Fall 2020 CEE 754/854: Engineering Hydrology

https://courses.unh.edu/class/202010/16884

Description: The *Engineering Hydrology* course is designed to introduce the science of hydrology, to describe the components of the hydrologic cycle, and to use hydrologic principles to design problems. The course prepares students to use hydrologic principles in the design of engineering projects such as water supply reservoirs, detention ponds, and urban stormwater systems. Principles of climate change impacts on the hydrologic cycle are addressed. The course also emphasizes the appropriate application of current software tools.

Schedule: TR 810 AM-930 AM **Room**: MCC 340

Instructor: Jennifer Jacobs, Ph.D., P.E., Jennifer.jacobs@unh.edu

Text book, title author, and year: Chow/Maidment/Mays, *Applied Hydrology* and other supplemental materials as well as Course Notes provided on CANVAS.

Content Delivery:

For the first two weeks, CEE 754/854 will be delivered online in a synchronous manner, (meaning it will be a live broadcast of what is happening in the classroom). The synchronous broadcast will be recorded for later viewing.

After the first two weeks, CEE 754/854 will used a "flipped classroom format" with lecture material presented asynchronously prior to class and class time will be devoted to problem solving sessions. These session will be delivered using a combination of online delivery and face-to-face delivery. MCC 340 can accommodate the enrollment of CEE 754/854, as of July 22, 2020. Face-to-face delivery will require students to have appropriate PPE and distancing and online. The class problem solving sessions will be broadcast in a ZOOM synchronous manner, (meaning it will be a live broadcast of what is happening in the classroom). The synchronous broadcast will be recorded for later viewing.

Students will have the opportunity to ask questions during class via ZOOM chats.

Asynchronous videos and other asynchronous material will be made available in the CEE 754/854 Canvas pages.

No matter which delivery format is used, students will be expected to "attend" class and be prepared to ask questions and answer questions. The class is run in an interactive format. At the same time the class will be broadcast in a synchronous manner, (meaning it will be a live broadcast of what is happening in the classroom). The synchronous broadcast will be recorded for later viewing.

Assessment:

All assignments will be posted in Canvas as well as links to the recordings of the synchronous broadcasts.

6-8 homework assignments that will be submitted electronically via Canvas

4-5 on-line and in-class quizzes, will be given during the first half of the semester

3 equally weighted examinations. It has not been determined the delivery format for examinations. Preference is for the exams to be administered in-person.

HEC-HMS Software exercises will be submitted electronically via Canvas

Attendance will be logged and students are required to have their video cameras on during class time. Attendance will be used in final grade determination.

Note: Accommodations for remote administration of any examination will be made on an individual basis following University policies and after timely consultation with course instructor.