COURSE DETAILS

Units of Credit	6
Contact hours	3 contact hours per week (2 Lecture, 1 Seminar)
Class location	Online, Blackboard Ultra

Course Coordinator and Lecturer	Dr Andrew Dansie email: a.dansie@unsw.edu.au office: CE306 phone: arrange to call on Microsoft Teams during COVID-19 remote teaching Dr. James Hayes email: j.hayes@unsw.edu.au phone: arrange to call on Microsoft Teams during COVID-19 remote teaching

INFORMATION ABOUT THE COURSE

This course provides students the opportunity to undertake a design project related to Humanitarian Engineering. This may include a field work component if appropriate which would provide students with further context and skills in humanitarian engineering. The course will be problem based, with context aligned with clearly identified needs for a marginalised community, either locally or internationally.

The course is intended to be predominantly team-based (although independent projects will be considered), with groups working on humanitarian related challenges, as approved by the course coordinator. Examples may be projects related to ongoing faculty research projects e.g. PLuS alliance, Social Impact projects or other collaborations between UNSW Faculty of Engineering and appropriate community partners.

‹   Review journal

COURSE PROGRAM

The course schedule provides a guide for how each project will proceed.

TERM 3, 2020

Lecture Content	Assessments and notes
Introduction to course content, finalise groups and topics (1 hour lecture)	

ASSESSMENT OVERVIEW

Item	Weighting	Learning outcomes assessed	Assessment Criteria	Due date	Deadline for absolute fail	Marks returned
Project journal and reflection (Part 1)	5%	1, 5,6	Students are required to keep a weekly journal documenting learning and observations, meeting minutes and personal reflections. This will be checked by the academic advisor on a weekly basis.	Friday Week 3	Friday Week 4	Friday Week 4
Project journal and reflection (Part 2)	10%	1,2,5,6	The remainder of the journal will be assessed along with a final essay on the student's reflections on development perspectives and project outcomes.	Friday Week 11	Friday Week 12	Friday Week 13
Presentation	25%	1,4	Presentations will be assessed on content and communication style including project progress to date, clear plans for remainder of the project and clear and persuasive presentation style	Week 7 (time and day to be agreed)	N/A	Week 7
Project report	45%	1,2,3,4,5,6	The report will be assessed based on the thoroughness of the project design and research, professional report standard and demonstration of a community centred approach.	Friday Week 10	Friday Week 11	Friday Week 12
Project management	15%	3,4,5,6	Interview with academic advisor and online peer assessment. Demonstration of clear project management, sustained involvement during term and reflective learning on humanitarian engineering.	Week 10 at time to be agreed with supervisor	N/A	Friday Week 12

Appendix A: Engineers Australia (EA) Competencies

Stage 1 Competencies for Professional Engineers

	Program Intended Learning Outcomes
PE1: Knowledge and Skill Base	PE1.1 Comprehensive, theory-based understanding of underpinning fundamentals
	PE1.2 Conceptual understanding of underpinning maths, analysis, statistics, computing
	PE1.3 In-depth understanding of specialist bodies of knowledge
	PE1.4 Discernment of knowledge development and research directions
	PE1.5 Knowledge of engineering design practice
	PE1.6 Understanding of scope, principles, norms, accountabilities of sustainable engineering practice
PE2: Engineering Application Ability	PE2.1 Application of established engineering methods to complex problem solving
	PE2.2 Fluent application of engineering techniques, tools and resources
	PE2.3 Application of systematic engineering synthesis and design processes
	PE2.4 Application of systematic approaches to the conduct and management of engineering projects
PE3: Professional and Personal Attributes	PE3.1 Ethical conduct and professional accountability
	PE3.2 Effective oral and written communication (professional and lay domains)
	PE3.3 Creative, innovative and pro-active demeanour
	PE3.4 Professional use and management of information
	PE3.5 Orderly management of self, and professional conduct
	PE3.6 Effective team membership and team leadership