UNSW Course Outline

ENGG4103 International Humanitarian Response - 2024

Published on the 02 Sep 2024

General Course Information

Course Code : ENGG4103
Year : 2024
Term : Term 3
Teaching Period : T3
Is a multi-term course? : No
Faculty : Faculty of Engineering
Academic Unit : School of Civil and Environmental Engineering
Delivery Mode : In Person
Delivery Format : Standard
Delivery Location : Kensington
Campus : Sydney
Study Level : Undergraduate
Units of Credit : 6

Useful Links

Handbook Class Timetable

Course Details & Outcomes

Course Description

This course provides understanding and preparation in international humanitarian response within the context of humanitarian practice for Engineers. The course consists of a series of lectures and workshops held at UNSW Kensington with an embedded and monetarily discounted

one week field exercise in Mount Macedon Victoria in partnership with RedR Australia. Successful completion of the activities results in RedR accreditation of the participant. RedR prepares and deploys skilled people to help communities and government agencies plan, prepare, rebuild and recover before, during and after crises and conflict. The RedR course is embedded in a series of lectures and workshops delivered at UNSW Kensington before and after the 1 week course. The theory and practice covered in the lectures and workshops provide a depth of knowledge and problem solving on humanitarian disaster response and recovery. This will build on the 'ENGG3001 Fundamentals of Engineering' and complement the core principles of humanitarianism, its history, current design, SPHERE application, and simulation role play for disaster recovery and conflict scenarios delivered by RedR Australia. Workshops will focus on group work involving rapid decision making and communication as well as enhancing self-reflection techniques to incorporate knowledge and scenarios experienced throughout the course. Students will work in teams to maximise learning outcomes and develop their communication skills.

Relationship to Other Courses

This course builds on knowledge obtained through ENGG3001 Fundamentals of Humanitarian Engineering.

Course Learning Outcomes

Course Learning Outcomes
CLO1 : Demonstrate understanding of the principles of Humanitarian Engineering in international humanitarian response and humanitarian cluster system
CLO2 : Demonstrate what orderly management of self and professional conduct entails in humanitarian response situations
CLO3 : Develop real-word humanitarian response skills through participatory learning and experience-based training.
CLO4 : Evaluate successes and where improvements are needed in humanitarian response efforts
CLO5 : Display effective team membership and leadership
CLO6 : Communicate effectively using spatial data and oral presentation
CLO7 : Demonstrate an ability to reflect on the integration of ethical, cultural, humanitarian, and infrastructure systems

Course Learning Outcomes	Assessment Item
CLO1 : Demonstrate understanding of the principles of Humanitarian Engineering in international humanitarian response and humanitarian cluster system	• Simulation exercise • Professional Interview • Humanitarian Engineering Reflection Journal • Critical review project
CLO2 : Demonstrate what orderly management of self and professional conduct entails in humanitarian response situations	• Simulation exercise • Humanitarian Engineering Reflection Journal • Critical review project
CLO3 : Develop real-word humanitarian response skills through participatory learning and experience-based training.	• Professional Interview • Simulation exercise
CLO4 : Evaluate successes and where improvements are needed in humanitarian response efforts	• Humanitarian Engineering Reflection Journal • Simulation exercise
CLO5 : Display effective team membership and leadership	• Critical review project
CLO6 : Communicate effectively using spatial data and oral presentation	• Professional Interview • Simulation exercise
CLO7 : Demonstrate an ability to reflect on the integration of ethical, cultural, humanitarian, and infrastructure systems	• Professional Interview • Humanitarian Engineering Reflection Journal • Critical review project • Simulation exercise

Learning and Teaching Technologies

Moodle - Learning Management System | Microsoft Teams | Review - Assessment/Feedback

Tool | Echo 360

Learning and Teaching in this course

Lectures and workshops will be held face to face.

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Simulation exercise Assessment Format: Individual	20%	Due Date: 08/10/2024 10:00 AM
Professional Interview Assessment Format: Individual	30%	Due Date: Week 11: 18 November - 24 November
Humanitarian Engineering Reflection Journal Assessment Format: Individual	20%	Start Date: Not Applicable Due Date: Not Applicable
Critical review project Assessment Format: Individual	30%	Due Date: 10/11/2024 12:00 AM

Assessment Details

Simulation exercise

Assessment Overview

A simulation exercise at UNSW building on that provided by the Essentials of Humanitarian Practice program will be assessed to determine the level of participation and understanding of the scenario. Assessment will be based on contribution, engagement, and awareness of the humanitarian system.

Course Learning Outcomes

- CLO1 : Demonstrate understanding of the principles of Humanitarian Engineering in international humanitarian response and humanitarian cluster system
- CLO2 : Demonstrate what orderly management of self and professional conduct entails in humanitarian response situations
- CLO3 : Develop real-word humanitarian response skills through participatory learning and experience-based training.
- CLO4 : Evaluate successes and where improvements are needed in humanitarian response efforts
- CLO6 : Communicate effectively using spatial data and oral presentation
- CLO7 : Demonstrate an ability to reflect on the integration of ethical, cultural, humanitarian, and infrastructure systems

Detailed Assessment Description

Details

The Simulation Exercise is worth 20%.

The Simulation Exercise is used to demonstrate your understanding of humanitarian cluster systems, communication structures, ethics, and participatory frameworks. You will be assigned as a specific stakeholder in a meeting regarding a disaster that has occurred in a less economically developed country (LEDC). You will be assigned your role in Week 3.

The Simulation Exercise will be a meeting with the national government of the LEDC and following discussion with your fellow stakeholders. As a part of the preparation for your role you should document:

- The interests of your stakeholder
- Your interactions with other stakeholders
- Your decision making based on your stakeholder

This is an exercise on your understanding of humanitarian cluster systems and role within a disaster context and no assessment will be made regarding your acting ability.

Marking Criteria

The Simulation Exercise will be assessed according to :

- Your understanding of cluster systems, communication structures, ethics, and participatory frameworks
- Your ability to effectively communicate your stakeholder's interests and behaviours and your interaction with other stakeholders
- Your understanding of cultural and social values and how they impact humanitarian engineering

The Simulation Exercise is related to the following learning outcomes:

3. *Evaluate successes and where improvements are needed in humanitarian response situations*

4. *Display effective team membership and leadership*

Assessment Length

4 hours

Submission notes

In-person assessment

Assignment submission Turnitin type

This is not a Turnitin assignment

Generative AI Permission Level

Not Applicable

Generative AI is not considered to be of assistance to you in completing this assessment. If you do use generative AI in completing this assessment, you should attribute its use.
For more information on Generative AI and permitted use please see here.

Professional Interview

Assessment Overview

This simulation represents an interview for deployment as a RedR expert and will draw from the student's experiences from the critical review project as well as the essentials of humanitarian practice. Assessment will be based on communication ability, knowledge of the humanitarian system, as well as engagement

Course Learning Outcomes

- CLO1 : Demonstrate understanding of the principles of Humanitarian Engineering in international humanitarian response and humanitarian cluster system
- CLO3 : Develop real-word humanitarian response skills through participatory learning and experience-based training.
- CLO6 : Communicate effectively using spatial data and oral presentation
- CLO7 : Demonstrate an ability to reflect on the integration of ethical, cultural, humanitarian, and infrastructure systems

Detailed Assessment Description

You will be supplied with the pertinent information regarding the NGO and the disaster two days before your interview. You will be required to attend an interview to present your ability to convey your qualities and perception of what it means to be a good humanitarian engineer. This will consist of you providing answers to targeted questions during the interview and then presenting yourself in a short time frame (3 minutes) to define both your strengths and weaknesses as an engineer akin to that of a professional interview.

The professional interview assessment is worth 30% of your individual course marks. This assessment will be carried out in Week 11, and you are required to arrange a time with the

course co-ordinator as to when you would like to have the interview. You will draw from your experiences from ENGG4103 and the Essentials of Humanitarian Practice course.

The interview is expected to take between 20-30 minutes per person.

Assignment submission Turnitin type

This is not a Turnitin assignment

Generative AI Permission Level

Not Applicable

Generative AI is not considered to be of assistance to you in completing this assessment. If you do use generative AI in completing this assessment, you should attribute its use.
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Humanitarian Engineering Reflection Journal

Assessment Overview

This reflection journal will require students to provide journal entries for each week of the course, as well as each day for the Essentials of Humanitarian Practice program. Students will need to demonstrate deep thinking regarding their experiences and how these experiences contribute to their prospective humanitarian engineer careers.

Course Learning Outcomes

- CLO1 : Demonstrate understanding of the principles of Humanitarian Engineering in international humanitarian response and humanitarian cluster system
- CLO2 : Demonstrate what orderly management of self and professional conduct entails in humanitarian response situations
- CLO4 : Evaluate successes and where improvements are needed in humanitarian response efforts
- CLO7 : Demonstrate an ability to reflect on the integration of ethical, cultural, humanitarian, and infrastructure systems

Detailed Assessment Description

The reflection journal should document how your knowledge of humanitarian engineering develops during the course as well as the EHP course. The journal should document:

- preliminary personal goals for the course,
- personal reflections (up to the submission date),
- learning and observations related to ENGG4103 overall, noting changes in content, teaching style, and priorities.

Assessment Length

Approximately 7000-10000 words

Assessment information

Part 1 of this assessment is due 27/09/24 and is worth 5% of your total individual course marks. Part 2 (final journal) is due 22/11/24 and is worth 15% of your total individual course marks.

Assignment submission Turnitin type

This assignment is submitted through Turnitin and students do not see Turnitin similarity reports.

Generative AI Permission Level

No Assistance

This assessment is designed for you to complete without the use of any generative AI. You are not permitted to use any generative AI tools, software or service to search for or generate information or answers.
For more information on Generative AI and permitted use please see here.

This is a reflective journal and should be based entirely on your own experiences.

Critical review project

Assessment Overview

This report will be assessed on the thoroughness and comprehension of a case study relating to a humanitarian response to a specific disaster and/or displacement. Detailed use of spatial data and mapping visualisations will be required. Students will be assessed on their ability to provide critical thinking about the relative success or failure of the response and make recommendations for improved future, similar efforts.

Course Learning Outcomes

- CLO1 : Demonstrate understanding of the principles of Humanitarian Engineering in international humanitarian response and humanitarian cluster system
- CLO2 : Demonstrate what orderly management of self and professional conduct entails in humanitarian response situations
- CLO5 : Display effective team membership and leadership
- CLO7 : Demonstrate an ability to reflect on the integration of ethical, cultural, humanitarian, and infrastructure systems

Detailed Assessment Description

You may propose your own project topic to the course coordinator. The topic must be finalised

by the end of Week 3.

The following is a guide for what content should be contained in the Critical Review Project:

- Introduction
- Background and context of disaster
- Government, NGO's, and other humanitarian actor's response
- Effectiveness and critique of response
- Recommendations to improve response
- Future considerations
- Conclusion

Assessment Length

2000-3000 words (references excluded)

Assignment submission Turnitin type

This assignment is submitted through Turnitin and students can see Turnitin similarity reports.

Generative AI Permission Level

Planning/Design Assistance

You are permitted to use generative AI tools, software or services to generate initial ideas, structures, or outlines. However, you must develop or edit those ideas to such a significant extent that what is submitted is your own work, i.e., what is generated by the tool, software or service should not be a part of your final submission. You should keep copies of your iterations to show your Course Authority if there is any uncertainty about the originality of your work.
If your Convenor has concerns that your answer contains passages of AI-generated text or media that have not been sufficiently modified you may be asked to explain your work, but we recognise that you are permitted to use AI generated text and media as a starting point and some traces may remain. If you are unable to satisfactorily demonstrate your understanding of your submission you may be referred to UNSW Conduct & Integrity Office for investigation for academic misconduct and possible penalties.
For more information on Generative AI and permitted use please see here.

General Assessment Information

Grading Basis

Standard

Requirements to pass course

Students must achieve a composite mark of at least 50/100.

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 9 September - 15 September	Lecture	Orientation Historical, ethics & Research Assignment dicsussion
	Workshop	African Farmer simulation
Week 2 : 16 September - 22 September	Lecture	Local engagement and participation
	Workshop	Participation exercise Critical review topic selection
Week 3 : 23 September - 29 September	Lecture	Humanitarian successes, failures, and assessment
	Workshop	Outbreak Ready simulation
	Assessment	Reflection journal part 1 due 27/9/2024
Week 4 : 30 September - 6 October	Lecture	Communication and cluster systems
	Workshop	Communication system case study Reflection work feedback Discuss simulation assessment
Week 5 : 7 October - 13 October	Lecture	Simulation exercise
	Workshop	Simulation exercise
	Assessment	Simulation exercise carried out in class and workshop
Week 6 : 14 October - 20 October	Other	Flexibility week for all courses (non-teaching)
Week 7 : 21 October - 27 October	Lecture	Needs assessment, decision making, and wicked problems
	Workshop	Critical review draft feedback and discussion Decision making exercise Wicked problem exercise
Week 8 : 28 October - 3 November	Lecture	Limitations in humanitarian settings and accountability
	Workshop	Limitations case study
Week 9 : 4 November - 10 November	Lecture	Civil and structural challenges
	Workshop	Site planning exercise
	Assessment	Critical review project due 10/11/2024
Week 10 : 11 November - 17 November	Lecture	Prepare for EHP course
	Fieldwork	RedR EHP course 13-18 November
Week 11 : 18 November - 24 November	Assessment	Reflection journal part 2 due 22/11/2024
	Assessment	Professional interview schedule to be determined between students and course coordinator

Attendance Requirements

Undergraduate students must attend at least 80% of the workshop/lab in which they are enrolled for the duration of the session.

Course Resources

Prescribed Resources

Students are recommended to read and understand the SPHERE handbook: https://spherestandards.org/handbook-2018/

Additional Costs

The course consists of a series of lectures and workshops held at UNSW Kensington with an embedded and monetarily discounted one week field exercise course- "Essentials of Humanitarian Practice" in Mount Macedon Victoria in partnership with RedR Australia. Opportunities for grants to further reduce the cost of the field exercise will be provided for students.

Course Evaluation and Development

Student feedback is evaluated using feedback from my experience based on prior courses, comments made throughout the course, as well as material from the submitted Student Humanitarian Engineering Reflection Journal. Improved formalisation of discourse has been identified as an important objective for past students, as a result each workshop will include a "Q+A" section at the beginning to address queries previously bought up. Students are encouraged to ask questions and make statements during lectures.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Philippa Higgins		Vallentine Annexe (H22) Room 137	0405886863	Full time	No	Yes

Other Useful Information

Academic Information

I. Special consideration and supplementary assessment

If you have experienced an illness or misadventure beyond your control that will interfere with your assessment performance, you are eligible to apply for Special Consideration prior to, or within 3 working days of, submitting an assessment or sitting an exam.

Please note that UNSW has a Fit to Sit rule, which means that if you sit an exam, you are declaring yourself fit enough to do so and cannot later apply for Special Consideration.

For details of applying for Special Consideration and conditions for the award of supplementary assessment, please see the information on UNSW's Special Consideration page.

II. Administrative matters and links

All students are expected to read and be familiar with UNSW guidelines and polices. In particular, students should be familiar with the following:

- Attendance
- UNSW Email Address
- Special Consideration
- Exams
- Approved Calculators
- Academic Honesty and Plagiarism
- Equitable Learning Services

III. Equity and diversity

Those students who have a disability that requires some adjustment in their teaching or learning environment are encouraged to discuss their study needs with the course convener prior to, or at the commencement of, their course, or with the Equity Officer (Disability) in the Equitable Learning Services. Issues to be discussed may include access to materials, signers or note-takers, the provision of services and additional exam and assessment arrangements. Early notification is essential to enable any necessary adjustments to be made.

IV. Professional Outcomes and Program Design

Students are able to review the relevant professional outcomes and program designs for their streams by going to the following link: https://www.unsw.edu.au/engineering/student-life/student-resources/program-design.

Note: This course outline sets out the description of classes at the date the Course Outline is published. The nature of classes may change during the Term after the Course Outline is published. Moodle or your primary learning management system (LMS) should be consulted for the up-to-date class descriptions. If there is any inconsistency in the description of activities between the University timetable and the Course Outline/Moodle/LMS, the description in the Course Outline/Moodle/LMS applies.

Academic Honesty and Plagarism

UNSW has an ongoing commitment to fostering a culture of learning informed by academic integrity. All UNSW students have a responsibility to adhere to this principle of academic integrity. Plagiarism undermines academic integrity and is not tolerated at UNSW. *Plagiarism at*

UNSW is defined as using the words or ideas of others and passing them off as your own.

Plagiarism is a type of intellectual theft. It can take many forms, from deliberate cheating to accidentally copying from a source without acknowledgement. UNSW has produced a website with a wealth of resources to support students to understand and avoid plagiarism, visit: student.unsw.edu.au/plagiarism. The Learning Centre assists students with understanding academic integrity and how not to plagiarise. They also hold workshops and can help students one-on-one.

You are also reminded that careful time management is an important part of study and one of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting and the proper referencing of sources in preparing all assessment tasks.

Repeated plagiarism (even in first year), plagiarism after first year, or serious instances, may also be investigated under the Student Misconduct Procedures. The penalties under the procedures can include a reduction in marks, failing a course or for the most serious matters (like plagiarism in an honours thesis or contract cheating) even suspension from the university. The Student Misconduct Procedures are available here:

www.gs.unsw.edu.au/policy/documents/studentmisconductprocedures.pdf

Submission of Assessment Tasks

Work submitted late without an approved extension by the course coordinator or delegated authority is subject to a late penalty of five percent (5%) of the maximum mark possible for that assessment item, per calendar day.

The late penalty is applied per calendar day (including weekends and public holidays) that the assessment is overdue. There is no pro-rata of the late penalty for submissions made part way through a day. This is for all assessments where a penalty applies.

Work submitted after five days (120 hours) will not be accepted and a mark of zero will be awarded for that assessment item.

For some assessment items, a late penalty may not be appropriate. These will be clearly indicated in the course outline, and such assessments will receive a mark of zero if not completed by the specified date. Examples include:

- Weekly online tests or laboratory work worth a small proportion of the subject mark;
- Exams, peer feedback and team evaluation surveys;
- Online quizzes where answers are released to students on completion;
- Professional assessment tasks, where the intention is to create an authentic assessment that has an absolute submission date; and,
- Pass/Fail assessment tasks.

Faculty-specific 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)

School Contact Information

For assistance with enrolment, class registration, progression checks and other administrative matters, please see the Nucleus: Student Hub. They are located inside the Library – first right as you enter the main library entrance. You can also contact them via http://unsw.to/webforms or reserve a place in the face-to-face queue using the UniVerse app.

For course administration matters, please contact the Course Coordinator.

Questions about the this course should normally be asked during the scheduled class so that everyone can benefit from the answer and discussion.