

Fall 2020 CEE 796/896: Applications with Matlab

<https://courses.unh.edu/class/202010/168003>

Description: This course will explore how to address a variety of Civil Engineering problems using Matlab as a key calculation tool. Students will learn the basic concepts of programming in the Matlab programming language as well as some of the numerical method tools available in Matlab. Students will be presented with the concepts of several numerical methods that can be used to solve different Civil Engineering problems.

Schedule: MWF 210PM-300PM

Room: KING N129

Instructor: Robert M. Henry, Ph.D., P.E., Robert.henry@unh.edu

Text book, title author, and year: No required textbook for the course. Selected readings from a UNH on-line database and other supplemental materials Course Notes provided on CANVAS

Content Delivery:

Kingsbury Room N129 has capacity for the enrollment of CEE 796/896 (as of July 22 2020). Therefore CEE 796/896 will be delivered in a face-to-face format requiring students to have appropriate PPE and distancing.

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.

Students will have the opportunity during the face-to-face and the synchronous broadcast to ask questions via ZOOM chats. Student watching the asynchronous recordings will need to send their questions via canvas for the instructor to address.

Asynchronous videos: In addition to the recordings of the live synchronous broadcast, YouTube videos and other asynchronous material will be made available in the CEE 796/896 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 that will be put forth. The class will run in an interactive format and students could be called upon in a random fashion to answer questions. It is possible that unannounced quizzes will be given in class and you must be present to receive credit for the quiz.

Assessment:

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

It is anticipated that there will be 8-10 homework assignments. Each assignment will be submitted electronically via Canvas using the format presented in the assignment information.

Periodic on-line and in-class quizzes, number is unknown but likely to be between 6 and 8

1 mid-term examination and 1 final examination

It has not been determined the delivery format. It is likely the mid-term and the final will be individual presentations of Matlab based projects.

Preference is for the mid-term to in-person and the final to be administered online.

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.