</b>

## 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 6<sup>th</sup> 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.

#### **Zoom Participation**

Synchronous online session guidelines: I rarely have problems with students. Many of these guidelines should not need to be stated, but I thought I would outline the expectations of our online meetings. Unfortunately, it only takes one student to cause serious disruption to the class.

1. You need to be dressed in attire you would wear to school (for the part of you that is visible).
2. You must use your name (or the name you go by in the class).
3. Either add a "zoom background" or make sure your background is suitable for a work environment (i.e. devoid of provocative pictures). Let's also take a break from politics. I am sure we could all use one.
4. Participation is part of this grade, so your camera needs to be on (if this is a problem, let me know in advance).
5. Do not give out the password or link to other people outside the class.
6. Make sure the background sounds are kept to a minimal and turn on mute when you are not talking.
7. Do not spotlight yourself on the screen unless you are talking. (if you don't know what this means, then don't worry about it.)
8. All of the zoom meetings will be recorded, but the links will not necessarily be shared unless something is pertinent that I think would benefit the entire class.

Failure to follow these guidelines may result in the following:

1. Removal from the zoom room to the waiting room.
2. Removal from synchronous sessions.
3. Reductions in your participation grade.
4. A required meeting with the dean of students.

#### **IV. Grade Calculations**

Grade Distribution:

Weekly Quizzes: 4pts each for a total of 40, 40 pts

Discussions: 20 points each, three discussions for a total of 60 pts

Fun Discussion 5 points each, three discussions for a total of 15 points

Three best unit exams out of 4 (including final exam) 300 pts

Total Points=415

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%
C+	75-79%		

#### **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 quiz or an exam will be recorded as a zero.

#### **VI. Quizzes**

Quizzes are online, 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 at least two 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

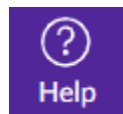
- View this website to see [minimum recommended computer and internet configurations for Canvas](#).
- You will also need access to the following tools to participate in this course.
  - o computer
  - o printer
  - o a stable internet connection (don't rely on cellular)

## UWSP Technology Support

- Visit with a [Student Technology Tutor](#)
- Seek assistance from the [IT Service Desk](#) (Formerly HELP Desk)
  - o IT Service Desk Phone: 715-346-4357 (HELP)
  - o IT Service Desk Email: [techhelp@uwsp.edu](mailto:techhelp@uwsp.edu)

## Canvas Support

In canvas, Click on the  
and note the



button in the global (left) navigation menu

options that appear:

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