

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 (updated times are listed in canvas). Please take the time to note this in your calendar, in your phone, or wherever it is useful to you. Some office hours are in my office (TNR 244) others times are virtual. Details are listed on canvas on the office hours page.

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 (W&T)

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 (lecture notes on canvas)	Readings in addition to Lecture Powerpoints	Lab/Homework Topic (subject to change)	Lab Period
5-Sept	1	Characterizing the Hydrologic Cycle	1.1-1.4 (W&T)	Activity: R introduction (10 pts)	
11-Sept	2	Precipitation	2.1-2.3 (W&T)	Lab: Precip Lab 1	lab
18-Sept	3	Frequency Analysis	2.7 12.4-12.5.3 (W& T)	Lab: frequency analysis and flood diagram	lab
25-Sept	4	Hydrology Stats and McCabe and Wolock	W&T 1.5-1.6, H&H 3.7, McCabe and Wolock, 2002	Lab: Precip Lab 2	lab
2-Oct	5	Evaporation and and SPI Index	Chapter 4 (W&T)	Lab: SPI and SPEI	lab
9-Oct	6	Groundwater and Drought Indices (in-class Quiz 1)	11.1-11.4 (W&T)	Lab: Groundwater Elevation (R lab practice handed out)	lab
16-Oct	7	Groundwater and Stationarity and Trends	review week 4 reading	Midterm Lab Quiz	R exam lab
23-Oct	8	Review (Oct 23) and Midterm (Oct 25 th)	review readings	No lab	No lab
30-Oct	9	Runoff and Design Storms	5.1-5.2,5.5- 5.6.2 (W&T)	HW: Runoff/quiz	Online Quiz
6-Nov	10	Infiltration/Soil Physics	chapter 3 (W&T)	ArcGIS: Curve Number Map and delineate watershed	lab
13-Nov	11	Hydrograph Separation and Watersheds	5.3-5.4 (W&T)	ArcGIS Curve Number Continued and Baseflow	lab
20-Nov: Thanksgiving week	12	Hydrograph Separation and Watersheds	review week 9 reading	Spatial Data and Drought Indices	lab
27-Nov	13	Streams (in class Quiz 2)	chapter 6 and 7(W&T)	Spatial Data and Drought Indices	lab
4-Dec	14	Spatial Statistics and Watersheds	chapter 6 and 7(W&T)	Manning's homework/quiz	Online quiz
11-Dec	15	Final Review		no lab	no lab
18-Dec	finals week	Final Exam Tuesday 19th 8-10 am	comprehensive		

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 the instructor before the due date. Extensions will not be given beyond the next assignment except under extreme circumstances.

Late Work Policy

Late work is automatically penalized in Canvas. 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: 10-11 labs, 20 pts each
- Online or in-class quizzes: 2-4, 10 pts each (lowest dropped),
- Professionalism and participation 20 pts (on time to class and lab, turning assignments in on time, active participation...no texting, respect towards classmates and professor),
- Midterm 100 pts (may include lab exam)
- Final Exam 125 pts (may include lab exam)