Spring 2020

ENE 662-852: Site Remediation

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New Jersey Institute of Technology
Department of Civil and Environmental Engineering
Site Remediation (EnE 662) Course Outline
Section: 852 **Spring, 2020**
Instructor: Michael Hornsby
Three credits

- Class Website: https://njit.instructure.com/courses/10573. All materials are available on the website – there is no external textbook
- Canvas Home Page: access via https://canvas.njit.edu/
- Class Meeting Time: Online during the Spring Semester, January 21 – May 5, 2020
- No live classes
- Instructor: Michael Hornsby https://www.linkedin.com/in/mikehornsby
- E-mail: hornsby@njit.edu Cell Phone: 609-529-6875
- Office Hours: Mondays, 9:00 P.M., Faculty Memorial Hall 305 or by appointment.

Prerequisite: EM 631. Can be taken concurrently with EM 631. Examines site remediation from start to finish. Includes regulations, cleanup standards, remedial investigations, feasibility studies, risk assessment, and safety. Examines established and innovative cleanup technologies such as incineration, containment, bioremediation, vapor extraction and ground water recovery.

Course Description and Objectives Summary:

The course examines site remediation from start to finish. Includes regulations, cleanup standards, remedial investigations, feasibility studies, risk assessment, and safety. Examines established and innovative cleanup technologies such as incineration, containment, bioremediation, vapor extraction and ground water recovery.

Learning Outcomes: Student learners will:

- What are the laws an regulations applicable to site remediation?
- How is an investigation conducted regarding a contaminated site?
- How to evaluate risks to human health and the environment?
- How are clean options identified, evaluated and selected?
- What remediation technologies and techniques are used at contaminated sites?

- Who's who when it comes to dealing with the government?

The final course grade will be determined as follows:

Final Grade	**Overall Academic Performance (100%)**
A	Above 90
B+	85-89
B	80-84
C+	75-79
C	70-74
D	60-69
F	Below 60

Exams: There will be two quizzes, a midterm exam held in class during the semester and one final exam.

Midterm Exam	March 9
Quizzes	Quiz 1: Week of Feb. 10. Quiz 2: Week of April 7
Final Exam Period	May 8-14

Grading Policy:

Midterm Exam	30%
Final Exam	30%
Quizzes	30% (2 quizzes @ 15% each)
Class Participation	10%
Extra Credit	0%

Makeup Exam Policy: There will normally be **NO MAKE-UP QUIZZES OR EXAMS** during the semester. In the event that a student has a legitimate reason for missing a quiz or exam, the student should contact the Dean of Students office and present written verifiable proof of the reason for missing the exam, e.g., a doctor's note, police report, court notice, etc. clearly stating the date AND time of the mitigating problem. The student must also notify the CES Department Office/Instructor that the exam will be missed If a make up is allowed, it will be more substantially difficult than the original quiz or exam.

Schedule

See the Pages section within each weekly online Module for details including: Introduction, Agenda, Learning Objectives, Assignments and Files/References

	WEEK OF	TOPIC
1	Jan. 20	Overview of Site Remediation Superfund and Federal Environmental Laws
2	Jan. 27	Site Remediation in New Jersey
3	Feb. 03	Remedial Investigations
4	Feb. 10	Feasibility Studies
5	Feb. 17	Risk Assessment
6	Feb. 24	Site Health & Safety Review for Mid-Term Exam
7	Mar. 03	Mid Term Exam
8	Mar. 10	Overview of Remedial Action Technology
	Mar. 17	Semester Break
9	Mar. 24	Thermal Desorption, Bioremediation
10	Mar. 31	Site Containment
11	Apr. 07	Vacuum Extraction
12	Apr. 14	Ground Water Remediation
13	Apr. 21	Open
14	Apr 28	Case Histories
15	May 05	Final Exam

POLICIES

All EnE students must familiarize themselves with, and adhere to, all official university-wide student policies. EnE takes these policies very seriously and enforces them strictly.

University-wide Withdrawal Dates: Withdrawal dates are posted on the NJIT academic calendar: https://www5.njit.edu/registrar/

ADDITIONAL RESOURCES

Accommodation of Disabilities: **O**ffice of **A**ccessibility **R**esources and **S**ervices (***formerly known as Disability Support Services***) offers long term and temporary accommodations for undergraduate, graduate and visiting students at NJIT.

If you need accommodations due to a disability please contact Chantonette Lyles, Associate Director at the Office of Accessibility Resources and Services at 973-596-5417 or via email at lyles@njit.edu. The office is located in Fenster Hall Room 260. A Letter of Accommodation Eligibility from the Office of Accessibility Resources Services office authorizing your accommodations will be required.

For further information regarding self-identification, the submission of medical documentation and additional support services provided please visit the Accessibility Resources and Services (OARS) website at:
http://www5.njit.edu/studentsuccess/disability-support-services/

Statement on Academic Integrity

"Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy that is found at: http://www5.njit.edu/policies/sites/policies/files/academic-integrity-code.pdf.

Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. Any student found in violation of the code by cheating, plagiarizing or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university. If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at dos@njit.edu"