

## Fall 2020 CEE 635: Engineering Materials

<https://courses.unh.edu/class/202010/14133>

**Description:** Structural properties and applications of the various materials used in civil engineering projects, including steel, cement, mineral aggregates, concrete, timber, and bituminous materials. Microstructure and properties of common metals, plastics, and ceramics. Prereq: CEE major or permission

**Schedule:** TR 1110 AM-1230 PM

**Room:** HORT B04

**Instructor:** Eshan Dave, Ph.D., [Eshan.dave@unh.edu](mailto:Eshan.dave@unh.edu)

**Text book, title author, and year:** Materials for Civil and Construction Engineers (4th Edition), ISBN: 978-0-13-432053-3 / 0-13-432053-0. Authors: Michael S. Mamlouk, John P. Zaniwski

### Content Delivery:

CEE 635 lecture component will be delivered in a face-to-face format requiring students to have appropriate PPE and distancing. Please see details below for laboratory component.

At the same time the lecture 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.

Additional asynchronous videos and other asynchronous material will be made available in the CEE 635 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.

### Laboratories:

There will be three laboratory components for CEE 635 in Fall 2020.

- (1) Group labs that will be taught online. Students will asynchronously watch laboratory videos and work in groups to analyze data and prepare lab reports. A total of six laboratory sessions are planned.
- (2) Individually each student in class will be required to come to two (2) in-person three (3) hours long laboratory session. At start of semester students will be asked to sign up for dates for these two sessions. Timing of these two in-person sessions will be same as the laboratory section that student has selected during registration.
- (3) Mini home experiments for students will be assigned. These will be conducted by students in individual format with a short memo and video submissions to Canvas.

### Assessment:

- All assignments will be posted in Canvas as well as links to the recordings of the synchronous broadcasts.
- 8-10 homework assignments that will be submitted electronically via Canvas
- 6 laboratory report and 3 memo and video submissions will be required to be submitted electronically via Canvas
- Periodic on-line quizzes will be administered electronically, a minimum of 6
- 2 mid-term examinations and 1 final examination

All three exams will be administered online. Students will be required to use Lock-down browser and will have to keep their webcams on for the duration of exam.

Notes:

- (1) Accommodations for remote administration of any examination will be made on an individual basis following University policies and after timely consultation with course instructor and UNH SAS.
- (2) This document is for student’s planning purpose, actual course syllabus and policy document will be provided to student on first day of classes.