Description: A thorough examination of the problems that exist in hazardous and solid waste management and engineering are presented in terms of the current regulations and engineering approaches used to develop solutions. Topics include risk-based decision making, transport and fate of contaminants, and the fundamental physical, chemical, and biological concepts, which make up the basis for technological solutions to these waste management problems. Case studies are used throughout the course to highlight key concepts and provide real-world examples.

Schedule: MWF 1010 AM -1100AM  
Room: On-line

Instructor: James P. Malley, Ph.D. jim.malley@unh.edu

Text book, title author, and year: No required textbook. All materials will be available via CANVAS

Content Delivery:
CEE 720/820 will be delivered in a ZOOM synchronous manner, (meaning it will be a live broadcast of what is happening during the course lecture). The synchronous broadcast will be recorded for later viewing and placed on CANVAS. There will not be any face-to-face meetings for this course. The course has a TA assigned and she will be available to assist students throughout the term with formal office hours and with help on study sessions and administering specific student accomodations.

Students will have the opportunity to ask questions during class via ZOOM chats and/or raising their hand electronically and then using the Zoom audio.

Additional asynchronous videos and other asynchronous material will be made available in the CEE 720/820 CANVAS pages. Guest speakers from industry and government will present during the semester synchronously and their presentations will be recorded for later viewing and placed on CANVAS.

Students will be expected to “attend” each Zoom class and be prepared to ask questions and answer questions. The class is run in an interactive format.

Assessment:
A) There will be 7 quizzes* given (essentially one every other week) and the top 6 quizzes will be counted – these will be given during the e-class meeting for about 60 minutes 60%

B) Cumulative Final Exam Will be Provided as a Take Home Exam during finals week 20%

C) Weekly group (Team Based Learning) turn-in assignments will be conducted during the e-class using group lecture and the ZOOM break out rooms 20%

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