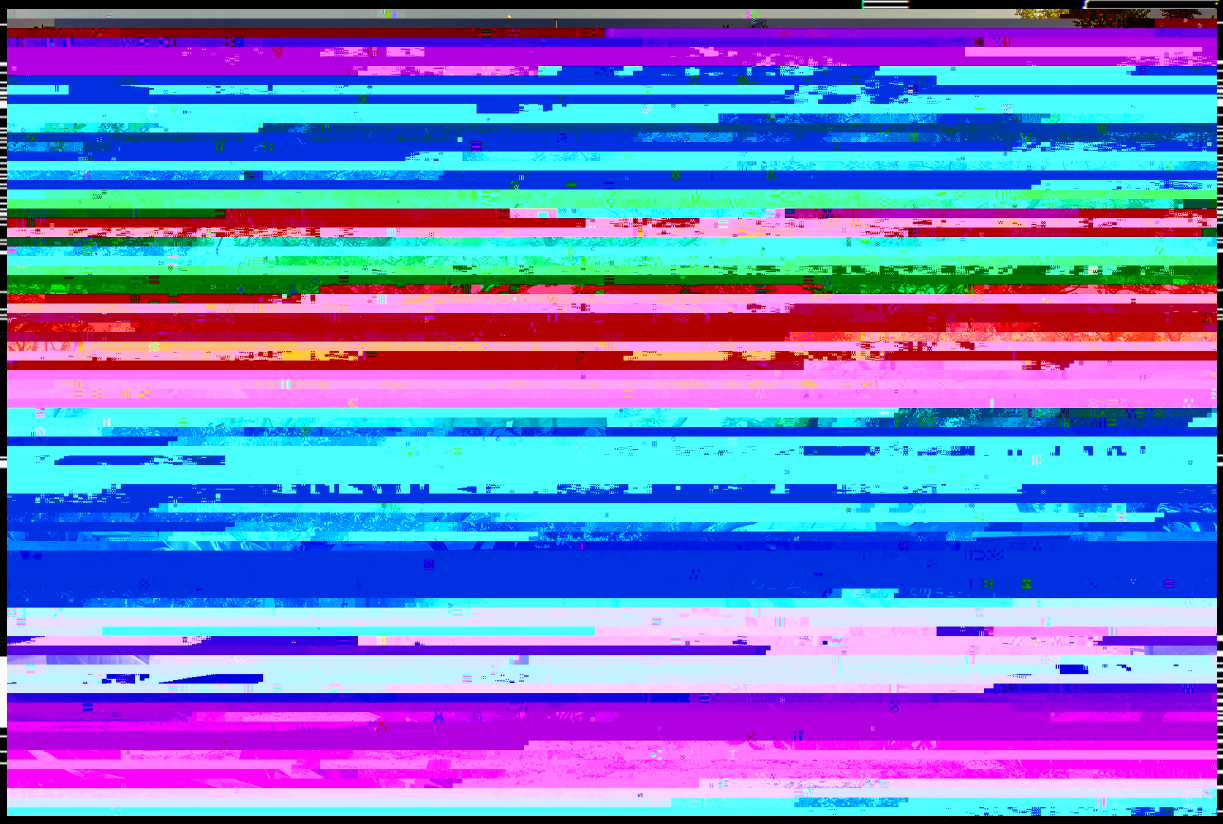
CVEN9881

Hazardous Waste Management

Term 2, 2022



Course Overview

Staff Contact Details

Convenors

Name	Email	Availability	Location	Phone
Ailar Hajimohammadi	ailar.hm@unsw.edu.au		Room 308, Level 3, H20	+61 2 9385 5066

School Contact Information

Engineering Student Support Services – The Nucleus - enrolment, progression checks, clash requests, course issues or program-related queries

Engineering Industrial Training – Industrial training questions

UNSW Study Abroad – study abroad student enquiries (for inbound students)

UNSW Exchange – student exchange enquiries (for inbound students)

UNSW Future Students – potential student enquiries e.g. admissions, fees, programs, credit transfer

Phone

(+61 2) 9385 8500 – Nucleus Student Hub

(+61 2) 9385 7661 – Engineering Industrial Training

(+61 2) 9385 3179 – UNSW Study Abroad and UNSW Exchange (for inbound students)

Course Details

Units of Credit 6

Summary of the Course

Waste audits and characterisation of hazardous wastes in regions and industries; control of generation and transport of hazardous waste, manifest systems; waste minimisation; on-site treatment methods; integrated off-site treatment facilities; management of residues from treatment facilities; introduction to planning of regional hazardous waste management systems. Characteristics of individual waste types (dioxins, PCBs, pesticides, heavy metal, etc.) and waste management in individual industries (steel, pulp and paper, petro-chemical, food processing, etc.).

Course Aims

The objectives of this subject are to:
- Provide an appreciation of the management of hazardous waste in a systems context; ie to understand the inter-relationships between the various functional elements of waste generation, minimisation, transport, treatment and residue disposal.
- Provide students with the knowledge and skills to be able to undertake investigations

Private Study	• Review lecture material and course readings • Contribute to group discussions and assessments • Prepare for quiz/ workshops • Download materials from Moodle • Keep up with notices and find out marks via Moodle
Lectures	• Prepare for the lecture and workshops before attending

Assessment

Details about the submission dates and timelines will be provided in Moodle and in workshop 1.

Students need to bring laptop to the class. There will be online quiz and class activities that need to be completed in the class.

These activities are part of the assessment and cannot be accessed later. Late access to submission links can only be granted in special conditions.

Assessment task	Weight	Due Date	Course Learning Outcomes Assessed
1. Assignment	30%	Not Applicable	1, 2, 3
2. Quizzes	25%	Not Applicable	1, 2, 3
3. Class activities	15%	Not Applicable	1, 2, 3
4. Presentation	30%	Not Applicable	3

Assessment 1: Assignment

This is a group assignment about hazardous waste. They work in groups of 3 to provide a high quality engineering report which includes legal, technical and economic considerations. They provide recommendations in relation to the manangement of theses hazardous wastes. The aim is to demonstrate their capacity to work as a team, understand hazardous waste management at a regional level and provide recommendation to the Federal Government.

Assessment 2: Quizzes

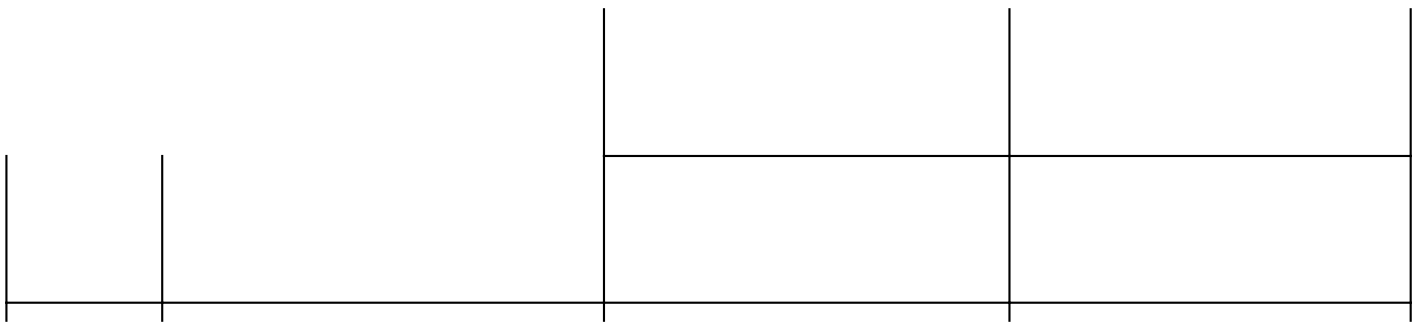
8 Quizzes worth 25% of the course total each. The quizzes directly relate to the content previously taught in lectures and workshops.

Assessment 3: Class activities

There will be in class activites for each lecture, and the students need to submit their answers to the activity.

Assessment 4: Presentation

Video presentation, screen capture recording of what you learned in this class



28/07/2022 (Week 9)	Scheduled Waste and Immobilisation	Ailar Hajimohammadi	Schedule Waste and Immobilisation
04/08/2022 (Week 10)	Radioactive waste	Ailar Hajimohammadi	Radioactive waste

Submission of Assessment Tasks

Please refer to the Moodle page of the course for further guidance on assessment submission.

UNSW has a standard late submission penalty of:

- 5% per day, for all assessments where a penalty applies, capped at five days (120 hours), after which a student cannot submit an assessment, and no permitted variation.

Academic Honesty and Plagiarism

Beware! An assignment that includes plagiarised material will receive a 0% Fail, and students who plagiarise may fail the course. Students who plagiarise are also liable to disciplinary action, including exclusion from enrolment.

Plagiarism is the use of another person’s work or ideas as if they were your own. When it is necessary or desirable to use other people’s material you should adequately acknowledge whose words or ideas they

Appendix: Engineers Australia (EA) Professional Engineer Competency Standard

Program Intended Learning Outcomes	