

Fall 2020 CEE 778/878: Foundation Design 1

<https://courses.unh.edu/class/202010/15422>

Description: Foundation design based on subsurface investigation and characterization using current methods of laboratory and in situ testing. Use of consolidation theory and bearing capacity theory for the design of shallow foundations including footings and rafts. Basic design of pile foundations. Earth pressure theory applied to design of retaining walls. Slope stability theory and applications.

Schedule: TR 810 AM – 940 AM

Room: KING S145

Instructor: Jean Benoît, jean.benoit@unh.edu

Text book, title author, and year: Das, B.M. and Sivakugan, N., Principles of Foundation Engineering, Ninth Edition – SI Edition, Cengage . Selected readings from a UNH on-line database and other supplemental materials Course Notes provided on CANVAS

Content Delivery:

Kingsbury room S145 can accommodate the enrollment of CEE 778/878, as of July 22, 2020. With the exception of the first two weeks, CEE 778/878 will be delivered in a face-to-face requiring students to have appropriate PPE and distancing. The first two weeks will be online.

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 to ask questions during class via ZOOM chats.

Asynchronous videos and other asynchronous material will be made available in the CEE 778/878 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.

Assessment:

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

Weekly homework assignments that will be submitted electronically via Canvas

A group design project will be assigned towards the latter part of the semester

If possible, some field demonstrations of exploration techniques will take place on campus as one of the assignments and as part of the semester design project

2 mid-term exams and 1 final exam

It has not been determined the delivery format

All exams will 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.