ENV 504: Remediation of Soil and Groundwater
Fall '24
Case study evaluation

The presentation will be evaluated based on the capacity of the presenters to explain the assigned case study in a rigorous and organized manner. The groups should demonstrate a clear, in-depth, understanding of the study. The presentation must include four distinct parts: (1) contamination characteristics, (2) approach description, (3) remediation design, (4) results. Within each group of four, two students should be responsible for part (1) and (2), and two students for (3) and (4). Below ,we list the minimum that is expected in each part, and evaluation criteria for the presentation. Understanding of the case study can require additional investigation using the lectures or other resources.

Groups will have 12 min to present and 3 min for questions.

1. Content (minimum) requirements:

Contamination characteristics

Provide chemical and physical properties of the contaminant. Indicate where the contaminant originates. Indicate where the contaminant is present on site. Provide geological/hydrological information on the site if relevant for the remediation project.

Technique

Describe the scientific principles of the technique(s) applied. Use conventions from the lecture (if the technique has already been introduced). Include equations if relevant.

Remedial design

Describe the temporal and physical implementation of the remediation strategy. If monitoring techniques are not indicated, suggest some and the relevant parameters to probe.

Results

Describe the results obtained in a quantitative manner. Make connection(s) with the technique(s) applied to demonstrate your good understanding of it.

2. Presentation evaluation criteria:

	Clarity of content	Clarity of delivery	Answers to questions
Well done	1. Objective of the presentation is easily identified; content supports objective; Content, structure, and language of presentation geared to intended audience; 3. Appropriate use of direct/indirect structure; presentation organized according to audience's needs; relationship between ideas clear; strong introduction and conclusion	1. Speaker uses gestures comfortably in line with his/her own style; eye contact is appropriate for audience; use of space appropriate for the situation; 2. Appropriate visual aids are used; visual aids serve as a complement to the speaker and the message to be delivered; designed effectively; speaker uses visual aid easily	1. Speaker answers questions knowledgeably, thoroughly, and concisely; process is handled smoothly; 2. Speaker is able to provide technical details readily
Acceptable	1. Objective is not immediately clear; some additional content needed to support objective; 2. Presentation is missing some content required by audience; some language used inappropriately (e.g., unfamiliar jargon, too much jargon); 3. Structure either too direct or too indirect; organization is evident but may be undermined by weak transitions or occasional digressions; introduction or conclusion does not accomplish its intended function.	1. Speaker gesturing too much or too little; eye contact may be slightly too much or too little; speaker may be moving around a little too much or not quite enough; 2. Appropriate visual aids are used; a few weaknesses in design; a few difficulties with use	1. Speaker has some difficulty answering questions concisely; some problems responding to some questions (e.g., defensive response); 2. Speaker provides adequate but incomplete answers to technical questions
Some weaknesses	1. Objective is difficult to determine; additional content needed to support objective; 2. Presentation is missing a substantial portion of content required by audience; uses some inappropriate or ineffective language; 3. Direct or indirect structure used inappropriately; organization is confusing or unclear; weak introduction or conclusion;	1. Speaker gesturing too much or too little; using distracting gestures (e.g., playing with a ring); not enough eye contact; inappropriate use of space; 2. Choice of visual aid is poor; weaknesses with design; difficulties with use	1. Speaker is thrown off balance by questions; has difficulty responding to some questioners; 2. Speaker grasps the technical question but is unable to respond to the technical details.
Problematic	1. Objective cannot be determined; 2. No organization apparent; content of presentation reflects interests of speaker but not of audience; inappropriate use of language; 3. No discernible organization; thoughts in random order without connections between them	1. Nonverbal components of the presentation distract from ability of the audience to receive the message; 2. Inappropriate choice of visual aid; design detracts from speaker's ability to deliver the message; inability of speaker to use visual aid	1. Speaker is unable to answer questions; loses control of the process; 2. speaker does not grasp the nature of the technical question and is unable to respond.