

PUB262

# Environmental Health Risk Management

School: School of Health - Public Health

2024 Semester 2

UniSC Sunshine Coast  
UniSC Moreton BayBLENDED  
LEARNING

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

Please go to [usc.edu.au](http://usc.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 for managing mass events, disasters and communicable disease outbreaks.

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

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
BLENDED LEARNING			
<b>Learning materials</b> – 2 hours of independent structured learning materials	2hrs	Week 1	13 times
<b>Tutorial/Workshop 1</b> – 3 hour on-campus workshop	3hrs	Week 1	13 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
- Food-related health risks
- 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, air, water, 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

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

Not applicable

### 5.2. Co-requisites

Not applicable

### 5.3. Anti-requisites

Not applicable

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

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 weeks three and 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>FORMAT:</b>	Completion of templates provided via Canvas

CRITERIA:	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

#### 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>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>		
CRITERIA:	No.		Learning Outcome assessed
	1	Quality and appropriateness of literature included in the review;	1 2
	2	Application of environmental health risk assessment framework;	1 2
	3	Critical appraisal of literature and knowledge gaps;	1 2
	4	Communication and synthesis of findings and conclusion;	1 2
	5	Adherence to genre and quality of syntax and grammar.	1 2
	6	Identification and critical evaluation of similarities and variances in exposure, health status and risk management related to the hazard for the defined communities	1 2 3

#### 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>FORMAT:</b>	Oral presentation supported by PowerPoint slides. Written presentation script.		
CRITERIA:	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

**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>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	2 3 4
	2	Identification and application of appropriate legislative resources for managing environmental health risks in the prescribed scenario;	2 3 4
	3	Scope and complexity of contingency planning for environmental health hazards	2 3 4
	4	Quality of syntax and mechanics	2 3 4

## 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

Please note that you need to have regular access to the resource(s) listed below. Resources may be required or recommended.

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

### 8.2. Specific requirements

Protective clothing including footwear for field work activities.

## 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

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

The final mark is in the percentage range 47% to 49.4%

The course is graded using the Standard Grading scale

You have not failed an assessment task in the course due to academic misconduct

## 10.3. Assessment: Submission penalties

Late submission of assessment tasks may be penalised at the following maximum rate:

- 5% (of the assessment task's identified value) per day for the first two days from the date identified as the due date for the assessment task.

- 10% (of the assessment task's identified value) for the third day - 20% (of the assessment task's identified value) for the fourth day and subsequent days up to and including seven days from the date identified as the due date for the assessment task.

- A result of zero is awarded for an assessment task submitted after seven days from the date identified as the due date for the assessment task. Weekdays and weekends are included in the calculation of days late. To request an extension you must contact your course coordinator to negotiate an outcome.

## 10.4. SafeUniSC

UniSC is committed to a culture of respect and providing a safe and supportive environment for all members of our community. For immediate assistance on campus contact SafeUniSC by phone: [07 5430 1168](tel:0754301168) or using the [SafeZone](#) app. For general enquires contact the SafeUniSC team by phone [07 5456 3864](tel:0754563864) or email [safe@usc.edu.au](mailto:safe@usc.edu.au).

The SafeUniSC Specialist Service is a Student Wellbeing service that provides free and confidential support to students who may have experienced or observed behaviour that could cause fear, offence or trauma. To contact the service call [07 5430 1226](tel:0754301226) or email [studentwellbeing@usc.edu.au](mailto:studentwellbeing@usc.edu.au).

## 10.5. Study help

For help with course-specific advice, for example what information to include in your assessment, you should first contact your tutor, then your course coordinator, if needed.

If you require additional assistance, the Learning Advisers are trained professionals who are ready to help you develop a wide range of academic skills. Visit the [Learning Advisers](#) web page for more information, or contact Student Central for further assistance: +61 7 5430 2890 or [studentcentral@usc.edu.au](mailto:studentcentral@usc.edu.au).

## 10.6. Wellbeing Services

Student Wellbeing provide free and confidential counselling on a wide range of personal, academic, social and psychological matters, to foster positive mental health and wellbeing for your academic success.

To book a confidential appointment go to [Student Hub](#), email [studentwellbeing@usc.edu.au](mailto:studentwellbeing@usc.edu.au) or call 07 5430 1226.

## 10.7. AccessAbility Services

Ability Advisers ensure equal access to all aspects of university life. If your studies are affected by a disability, learning disorder mental health issue, injury or illness, or you are a primary carer for someone with a disability or who is considered frail and aged, [AccessAbility Services](#) can provide access to appropriate reasonable adjustments and practical advice about the support and facilities available to you throughout the University.

To book a confidential appointment go to [Student Hub](#), email [AccessAbility@usc.edu.au](mailto:AccessAbility@usc.edu.au) or call 07 5430 2890.

## 10.8. 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>

## 10.9. 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.

## 10.10.General Enquiries

### In person:

- **UniSC Sunshine Coast** - Student Central, Ground Floor, Building C, 90 Sippy Downs Drive, Sippy Downs
- **UniSC Moreton Bay** - Service Centre, Ground Floor, Foundation Building, Gympie Road, Petrie
- **UniSC SouthBank** - Student Central, Building A4 (SW1), 52 Merivale Street, South Brisbane
- **UniSC Gympie** - Student Central, 71 Cartwright Road, Gympie
- **UniSC Fraser Coast** - Student Central, Student Central, Building A, 161 Old Maryborough Rd, Hervey Bay
- **UniSC Caboolture** - Student Central, Level 1 Building J, Cnr Manley and Tallon Street, Caboolture

**Tel:** +61 7 5430 2890

**Email:** [studentcentral@usc.edu.au](mailto:studentcentral@usc.edu.au)