SYLLABUS: ENVE/ENVS/EVST 3110 Brownfield Redevelopment
Fall 2024

Meeting times

Lecture: **Tu Th 3:30-4:20 pm**
Location: CAST 205

Discussion Sections:

- 001D **Fr 11:15-12:05 pm** Location: **CAST 205**
- 002D **Fr 12:20-1:10 pm** Location: **CAST 205**

Instructors

Randi Mendes
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Teaching Assistants

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Course Overview

This course will introduce students to the process of investigating, cleaning up and putting back into use abandoned sites with suspected contamination, also known as brownfields.

Course Materials

Links to course materials and various documents will be provided on the Husky CT site for this course.

Discussion Sessions

The student groups will meet with the instructors on a weekly basis during the discussion sessions. Meetings with the instructor will be approximately 30 min per group. The groups may use the rest of the discussion time to meet with their group peers.

Learning Objectives

This course entails learning objectives that include both technical skills specific to brownfield redevelopment, and non-technical skills related to communication and management.

Upon completion of this course, students will be able to:

(Technical Skills)

1. Identify the status of a site as brownfield.
2. Describe the components of brownfield redevelopment.
3. Articulate the relevant laws and regulations that govern the management of a brownfield site.
4. Describe how public (federal, state, municipal) and private partners are involved in the process of redeveloping brownfield sites.
5. List the different phases of a site investigation, the objectives of each phase and the methodology to develop a plan for each phase.
6. Identify and describe different measures of cleanup and remediation procedures.
7. Explain the concept of environmental justice and the parameters to determine EJ communities.
8. Identify economic, ecological, and social factors that influence the redevelopment of brownfield sites.
9. Develop community engagement plans for the brownfield redevelopment process.

(Communication and Management skills)

1. Explain the elements of a compelling grant proposal.
2. Effectively synthesize technical information into a coherent and informative narrative.
3. Work together in multi-disciplinary teams, meeting deadlines and providing constructive feedback to peers.
4. Communicate with government officials in a professional manner.
5. Deliver oral presentations to diverse audiences in a timely and engaging manner.

Course Schedule

Note: this schedule provides an overall outline of deadlines; for up-to-date information on deadlines, consult the Course Calendar on HuskyCT

Week	Day	Topic	Speaker	Assignments Deliverables
1 27-Aug	Tu	Introduction to the course/ Team management and communication/ Project Introductions & Assignments	Dr. M	
29-Aug	Th	Introduction to Environmental Pollution & Brownfields*	Dr. M	
30-Aug	F	Intro Meetings with Towns		Microsoft Teams Assignment
2 3-Sep	Tu	Introduction to EPA Grants*	Brian Kortz & Dan Jahne, Fuss & O'Neil	
5-Sep	Th	Grant-writing session Data Sources for Section 1	Dr. M	

6-Sep	F	Section 1 Example Grant Review		
3 10-Sep	Tu	Brownfields Field Trip to Willimantic Whitewater Park	Dr. M, Wayne Bugden, UConn TAB	
12-Sep	Th	Intro to Environmental Justice, Displacement, & Community Engagement*	Katie Malgioglio	EPA Draft Section 1.a (i and ii)
13-Sep	F	Peer Review and TA Feedback for Section 1a		
4 17-Sep	Tu	Grant writing session – Intro to EJSCREEN*	Aaron Hinze	
19-Sep	Thu	Grant writing session – Community need Section 2a.ii (1) and (3)	Dr. M	
20-Sep	F	EJSCREEN Session		EPA Final Section 1.a.i and 1.a.ii
5 24-Sep	Tu	Public Health - Intro to data sources and what does it mean*	Dr. Sara Wakai	Peer Evals on Section 1 Due 9/25
26-Sep	Th	Grant writing session – Community need Section 2a.ii (2)	Dr. M	
27-Sep	F	Section 2aii Example Grant Review		
6 1-Oct	Tu	Community Meeting Roleplay Pt 1*	Dr. M & Katie Malgioglio	Section 2a.ii (1,2,3) Draft Due 9/30 by 11:59 PM
3-Oct	Th	Grant Writing Session: Section 2B	Dr. M	
4-Oct	F	Peer Review & TA Feedback for Section 2aii(1,2,3)		
7 8-Oct	Tu	Community Meeting Roleplay Pt 2*	Dr. M & Katie Malgioglio	
10-Oct	Th	Urban and Community Planning*	Demian Sorrentino, UConn TAB	
11-Oct	F	Section 2B Example Grant Review		Section 2a.ii (1,2,3) Final Draft Due 10/13 by 11:59 PM
8 15-Oct	Tu	Environmental Professional for the Day: Site Investigation Pt 1 (Phase 1 Activity)*	Wayne Bugden, UConn TAB	EPA Grant Draft Section 2B Due 10/14 by 11:59 PM
17-Oct	Th	Remediation approaches and technologies*	Wayne Bugden, UConn TAB	
18-Oct	F	Peer Review & TA Feedback for Section 2B		
9 22-Oct	Tu	Remediation technologies - Case Studies (Consulting)*	Jamie Barr, Langan Engineering	

24-Oct	Th	Grant Writing Session – Section 3 Tasks and Project Management	Dr. M & Wayne Bugden	
25-Oct	F	TBA		EPA Grant Final Draft Section 2B Due 10/27 by 11:59 PM
10 29-Oct	Tu	Environmental Professional for the Day: Site Investigation Pt 2 (Phase 2 Activity)*	Wayne Bugden, Uconn TAB	Peer Evals on Section 2
31-Oct	Th	Grant Writing Session – Section 3 Budgets*	Wayne Bugden, UConn TAB	
1-Nov	F	Section 3 Example Grant Review		
11 5-Nov	Tu	Construction and Demo/ Hazardous building materials*	Brian Cutler, Loureiro Engineering	Section 3 Draft Due 11/4 by 11:59 PM
7-Nov	Th	A developer's perspective*	Kent Schwendy, CIL	
8-Nov	F	Peer Review & TA Feedback for Section 3		
12 12-Nov	Tu	Climate Change and Brownfields*	Dr. Renata Bertotti	
14-Nov	Th	Spring Semester & Professional Development	Dr. Mendes	
15-Nov	F	TBA		Section 3 Final Draft Due 11/17 by 11:59 PM
13 19-Nov	Tu	Careers in Brownfields*	Previous Brownfields Students	Peer Evals on Section 3
21-Nov	Th	Presentation Guidelines and Skills (No in-person class)	Dr. M	
22-Nov	F	No Class		
Thanksgiving Recess (November 24th – November 30th)				
14 3-Dec	Tu	Presentations Working Session & Feedback*	Dr. M, Katie Malgioglio, and TAs	
5-Dec	Th	TBA		
6-Dec	F	Final Presentations		Presentation Due by 12/6 by 11:59 PM

Class assignments and grading

The assessment of the class and the associated grades will be based on four components:

- EPA grant proposal and peer evaluation (weighted group assignment) - 60%
- EPA grant presentation (group assignment – individual grading) – 20%
- In Class Reflections/Activities (individual assignment) – 20%

EPA assessment grant proposal – Grading Rubric (60% of grade)

The EPA proposal will be completed by teams assigned by the instructor. Because of the interdisciplinary nature of the course, which is reflected in the different student backgrounds, teams will be assembled to involve students from diverse backgrounds that can contribute to the different aspects of the project. To support effective team management, the class will be utilizing the CATME Peer-Evaluation tool.

The EPA proposal and the brownfield project will be completed by teams assigned by the instructor. Because of the interdisciplinary nature of the course, which is reflected in the different student backgrounds, teams will be assembled to involve students from diverse backgrounds that can contribute to the different aspects of the project. To support effective team management, the class will be utilizing the CATME Team-Maker and Peer-Evaluation tools.

Deliverable	Individual/ Group	Points
Section 1: Project area and brownfield site description	Weighted based on peer evaluation	20
Section 2: Community need and community engagement	Weighted based on peer evaluation	35
Section 3: Tasks descriptions, cost estimates, and measuring progress	Weighted based on peer evaluation	15

Peer Evaluation Grading

Peer Evaluation will occur three times, each after sections 1, 2 and 3. Each team member will be asked to evaluate the percent contribution of each team member to the assigned task; the final points will be weighted on the basis of the average evaluated contribution from the rest of the group.

The peer evaluation will be performed online through the CATME tool and will be based on the following factors:

- Contributing to Work [5 points]
- Interacting with Teammates [5 points]
- Keeping Team on Track [5 points]
- Expecting Quality [5 points]
- Having Knowledge/Skills [5 points]
- Team Interdependence [5 points]

A peer evaluation tracker will be available for each group in google sheets. Each group member will have to complete their goals and achievements for each group meeting.

Final Presentation (20% of grade)

At the end of the semester, each group will present their completed proposal to the class and panel of judges. Each group will have 15' to present (12' presentation with 3' for questions).

Grades will be the same for the group; however, **if a member does not show up for the final presentation, they will receive zero points.**

In Class Reflections/Activities (20% of grade)

During the course lectures, there will be in-class activities that will be graded individually. Students will complete the reflection/activity during the class period for grading. No submissions will be accepted after unless notice of absence is given. Classes during which the reflection or activity will be given are noted on the syllabus with an asterisk(*) following the topic title. There are a total of 18 throughout the semester for a total of 36 points.

Grading Rubric

Letter Grade	Grade Point	Percentage
A	4.0	94 - 100%
A-	3.7	90 - 93%
B+	3.3	87 - 89%
B	3.0	83 - 86%
B-	2.7	80 - 83%
C+	2.3	77 - 79%
C	2.0	73 - 76%
C-	1.7	70 - 72%
D+	1.3	67 - 79%
D	1.0	60 - 66%
F	0.0	0 - 59%