

Instructor: Dr. Katherine Clancy

Come to Office Hours for Help

I am here for you. It is your responsibility to know my office hour availability. Please take the time to note this in your calendar, in your phone, or wherever it is useful to you.

Zoom link for virtual office hours : <https://wisconsin-edu.zoom.us/my/kclancy/>

E-mail: kclancy@uwsp.edu

Course Information

Course Description: Characterization and quantification of the hydrologic cycle

Textbook & Course Materials

Hydrology Textbook: Environmental Hydrology 2nd Ed by Andy Ward and Stanley Trimble

Statistics in Water Resources (provided as an electronic pdf, see the canvas)

<https://www.uwsp.edu/canvas/Pages/default.aspx>

Expectations: Understand basics of how to use a spreadsheet (i.e. excel) and college algebra and statistics.

Learning Outcomes: After completing the reading assignments and laboratories in this course you should be able to do the following:

1. Describe the basic physical processes involved in the hydrologic cycle.
2. Obtain and interpret hydrologic and climatic data.
3. Apply appropriate statistical analysis to hydrologic data.
4. Summarize and describe hydrologic data in graphical and tabular form.

Changes to the course schedule may occur. Graded Course Activities. For details and due dates, please check canvas or any updates.

Week Start Day	Week	Lecture Topic	Readings in addition to Lecture Powerpoints	Lab/Homework Topic (subject to change)	Lab
23-Jan	1	Characterizing the Hydrologic Cycle	1.1-1.4 (W&T)	R activity (quiz)	Lab
30-Jan	2	Precipitation	2.1-2.3 (W&T)	Lab: Area Estimation of Precipitation	lab
3-Feb	3	Frequency Analysis	2.7 12.4-12.5.3 (W&T)	Lab: frequency analysis and flood diagram	lab
13-Feb	4	Hydrology Stats and McCabe and Wolock	W&T 1.5-1.6, H&H 3.7, McCabe and Wolock, 2002	Lab: Precip Data and Statistical Tests	lab
20-Feb	5	Evaporation and Droughts Continued and SPI Index	Chapter 4 (W&T)	Lab: Groundwater elevation	lab
27-Feb	6	Groundwater	11.1-11.4 (W&T)	R lab test practice	lab
6-Mar	7	Groundwater and Stationarity and Trends	review week 4 reading	R lab test	R exam lab
13-Mar	8	Review and Midterm	review readings	no lab	
20-Mar	spring break				
27-Mar	9	Runoff and Design Storms	5.1-5.2,5.5- 5.6.2 (W&T)	HW: Runoff/quiz	No lab
3-Apr	10	Infiltration/Soil Physics	chapter 3 (W&T)	Lab: Data Retrieval	lab
10-Apr	11	Hydrograph Separation and Watersheds	5.3-5.4 (W&T)	Lab: Hydrograph separation	lab
17-Apr	12	Runoff 2	review week 9 reading	Lab: Water Data Retrieval	lab
24-Apr	13	Streams	chapter 6 and 7(W&T)	HW: Runoff model vs observation	HW/quiz
1-May	14	Streams and Watershed Management	chapter 6 and 7(W&T)	study for review homework	no lab
8-May	15	Final Review		no lab	no lab
15-May	finals week	Final is May 15th			

Complete Assignments

All assignments for this course will be submitted electronically through Canvas unless otherwise instructed. Assignments must be submitted by the

given deadline or special permission must be requested from instructor *before the due date*. Extensions will not be given beyond the next assignment except under extreme circumstances.

Late Work Policy

After the due date, you may incur a 2-point penalty per day the lab is late. Late labs slow down feedback to students, increase the burden to professors, and introduce unnecessary chaos in a class. Finally, students who become increasingly behind in this class rarely can keep up.

You may **not** submit a lab after feedback has been given. Quiz answers will be released one week after the due date. You may not take a quiz after this date. If you require special consideration due to unique circumstances, you need to contact me in a timely manner.

Letter Grade Assignment

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

Graded Assignments

- Labs/HW quizzes, 9 labs (20 pts), for a total 140 points (lowest score dropped)
- Week 1 activity: 10 pts

- In-class quizzes: 3-4, 10 pts each (lowest dropped)
- Professionalism 20 pts (turning assignments in on time, active participation...no texting, respect towards classmates and professor)
- Participation (attendance and demonstration of work on in class activities) 20 pts
- Midterm 100 pts (may include lab exam)
- Final Exam 125 pts (may include lab exam)