ENGG4103

International Humanitarian Response

Term 3, 2022
Course Overview

Staff Contact Details

Convenors

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
<th>Availability</th>
<th>Location</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>James Hayes</td>
<td><a href="mailto:j.e.hayes@unsw.edu.au">j.e.hayes@unsw.edu.au</a></td>
<td>Full time</td>
<td>CivEng 615</td>
<td>040523619 7</td>
</tr>
</tbody>
</table>

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

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 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.

Course Learning Outcomes

After successfully completing this course, you should be able to:

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>EA Stage 1 Competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Demonstrate understanding of the principles of Humanitarian Engineering in international humanitarian response and humanitarian cluster system</td>
<td>PE1.3, PE1.5, PE1.6</td>
</tr>
<tr>
<td>2. Demonstrate what orderly management of self and professional conduct entails in humanitarian response situations</td>
<td>PE3.1, PE3.2, PE3.3, PE3.4</td>
</tr>
<tr>
<td>3. Develop real-word humanitarian response skills through participatory learning and experience-based training.</td>
<td></td>
</tr>
<tr>
<td>4. Evaluate successes and where improvements are needed in humanitarian response efforts</td>
<td>PE1.3, PE2.4</td>
</tr>
<tr>
<td>5. Display effective team membership and leadership</td>
<td>PE3.6</td>
</tr>
<tr>
<td>6. Communicate effectively using spatial data and oral presentation</td>
<td>PE3.3, PE3.4</td>
</tr>
<tr>
<td>7. Demonstrate an ability to reflect on the integration of ethical, cultural, humanitarian, and infrastructure systems</td>
<td>PE3.1, PE3.3, PE3.5</td>
</tr>
</tbody>
</table>

Teaching Strategies

Please refer to the information in Moodle
Assessment

<table>
<thead>
<tr>
<th>Assessment task</th>
<th>Weight</th>
<th>Due Date</th>
<th>Course Learning Outcomes Assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Simulation exercise</td>
<td>20%</td>
<td>Not Applicable</td>
<td>1, 2, 3, 4, 6, 7</td>
</tr>
<tr>
<td>2. Professional Interview</td>
<td>30%</td>
<td>Not Applicable</td>
<td>1, 3, 6, 7</td>
</tr>
<tr>
<td>3. Humanitarian Engineering Reflection Journal</td>
<td>20%</td>
<td>19/11/2022 12:00 AM</td>
<td>1, 2, 4, 7</td>
</tr>
<tr>
<td>4. Critical review project</td>
<td>30%</td>
<td>19/11/2022 12:00 AM</td>
<td>1, 2, 5, 7</td>
</tr>
</tbody>
</table>

Assessment 1: Simulation exercise

Start date: 13/10/2022 12:00 AM
Marks returned: 29/11/22

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.

This is not a Turnitin assignment

Assessment 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

Assessment 2: Professional Interview

Start date: Week 11
Marks returned: 30/11/22

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

Assessment criteria

The interview and questions will be marked based on your demonstration of:
• Humanitarian engineering concepts
• Understanding of role and team contributions
• Identification of personal strengths and weaknesses
• Professional presentation and ethical understanding

Assessment 3: Humanitarian Engineering Reflection Journal

Start date: 12/09/2022 12:00 AM
Due date: 19/11/2022 12:00 AM

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.

Assessment criteria

The journal will be assessed according to:

• relevance of discussion.
• links made to related external material as evidence.
• depth of reflection.
• identification of underlying assumptions.

Assessment 4: Critical review project

Due date: 19/11/2022 12:00 AM
Marks returned: 29/11/22

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.

Assessment criteria

The Critical Review Project will be assessed according the:

• Discussion of the context and impact of the disaster and associated humanitarian response
• Critical evaluation of the relative success or failure of the humanitarian response
• Quality of recommendations and future considerations
• Writing style and presentation
Attendance Requirements

Students are strongly encouraged to attend all classes and review lecture recordings.
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 are and where you found them (giving the complete reference details, including page number(s)). The Learning Centre provides further information on what constitutes Plagiarism at:

https://student.unsw.edu.au/plagiarism
Academic Information

Final Examinations:

Final exams in T3 2022 will be held online between 25th November - 8th December 2022 inclusive, and supplementary exams between 9th - 13th January 2023 inclusive. You are required to be available on these dates. Please do not to make any personal or travel arrangements during this period.

ACADEMIC ADVICE

- Key Staff to Contact for Academic Advice (log in with your zID and password): https://intranet.civeng.unsw.edu.au/key-staff-to-contact-during-your-studies-at-unsw
- Key UNSW Dates - eg. Census Date, exam dates, last day to drop a course without academic/financial liability etc.
- CVEN Student Intranet (log in with your zID and password): https://intranet.civeng.unsw.edu.au/student-intranet
- Student Life at CVEN, including Student Societies: https://www.unsw.edu.au/engineering/civil-and-environmental-engineering/student-life
- Special Consideration: https://student.unsw.edu.au/special-consideration
- General and Program-Specific Questions: The Nucleus: Student Hub

Disclaimer

This course outline sets out 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 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 (as updated in Moodle), the description in the Course Outline/Moodle applies.

Image Credit

Mike Gal.

CRICOS

CRICOS Provider Code: 00098G

Acknowledgement of Country

We acknowledge the Bedegal people who are the traditional custodians of the lands on which UNSW Kensington campus is located.
## Appendix: Engineers Australia (EA) Professional Engineer Competency Standard

<table>
<thead>
<tr>
<th>Program Intended Learning Outcomes</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Knowledge and skill base</strong></td>
<td></td>
</tr>
<tr>
<td>PE1.1 Comprehensive, theory based understanding of the underpinning natural and physical sciences and the engineering fundamentals applicable to the engineering discipline</td>
<td></td>
</tr>
<tr>
<td>PE1.2 Conceptual understanding of the mathematics, numerical analysis, statistics, and computer and information sciences which underpin the engineering discipline</td>
<td></td>
</tr>
<tr>
<td>PE1.3 In-depth understanding of specialist bodies of knowledge within the engineering discipline</td>
<td>✔</td>
</tr>
<tr>
<td>PE1.4 Discernment of knowledge development and research directions within the engineering discipline</td>
<td></td>
</tr>
<tr>
<td>PE1.5 Knowledge of engineering design practice and contextual factors impacting the engineering discipline</td>
<td>✔</td>
</tr>
<tr>
<td>PE1.6 Understanding of the scope, principles, norms, accountabilities and bounds of sustainable engineering practice in the specific discipline</td>
<td>✔</td>
</tr>
<tr>
<td><strong>Engineering application ability</strong></td>
<td></td>
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<tr>
<td>PE2.1 Application of established engineering methods to complex engineering problem solving</td>
<td></td>
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<tr>
<td>PE2.2 Fluent application of engineering techniques, tools and resources</td>
<td></td>
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<tr>
<td>PE2.3 Application of systematic engineering synthesis and design processes</td>
<td></td>
</tr>
<tr>
<td>PE2.4 Application of systematic approaches to the conduct and management of engineering projects</td>
<td>✔</td>
</tr>
<tr>
<td><strong>Professional and personal attributes</strong></td>
<td></td>
</tr>
<tr>
<td>PE3.1 Ethical conduct and professional accountability</td>
<td>✔</td>
</tr>
<tr>
<td>PE3.2 Effective oral and written communication in professional and lay domains</td>
<td>✔</td>
</tr>
<tr>
<td>PE3.3 Creative, innovative and pro-active demeanour</td>
<td>✔</td>
</tr>
<tr>
<td>PE3.4 Professional use and management of information</td>
<td>✔</td>
</tr>
<tr>
<td>PE3.5 Orderly management of self, and professional conduct</td>
<td>✔</td>
</tr>
<tr>
<td>PE3.6 Effective team membership and team leadership</td>
<td>✔</td>
</tr>
</tbody>
</table>