

PUB262

# Environmental Health Risk Management

School: School of Health - Public Health

2026 Trimester 2

 UniSC Sunshine Coast  
 UniSC Moreton Bay

 BLENDED  
 LEARNING

Most of your course is on campus but you may be able to do some components of this course online.

Please go to [unisc.edu.au](http://unisc.edu.au) for up to date information on the teaching sessions and campuses where this course is usually offered.

## 1. What is this course about?

### 1.1. Description

In this course, you will develop knowledge and skills to assess and manage risks to human health from hazards in natural and built environments. You will identify hazards and exposure pathways relevant to water, air, soil, food, waste, noise, radiation, pests, and vectors. You will also develop skills to locate and apply legislation and regulations relevant to public health and occupational health and safety. You will work in multi-disciplinary teams to characterise risks and develop risk mitigation strategies and managing disasters, emergencies and mass outdoor events.

### 1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
<b>BLENDED LEARNING</b>			
<b>Learning materials</b> – 2 hours of independent structured learning materials	2hrs	Week 1	12 times
<b>Tutorial/Workshop 1</b> – 3 hour on-campus workshop	3hrs	Week 1	12 times
<b>Fieldwork</b> – 3 day field trip	21hrs	Week 7	Once Only

### 1.3. Course Topics

Environmental health theory and practice  
 Environmental health risk assessment and management frameworks  
 Environmental health guidelines and legislation  
 Toxicology and ecotoxicology  
 Chemical, biological, physical and psychosocial hazards  
 Epidemiology  
 Air pollution  
 Soil-based hazards  
 Disaster and Emergency Preparedness and Management  
 Water and sanitation  
 Noise and occupational health  
 Waste management  
 Risk perception and communication

## 2. What level is this course?

200 Level (Developing)

Building on and expanding the scope of introductory knowledge and skills, developing breadth or depth and applying knowledge and skills in a new context. May require pre-requisites where discipline specific introductory knowledge or skills is necessary. Normally, undertaken in the second or third full-time year of an undergraduate programs.

## 3. What is the unit value of this course?

12 units

## 4. How does this course contribute to my learning?

COURSE LEARNING OUTCOMES	GRADUATE QUALITIES MAPPING	PROFESSIONAL STANDARD MAPPING *
On successful completion of this course, you should be able to...	Completing these tasks successfully will contribute to you becoming...	International Union for Health Promotion and Education
1 Identify and critically evaluate evidence and policies for environmental health issues	Creative and critical thinker	B.8, B.10, 6.3
2 Apply risk assessment concepts, methodologies and frameworks to understanding and managing human health risks from environmental hazards	Empowered	B.10, 7.2, 9.4
3 Identify and evaluate options to reduce risk and meet regulatory requirements related to food, water, air, land and noise pollution	Empowered	4.1, 4.2, 4.3, 4.4, 5.1, 5.2, 5.3, 6.1, 6.3, 6.7, 7.2, 7.3
4 Develop appropriate risk management strategies for managing human health risks in prescribed settings	Empowered	1.5, 3.1, 3.3, 4.1, 4.2, 5.1, 5.2, 5.3, 5.4, 6.1, 6.2, 6.3, 6.4, 6.5, 6.7, 7.1, 7.2, 7.3

\* Competencies by Professional Body

CODE	COMPETENCY
INTERNATIONAL UNION FOR HEALTH PROMOTION AND EDUCATION	
B.8	The evidence base and research methods, including qualitative and quantitative methods, required to inform and evaluate health promotion action

CODE	COMPETENCY
B.10	The systems, policies and legislation which impact on health and their relevance for health promotion.
1.5	Work in collaboration with key stakeholders to reorient health and other services to promote health and reduce health inequities.
3.1	Engage partners from different sectors to actively contribute to health promotion action
3.3	Build successful partnership through collaborative working, mediating between different sectoral interests
4.1	Use effective communication skills including written, verbal, nonverbal, and listening skills
4.2	Use information technology and other media to receive and disseminate health promotion information
4.3	Use culturally appropriate communication methods and techniques for specific groups and settings
4.4	Use interpersonal communication and groupwork skills to facilitate individuals, groups, communities and organisations to improve health and reduce health inequities.
5.1	Work with stakeholders to agree a shared vision and strategic direction for health promotion action
5.2	Use leadership skills which facilitate empowerment and participation (including team work, negotiation, motivation, conflict resolution, decision-making, facilitation and problem solving)
5.3	Network with and motivate stakeholders in leading change to improve health and reduce inequities
5.4	Incorporate new knowledge to improve practice and respond to emerging challenges in health promotion
6.1	Use participatory methods to engage stakeholders in the assessment process
6.2	Use a variety of assessment methods including quantitative and qualitative research methods
6.3	Collect, review and appraise relevant data, information and literature to inform health promotion action
6.4	Identify the determinants of health which impact on health promotion action
6.5	Identify the health needs, existing assets and resources relevant to health promotion action
6.7	Identify priorities for health promotion action in partnership with stakeholders, based on best available evidence and ethical values.
7.1	Mobilise, support and engage the participation of stakeholders in planning health promotion action
7.2	Use current models and systematic approaches for planning health promotion action
7.3	Develop a feasible action plan within resource constraints and with reference to existing needs and assets
9.4	Use research and evidence-based strategies to inform practice

## 5. Am I eligible to enrol in this course?

Refer to the [UniSC Glossary of terms](#) for definitions of “pre-requisites, co-requisites and anti-requisites”.

### 5.1. Pre-requisites

Must have completed 48 units of any program

### 5.2. Co-requisites

Not applicable

### 5.3. Anti-requisites

Not applicable

### 5.4. Specific assumed prior knowledge and skills (where applicable)

Not applicable

## 5.5. Microcredential Information

Not applicable

## 6. How am I going to be assessed?

### 6.1. Grading Scale

Standard Grading (GRD)

High Distinction (HD), Distinction (DN), Credit (CR), Pass (PS), Fail (FL).

### 6.2. Details of early feedback on progress

Feedback for Task 1 will be provided face-to-face during workshops in week four.

### 6.3. Assessment tasks

DELIVERY MODE	TASK NO.	ASSESSMENT PRODUCT	INDIVIDUAL OR GROUP	WEIGHTING %	WHAT IS THE DURATION / LENGTH?	WHEN SHOULD I SUBMIT?	WHERE SHOULD I SUBMIT IT?
All	1	Plan	Individual	15%	Completion of research strategy and literature review templates	Week 4	Online Submission
All	2	Artefact - Technical and Scientific, and Written Piece	Individual	45%	2500 words (max)	Week 7	Online Assignment Submission with plagiarism check
All	3a	Oral	Individual	15%	4 minutes (individual component of a group presentation)	Week 12	In Class
All	3b	Artefact - Technical and Scientific, and Written Piece	Group	25%	2200 words max	Week 12	Online Assignment Submission with plagiarism check

#### All - Assessment Task 1: Literature review research strategy and plan

<b>GOAL:</b>	To develop your skills in planning and conducting a critical literature review and to give you feedback on your organisation and planning.													
<b>PRODUCT:</b>	Plan													
<b>AUTHORSHIP STATEMENT:</b>														
<b>FORMAT:</b>	Completion of templates provided via Canvas													
<b>CRITERIA:</b>	<table border="1"> <thead> <tr> <th>No.</th> <th></th> <th>Learning Outcome assessed</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Appropriateness of literature review question</td> <td>1 2</td> </tr> <tr> <td>2</td> <td>Appropriateness of search terms and strategy</td> <td>1 2</td> </tr> <tr> <td>3</td> <td>Accuracy of literature review structure</td> <td>1 2</td> </tr> </tbody> </table>	No.		Learning Outcome assessed	1	Appropriateness of literature review question	1 2	2	Appropriateness of search terms and strategy	1 2	3	Accuracy of literature review structure	1 2	
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3	Accuracy of literature review structure	1 2												
<b>GENERIC SKILLS:</b>	Organisation, Information literacy													

## All - Assessment Task 2: Environmental Health Hazard Report

<b>GOAL:</b>	To develop your skills in applying an environmental health risk assessment framework, and sourcing, critically evaluating and summarising scientific evidence (including epidemiological data) for a specific environmental health hazard																						
<b>PRODUCT:</b>	Artefact - Technical and Scientific, and Written Piece																						
<b>AUTHORSHIP STATEMENT:</b>																							
<b>FORMAT:</b>	<p>The report will include:</p> <p>a) a review of scientific literature and evidence for a prescribed chemical hazard addressing the issue identification, hazard assessment, stages of the environmental health risk assessment framework;</p> <p>b) critical analysis of epidemiological data related to the hazard for two defined communities;</p> <p>c) summary of risk management practices identifying key stakeholders and their roles; and</p> <p>d) identification of gaps in existing knowledge and provide recommendations for future research and risk management.</p> <p>Information regarding the environmental health hazard, defined communities and report structure will be provided in Canvas.</p>																						
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6	Adherence to genre and quality of communication																						
<b>GENERIC SKILLS:</b>	Communication, Organisation, Applying technologies, Information literacy																						

## All - Assessment Task 3a: Environmental health risk management plan for a mass event and disaster management scenario - oral presentation

<b>GOAL:</b>	To develop your skills in creating, communicating and justifying environmental health risk management plans for mass event and disaster management scenarios																
<b>PRODUCT:</b>	Oral																
<b>AUTHORSHIP STATEMENT:</b>																	
<b>FORMAT:</b>	Oral presentation supported by PowerPoint slides. Written presentation script.																
<b>CRITERIA:</b>	<table border="1"> <thead> <tr> <th>No.</th> <th></th> <th>Learning Outcome assessed</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Appropriateness of risk management strategies for specific environmental hazards in prescribed scenario</td> <td>2 3 4</td> </tr> <tr> <td>2</td> <td>Depth of justification for selection of risk management strategies</td> <td>1 3 4</td> </tr> <tr> <td>3</td> <td>Clarity and effectiveness of oral communication and presentation slides</td> <td>1 3 4</td> </tr> <tr> <td>4</td> <td>Contribution to team in developing and communicating a risk management plan</td> <td>1 2 3 4</td> </tr> </tbody> </table>	No.		Learning Outcome assessed	1	Appropriateness of risk management strategies for specific environmental hazards in prescribed scenario	2 3 4	2	Depth of justification for selection of risk management strategies	1 3 4	3	Clarity and effectiveness of oral communication and presentation slides	1 3 4	4	Contribution to team in developing and communicating a risk management plan	1 2 3 4	
No.		Learning Outcome assessed															
1	Appropriateness of risk management strategies for specific environmental hazards in prescribed scenario	2 3 4															
2	Depth of justification for selection of risk management strategies	1 3 4															
3	Clarity and effectiveness of oral communication and presentation slides	1 3 4															
4	Contribution to team in developing and communicating a risk management plan	1 2 3 4															
<b>GENERIC SKILLS:</b>	Communication, Collaboration, Problem solving																

**All - Assessment Task 3b:** Environmental health risk management plan for a mass event and disaster management scenario - Supporting portfolio

<b>GOAL:</b>	To develop your skills in creating and communicating environmental health risk management plans for mass outdoor events and disaster scenarios	
<b>PRODUCT:</b>	Artefact - Technical and Scientific, and Written Piece	
<b>AUTHORSHIP STATEMENT:</b>		
<b>FORMAT:</b>	No standard required format. Creativity and innovation is encouraged.	
<b>CRITERIA:</b>	<b>No.</b>	<b>Learning Outcome assessed</b>
	1	Application of appropriate risk management strategies for the prescribed scenario <span style="float: right;">2 3 4</span>
	2	Identification and application of appropriate legislative resources for managing environmental health risks in the prescribed scenario; <span style="float: right;">2 3 4</span>
	3	Scope and complexity of contingency planning for environmental health hazards <span style="float: right;">2 3 4</span>
	4	Quality of syntax and mechanics <span style="float: right;">2 3 4</span>
<b>GENERIC SKILLS:</b>	Communication, Collaboration, Problem solving, Organisation	

6.4. Assessment to competency mapping

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
<b>THE COMPHP CORE COMPETENCIES FRAMEWORK FOR HEALTH PROMOTION 2011</b>				
All delivery modes	Artefact - Technical and Scientific, and Written Piece	Environmental Health Hazard Report	6.3	Taught, Practiced, Assessed
			B.10	Taught, Practiced, Assessed
		Environmental health risk management plan for a mass event and disaster management scenario - Supporting portfolio	7.2	Taught, Practiced, Assessed
			B.10	Taught, Practiced, Assessed
Oral		Environmental health risk management plan for a mass event and disaster management scenario - oral presentation	7.2	Taught, Practiced, Assessed
			B.10	Taught, Practiced, Assessed
Plan		Literature review research strategy and plan	6.3	Taught, Practiced, Assessed

7. Directed study hours

A 12-unit course will have total of 150 learning hours which will include directed study hours (including online if required), self-directed learning and completion of assessable tasks. Student workload is calculated at 12.5 learning hours per one unit.

## 8. What resources do I need to undertake this course?

Please note: Course information, including specific information of recommended readings, learning activities, resources, weekly readings, etc. are available on the course Canvas site— Please log in as soon as possible.

### 8.1. Prescribed text(s) or course reader

You need regular access to the resource(s) below. Many texts are available as ebooks through the [Library](#) at no additional cost.

REQUIRED?	AUTHOR	YEAR	TITLE	EDITION	PUBLISHER
Recommended	Friis, R.H.	2019	Essentials of Environmental Health	n/a	Jones & Bartlett

### 8.2. Specific requirements

This course includes a 3 day Field Trip to Minjerribah (Stradbroke Island). You will be required to pay a fee to contribute towards accommodation, transport and food. You will be required to wear covered footwear, hat and clothing appropriate for participating in laboratory and field work.

## 9. How are risks managed in this course?

Risk assessments have been performed for all field activities and low to moderate levels of health and safety risk exists. Moderate risks may include working in an Australian bush setting, working with people, working outside normal office hours for example. It is your responsibility to review course material, search online, discuss with lecturers and peers and understand the health and safety risks associated with your specific course of study and to familiarise yourself with the University's general health and safety principles by reviewing the [online induction training for students](#), and following the instructions of the University staff.

## 10. What administrative information is relevant to this course?

### 10.1. Assessment: Academic Integrity

Academic integrity is the ethical standard of university participation. It ensures that students graduate as a result of proving they are competent in their discipline. This is integral in maintaining the value of academic qualifications. Each industry has expectations and standards of the skills and knowledge within that discipline and these are reflected in assessment.

Academic integrity means that you do not engage in any activity that is considered to be academic fraud; including plagiarism, collusion or outsourcing any part of any assessment item to any other person. You are expected to be honest and ethical by completing all work yourself and indicating in your work which ideas and information were developed by you and which were taken from others. You cannot provide your assessment work to others. You are also expected to provide evidence of wide and critical reading, usually by using appropriate academic references.

In order to minimise incidents of academic fraud, this course may require that some of its assessment tasks, when submitted to Canvas, are electronically checked through Turnitin. This software allows for text comparisons to be made between your submitted assessment item and all other work to which Turnitin has access.

### 10.2. Assessment: Additional Requirements

#### **Eligibility for Supplementary Assessment**

Your eligibility for supplementary assessment in a course is dependent of the following conditions applying:

- (a) The final mark is in the percentage range 47% to 49.4%; and
- (b) The course is graded using the Standard Grading scale

### 10.3. Assessment: Submission penalties

Late submissions may be penalised up to and including the following maximum percentage of the assessment task's identified value, with weekdays and weekends included in the calculation of days late:

- (a) One day: deduct 5%;
- (b) Two days: deduct 10%;
- (c) Three days: deduct 20%;
- (d) Four days: deduct 40%;
- (e) Five days: deduct 60%;
- (f) Six days: deduct 80%;
- (g) Seven days: A result of zero is awarded for the assessment task.

The following penalties will apply for a late submission for an online examination:

- Less than 15 minutes: No penalty
- From 15 minutes to 30 minutes: 20% penalty
- More than 30 minutes: 100% penalty

#### 10.4. Links to relevant University policy and procedures

For more information on Academic Learning & Teaching categories including:

- Assessment: Courses and Coursework Programs
- Review of Assessment and Final Grades
- Supplementary Assessment
- Central Examinations
- Deferred Examinations
- Student Conduct
- Students with a Disability

For more information, visit <https://www.usc.edu.au/explore/policies-and-procedures#academic-learning-and-teaching>

#### 10.5. Student Charter

UniSC is committed to excellence in teaching, research and engagement in an environment that is inclusive, inspiring, safe and respectful. The [Student Charter](#) sets out what students can expect from the University, and what in turn is expected of students, to achieve these outcomes.

#### 10.6. General Enquiries

For course-specific questions, contact your teaching staff or Course Coordinator.

For other enquiries or to access support, please contact Student Central:

- [UniSC Student Central](#)
- [UniSC Adelaide Student Central](#)