

ARBE4302: Disaster Management and Resilience in the Built Environment

Callaghan

Semester 1 - 2024



OVERVIEW

Course Description	This course examines the impacts on the built environment of natural and human initiated disasters. This is done through the context of investigating the consequences and activities during the short, medium and long-term periods after the occurrence of a disaster. The role of the construction in supporting post disaster reconstruction and making the built environment resilient will be explored.
Academic Progress Requirements	Nil
Requisites	This course replaces ARBE4321. If you have successfully completed ARBE4321 you cannot enrol in this course.
Assumed Knowledge	ARBE1102
Contact Hours	Callaghan Lectorial Face to Face on Campus 3 hour(s) per week(s) for 13 week(s) starting Week 1 Distance learning students will receive equivalent instruction through online or other distance education strategies.
Unit Weighting Workload	10 Students are required to spend on average 120-140 hours of effort (contact and non-contact) including assessments per 10-unit course.

COURSE OUTLINE

CONTACTS

Course Coordinator	Callaghan A/Pr Ifte Ahmed Ifte.Ahmed@newcastle.edu.au (02) 4921 6011 Consultation: Tues:11:00-12:00
Teaching Staff	Tutor: Pr Temitope Egbelakin
School Office	School of Architecture and Built Environment Architecture Building Callaghan archbe@newcastle.edu.au +61 2 4921 5771

SYLLABUS

Course Content	<ul style="list-style-type: none">• Overview of emergency or disaster situations and the consequences in the built environment.• Existing theories and practices in disaster management.• Existing bodies that manage disaster situations.• The principles and process of post disaster reconstruction project management, including planning, organising, staffing and controlling a - project management team.• Stakeholder, knowledge management, communications management.• Mitigation thorough community consultation and engagement.• Sustainable economic, social and cultural redevelopment of the affected communities.• Ethics and social responsibility of redevelopment
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Course Learning Outcomes	<p>On successful completion of this course, students will be able to:</p> <ol style="list-style-type: none">1. Describe the theory and practice of emergency management2. Apply post-disaster project management principles and practices3. Apply post-disaster mitigation and sustainable re-development measures4. Present written and visual concepts and ideas.5. Develop teamwork and leadership skills to effectively communicate in the building industry
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SCHEDULE

Week	Week Begins	Topic	Learning Activity	Assessment Due
1	26 Feb	Course Introduction Overview: Global and Local Perspectives on Disasters	Tutorials	
2	4 Mar	Planetary Boundaries	Tutorials	
3	11 Mar	The Concepts of Resilience and Systems Thinking	Tutorials	
4	18 Mar	Broadening the Debate: Global Risk & Resilience	Panel Discussion	Assessment 1: Article Review 21/03/2024
5	25 Mar	Project Management in a Disaster Context	Tutorials	
6	1 Apr	Dealing with People: Stakeholder Management and Community Consultation	Tutorials	
7	8 Apr	Teamwork, Coordination and Communication in Post-Disaster Environments	Tutorials	
Mid-Semester Recess				
Mid-Semester Recess				
8	29 Apr	Broadening the Debate: Operating in a Volatile Environment	Panel Discussion	Assessment 2: Project Plan 02/05/2024
9	6 May	Disaster Risk Reduction in the Built Environment	Tutorials	
10	13 May	Incorporating Sustainable Development Considerations into Disaster Planning and Reconstruction	Tutorials	
11	20 May	Broadening the Debate: Reducing Risk and Avoiding Risk Creation	Panel Discussion	
12	27 May	Ethical, Social and Economic Considerations: Dealing with Systemic Dilemmas	Tutorials	Assessment 3: Disaster Scenario 30/05/2024
13	3 Jun	Course Review	Course Review	
Examination Period				
Examination Period				

ASSESSMENTS

This course has 3 assessments. Each assessment is described in more detail in the sections below.

	Assessment Name	Due Date	Involvement	Weighting	Learning Outcomes
1	Article Review	Thursday 21 March 2024 by 11:59pm	Individual	40%	1, 3, 4
2	Project Plan	Thursday 2 May 2024 by 11:59pm	Group	30%	3, 4, 5
3	Disaster Scenario	Thursday 30 May 2024 by 11:59pm	Individual	30%	2, 3, 4

Late Submissions

The mark for an assessment item submitted after the designated time on the due date, without an approved extension of time, will be reduced by 10% of the possible maximum mark for that assessment item for each day or part day that the assessment item is late. Note: this applies equally to week and weekend days.

Assessment 1 - Article Review

Assessment Type	Report
Purpose	Detailed review of an academic journal article. On completion of this assessment the student should be able to: <ul style="list-style-type: none">- Describe the theory and practice of emergency management.- Apply post-disaster mitigation and sustainable re-development measures.- Present written and visual concepts and ideas.
Description	In order to help you structure your review, you should consider, but not be limited to: <ul style="list-style-type: none">- The key messages from the article- How these messages may further efforts to reduce disaster risk- The implications of the article for practitioners <p>Please ensure that you carefully read and analyse the article, before articulating a perspective on how the ideas contained might assist in reducing disaster risk and building resilience (you are also encouraged to critically reflect on wider literature and personal experience - e.g. you may feel the author has overlooked something).</p> <p>Submission referencing: All sources must be referenced appropriately, and all figures and tables must be numbered, titled and integrated into the body of the report. Harvard or APA7 referencing is suggested (Author-Date system) and please be aware of the University's rules and regulations on plagiarism.</p> <p>Submission format: Use a report format with a numerical hierarchy (or otherwise) of headings and subheadings. Use an A4 type written format.</p> <p>Electronic Submissions: The file size can be an issue when submitting through Canvas. You are advised to review the size of your file ensuring it is below 2.0MB. If you are including photographs and other digital graphic media it is recommended that you adopt processes (Photoshop, PowerPoint, etc.) to reduce it to 72dpi format. It is important to note that electronic submissions will be marked in their electronic form for this course. It is the responsibility of the student to ensure that any files submitted are in a Microsoft/Mac Word or Adobe format or are readable or compatible with these formats. THERE WILL BE NO HARDCOPY SUBMISSIONS!</p> <p>Submission time and location: All assignments are to be submitted online through Canvas by the submission date and time.</p>
Weighting	40%
Length	1000 words maximum (+/- 10%)
Due Date	Thursday 21 March 2024 by 11:59pm
Submission Method	Online The assessment should be submitted via Canvas.
Assessment Criteria	Assessment Rubric available on Canvas.
Return Method	Not Returned
Feedback Provided	Online - Feedback on the assessment item will be provided typically within three weeks of submission via Canvas.

Assessment 2 - Project Plan

Assessment Type	Proposal / Plan
Purpose	This is the design of a post-disaster project plan integrating disaster risk reduction concerns into the redevelopment process. On completion of this assignment the student should be able to: <ul style="list-style-type: none">- Apply post-disaster project management principles and practices.- Present written and visual concepts and ideas.- Develop teamwork and leadership skills to effectively communicate in the building industry.
Description	You are required to analyse a disaster redevelopment project context and prepare a project plan that demonstrates an understanding of the project background and provides justification and recommendations for the implementation of your solution/s.

The problem scenario is fully explained within the assessment item-briefing document that can be downloaded from Canvas. You may be required to make assumptions or educated guesses on any information/material that you believe to be missing. If this is the case, you are to explain/justify these assumptions.

This course places a high value on the development of students' academic and professional writing, including such qualities as structuring sections and paragraphs to bring out a sound professional discussion, control of the conciseness and relevance of the discussion, ability to summarise and critique the arguments of pertinent writers, and to use appropriate citation and referencing techniques. Given these expectations, please note that the project plan should achieve the objectives within 2500 words, excluding notes, diagrams, tables, figures, footnotes and reference list.

The assessment criteria for this assignment refers to particular qualities of written work including clarity and conciseness of style, identification of issues, structuring of argument, development of solution/s, evidence of critical and relevant reading, depth of analysis, explication of assumptions, integration of interpretations and so on.

To simulate a real-world scenario, you will work in a group with other students, similar to an actual project team. All group members are expected to contribute to the final product.

Submission referencing: All sources must be referenced appropriately, and all figures and tables must be numbered, titled and integrated into the body of the report. Harvard or APA7 referencing is suggested (Author-Date system) and please be aware of the University's rules and regulations on plagiarism.

Submission format: Use a report format with a numerical hierarchy (or otherwise) of headings and subheadings. Use an A4 type written format.

Electronic Submissions:

The file size can be an issue when submitting through Canvas. You are advised to review the size of your file ensuring it is below 2.0MB. If you are including photographs and other digital graphic media it is recommended that you adopt processes (Photoshop, PowerPoint, etc.) to reduce it to 72dpi format. It is important to note that electronic submissions will be marked in their electronic form for this course. It is the responsibility of the student to ensure that any files submitted are in a Microsoft/Mac Word or Adobe format or are readable or compatible with these formats. THERE WILL BE NO HARDCOPY SUBMISSIONS!

Submission time and location: All assignments are to be submitted online through Canvas by the submission date and time.

Weighting

Length

Due Date

Submission Method

Assessment Criteria

Return Method

Feedback Provided

30%

2500 words maximum (+/- 10%)

Thursday 2 May 2024 by 11:59pm

Online

The assessment should be submitted via Canvas.

Assessment Rubric available on Canvas

Not Returned

Online - Feedback on the assessment item will be provided typically within three weeks of submission via Canvas..

Assessment 3 - Disaster Scenario

Assessment Type

Purpose

Written Assignment

This is a short open-ended quiz based on a complex disaster scenario.

On completion of this assignment the student should be able to:

- Apply post-disaster project management principles and practices
- Apply post-disaster mitigation and sustainable re-development measures
- Present written concepts and ideas.

Description

You will receive a disaster scenario report and imagine yourself in the role of project

manager for a major international humanitarian organisation responding to the crisis.

You will be required to answer the following questions following circulation of the scenario:

1. List the most critical information to be collected as part of your impact assessment.
2. Describe why you might use systems thinking to devise appropriate responses to the crisis.
3. How would you ensure that your NGO plan of action to assist in the recovery of the local community will work in the long-term?
4. Describe your approach to stakeholder engagement, in light of the context.
5. What are the key disaster risk reduction measures (max 3) that you would build into the reconstruction programme? Provide rationale for selection.

You are allowed only 100 words per answer (please include a word count for each answer in your submission). You must come up with very concise answers!

Respond only to the questions asked. Submitted document should be in the following format:

1. ANSWER... (INSERT WORD COUNT)

2. ANSWER... (INSERT WORD COUNT)

etc.

30%

100 (+/-10%) words maximum per answer

Thursday 30 May 2024 by 11:59pm

Online

The assessment should be submitted via Canvas.

Assessment Rubric available on Canvas.

Online

Online - Feedback on the assessment item will be provided typically within three weeks of submission via Canvas...

Weighting

Length

Due Date

Submission Method

Assessment Criteria

Return Method

Feedback Provided

ADDITIONAL INFORMATION

Grading Scheme

This course is graded as follows:

Range of Marks	Grade	Description
85-100	High Distinction (HD)	Outstanding standard indicating comprehensive knowledge and understanding of the relevant materials; demonstration of an outstanding level of academic achievement; mastery of skills*; and achievement of all assessment objectives.
75-84	Distinction (D)	Excellent standard indicating a very high level of knowledge and understanding of the relevant materials; demonstration of a very high level of academic ability; sound development of skills*; and achievement of all assessment objectives.
65-74	Credit (C)	Good standard indicating a high level of knowledge and understanding of the relevant materials; demonstration of a high level of academic achievement; reasonable development of skills*; and achievement of all learning outcomes.
50-64	Pass (P)	Satisfactory standard indicating an adequate knowledge and understanding of the relevant materials; demonstration of an adequate level of academic achievement; satisfactory development of skills*; and achievement of all learning outcomes.

0-49	Fail (FF)	Failure to satisfactorily achieve learning outcomes. If all compulsory course components are not completed the mark will be zero. A fail grade may also be awarded following disciplinary action.
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Placement Requirements	<p>*Skills are those identified for the purposes of assessment task(s). This is a placement course covered by the Student Placement Policy. Refer to http://newcastle.edu.au/policy/000768.html for further information.</p>
Communication Methods	<p>Communication methods used in this course include:</p> <ul style="list-style-type: none"> - Canvas Course Site: Students will receive communications via the posting of content or announcements on the Canvas course site.
Course Evaluation	<p>Each year feedback is sought from students and other stakeholders about the courses offered in the University for the purposes of identifying areas of excellence and potential improvement.</p>
Oral Interviews (Vivas)	<p>As part of the evaluation process of any assessment item in this course an oral examination (viva) may be conducted. The purpose of the oral examination is to verify the authorship of the material submitted in response to the assessment task. The oral examination will be conducted in accordance with the principles set out in the Oral Examination (viva) Procedure. In cases where the oral examination reveals the assessment item may not be the student's own work the case will be dealt with under the Student Conduct Rule.</p>
Academic Misconduct	<p>All students are required to meet the academic integrity standards of the University. These standards reinforce the importance of integrity and honesty in an academic environment. Academic Integrity policies apply to all students of the University in all modes of study and in all locations. For the Student Academic Integrity Policy, refer to https://policies.newcastle.edu.au/document/view-current.php?id=35.</p>
Adverse Circumstances	<p>The University acknowledges the right of students to seek consideration for the impact of allowable adverse circumstances that may affect their performance in assessment item(s). Applications for special consideration due to adverse circumstances will be made using the online Adverse Circumstances system where:</p> <ol style="list-style-type: none"> 1. the assessment item is a major assessment item; or 2. the assessment item is a minor assessment item and the Course Co-ordinator has specified in the Course Outline that students may apply the online Adverse Circumstances system; 3. you are requesting a change of placement; or 4. the course has a compulsory attendance requirement. <p>Before applying you must refer to the Adverse Circumstance Affecting Assessment Items Procedure available at: https://policies.newcastle.edu.au/document/view-current.php?id=236</p>
Important Policy Information	<p>The Help button in the Canvas Navigation menu contains helpful information for using the Learning Management System. Students should familiarise themselves with the policies and procedures at https://www.newcastle.edu.au/current-students/respect-at-uni/policies-and-procedures that support a safe and respectful environment at the University.</p>

This course outline was approved by the Head of School. No alteration of this course outline is permitted without Head of School approval. If a change is approved, students will be notified and an amended course outline will be provided in the same manner as the original.

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