ENVS819

Environmental Health

S2 Evening 2018

Dept of Environmental Sciences

Contents

General Information

Unit convenor and teaching staff
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Credit points
4

Prerequisites
Admission to MEnv or MSc or GradDipEnv or GradCertEnv or MEnvPlan or MPlan or MPH or MSusDev or GradDipSusDev or GradCertSusDev or GradCertDevStudGlobalHlth or MWldMgt or MMarScMgt or MConsBiol or GradDipConsBiol or MDevStud

Corequisites

Co-badged status

Unit description
This unit explores those aspects of human health determined by physical, chemical, biological and social components of the environment. The unit explores this relationship through a broad range of local, regional, national and international topics including the interrelationships between physical, biological and socio-economic environments; population and environmental health measures and methods; identifying the causes, impacts and mitigation of environmental hazards; the regulatory framework covering various aspects of local and national environmental health; and emerging issues in environmental health such as climate change and globalisation.

Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at https://www.mq.edu.au/study/calendar-of-dates

Learning Outcomes

On successful completion of this unit, you will be able to:

Develop a broad understanding and knowledge of the nature of environmental health issues at different geographic scales - local, regional, national and global.
Develop critical, analytical and integrative thinking and deep research skills by class discussions and reading key environmental health reports, journals, and internet

resources.

Prepare and present a detailed research investigation on a specific environmental health topic utilising advanced science communication skills and considered opinion highlighting the nature of the issue, population affected, key findings and recommendations.

Gain the confidence and capacity to contribute to public discourse on a range of environmental health issues.

Appreciate the interdisciplinary nature of environmental health professionals skills and knowledge in the context of other units of study.

Assessment Tasks

Name	Weighting	Hurdle	Due
Online module 1: Pollution	5%	Yes	27 August 2018
Online module 2: Climate	5%	No	17 September 2018
Research literature review	20%	No	24 September 2018
Online module 3: conflict EH	5%	No	22 October 2018
Research project report	40%	No	2 November 2018
Class presentation	10%	No	6 November 2018
Participation and engagement	15%	No	throughout semester

Online module 1: Pollution

Due: **27 August 2018**
Weighting: **5%**
This is a hurdle assessment task (see assessment policy for more information on hurdle assessment tasks)

The focus for this online module is the Lancet "Commission on Pollution and Health" and the work of the Pure Earth organisation.

- There are a number of required readings as well as Audio Visual material provided for this module.
- Each student must provide responses to a series of questions.
- Your responses must demonstrate completion of the module and an understanding of the issues and challenges related to this topic.
- Refer to the marking rubric for more information.

On successful completion you will be able to:

- Develop a broad understanding and knowledge of the nature of environmental health issues at different geographic scales - local, regional, national and global.
- Appreciate the interdisciplinary nature of environmental health professionals skills and knowledge in the context of other units of study.

Online module 2: Climate

Due: **17 September 2018**
Weighting: **5%**

The focus of this online module are weather and climate factors affecting environmental health.

- There are a number of required readings as well as Audio Visual material provided for this module.
- Each student must provide responses to a series of questions.
- Your responses must demonstrate completion of the module and an understanding of the issues and challenges related to this topic.
- Refer to the marking rubric for more information.

On successful completion you will be able to:

- Develop a broad understanding and knowledge of the nature of environmental health issues at different geographic scales - local, regional, national and global.
- Appreciate the interdisciplinary nature of environmental health professionals skills and knowledge in the context of other units of study.

Research literature review

Due: **24 September 2018**
Weighting: **20%**

The Research literature review is the first of three related components that comprise the major assessment task for ENVS819.

Your research is an original investigation into a contemporary environmental health topic drawn from any of the ENVS819 lecture topics* (refer to the lecture schedule and iLearn resource)

- With the final research project report (Assessment 5) in mind, this short literature review requires you to read and review selected material related to your selected topic.
- You must use **a minimum of twelve (12) references based on academic journal articles and published reports**.

- The short literature review should be used to develop a broad familiarity with the selected research topic, which will be explored in greater depth in the final project report.

- The short literature review should highlight any research gaps or controversies and include a concise conclusion.
- Refer to the marking rubric for more information.

** Other project topics may be accepted but must be discussed with the unit convenor before submitting this assessment.*

Referencing:

Correct referencing style (in-text and final reference list) is a major component of this assessment task.

You must correctly use an accepted reference style for this assessment. *Harvard and Vancouver styles are preferred. Make sure you follow the correct citation style for your assessments: in-text and final reference list.*

NB: 1,000 words (Word count DOES NOT include the reference list)

On successful completion you will be able to:

- Develop a broad understanding and knowledge of the nature of environmental health issues at different geographic scales - local, regional, national and global.
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- Prepare and present a detailed research investigation on a specific environmental health topic utilising advanced science communication skills and considered opinion highlighting the nature of the issue, population affected, key findings and recommendations.
- Appreciate the interdisciplinary nature of environmental health professionals skills and knowledge in the context of other units of study.

Online module 3: conflict EH

Due: **22 October 2018**
Weighting: **5%**

This online module focuses on the environmental health aspects of armed conflict and natural hazard crises.

- There are a number of required readings as well as Audio Visual material provided for this module.
- Each student must provide responses to a series of questions.
- Your responses must demonstrate completion of the module and an understanding of the issues and challenges related to this topic.
- Refer to the marking rubric for more information.

On successful completion you will be able to:

- Develop a broad understanding and knowledge of the nature of environmental health issues at different geographic scales - local, regional, national and global.
- Appreciate the interdisciplinary nature of environmental health professionals skills and knowledge in the context of other units of study.

Research project report

Due: **2 November 2018**
Weighting: **40%**

Report requirements:

The project should present a thorough investigation into the selected topic that was submitted as Assessment 3 (Research project literature review).

The report should include the following sections and components:

- Title page
- Table of Contents
- Introduction
- Background to the environmental health issue
- Review of the current status of the environmental health issue
- Challenges, obstacles and controversies related to the environmental health issue
- Conclusion
- Reference list (correct style required e.g. Harvard or Vancouver)
- Appendix (optional)
- Line spacing should be 1.5
- Page numbers

Graphics:

Tables, maps, diagrams, photos, etc. are highly encouraged and recommended to add-value

and illustrate the report where appropriate. Make sure you link all your graphics with the text - do not simply place a graphic in the report without including some comments. Ensure all graphics are captioned and correctly referenced. Graphics can be inserted in-text or compiled in an appendix.

Referencing:

Correct referencing style (in-text and final reference list) is a major component of this assessment task.

You must correctly use an accepted reference style for this assessment. *Harvard and Vancouver styles are preferred. Make sure you follow the correct citation style for your assessments: in-text and final reference list .*

Refer to the marking rubric for more information.

NB: 3,000 words (Word count DOES NOT include the reference list, tables, figures or appendix)

On successful completion you will be able to:

- Develop a broad understanding and knowledge of the nature of environmental health issues at different geographic scales - local, regional, national and global.
- Develop critical, analytical and integrative thinking and deep research skills by class discussions and reading key environmental health reports, journals, and internet resources.
- Prepare and present a detailed research investigation on a specific environmental health topic utilising advanced science communication skills and considered opinion highlighting the nature of the issue, population affected, key findings and recommendations.
- Gain the confidence and capacity to contribute to public discourse on a range of environmental health issues.
- Appreciate the interdisciplinary nature of environmental health professionals skills and knowledge in the context of other units of study.

Class presentation

Due: **6 November 2018**
Weighting: **10%**

The oral presentation and background slide will provide a summary of your research project

communicating key ideas and issues.

You are required to:

- Submit via iLearn, one (1) original background slide* (PDF format) that represents your research project environmental health topic.
- Present a brief oral presentation to the class (3 minutes maximum) that clearly and concisely summarises your research project topic.
- 3 minutes talking is approximately 300-350 words.

Refer to the marking rubric for more information.

** Your background slide must be original and highlight the research project topic of your talk.*

On successful completion you will be able to:

- Prepare and present a detailed research investigation on a specific environmental health topic utilising advanced science communication skills and considered opinion highlighting the nature of the issue, population affected, key findings and recommendations.
- Gain the confidence and capacity to contribute to public discourse on a range of environmental health issues.

Participation and engagement

Due: **throughout semester**
Weighting: **15%**

Each student must demonstrate active participation and engagement during the semester.

Four (4) online posts are required and in-class contributions to discussions will be noted.

Specifically:

- ***one (1) post by end of week 3 (9pm Friday 17 August**) that introduces yourself (e.g. study program, current/previous professional work, career aims, interest in environmental health).*

- ***one (1) brief post summarising a news media story** on environmental health sourced from the "EH News" website https://www.ehn.org/*

- ***one (1) brief post responding to another student's news media post***

The two (2) media brief posts on iLearn are required ***by end of Week 11 (9pm Friday 26 October)***

- ***one (1) brief student reflection on ENVS819*** *post via Turnitin* ***by 9pm Friday 16th November****. More information will be provided.*

The aim of these activities is to encourage your active involvement in the class.

On successful completion you will be able to:

- Gain the confidence and capacity to contribute to public discourse on a range of environmental health issues.

Delivery and Resources

Lectures:

The weekly 3 hour lecture block is the main mode of face-to-face delivery in this unit. The format is a mix of formal presentations, class discussions and student exercises. Active student participation and engagement is expected for all students.

The lectures are recorded using the Echo 360 Active Learning Platform and can be accessed via the ENVS819 iLearn page.

Three (3) online modules have been developed for completion in Weeks 4, 7 and 10. There are assessment tasks linked to each online module - Assessments 1, 2 and 4.

In Week 13, all students are required to be available and present their research project to the class - this is Assessment task 6.

iLearn:

ENVS819 makes extensive use of iLearn as the primary portal for information and class communication. All lecture materials, supplementary resources, background readings, key reports and articles and websites are provided via the iLearn page.

iLearn "Announcements" and the "Discussion Forums" are utilised and all students are required to login regularly (at least once per week). It is expected that all students will actively engage and participate in the online and class discussions. A grade of 15% has been allocated for student contributions to a series of online posts and class discussions.

Given the contemporary nature of this subject, regular use is made of the Environmental Health News service: http://www.environmentalhealthnews.org/ and all students are encouraged to subscribe to the daily "EH News" e-letter to assist with learning.

Key websites include:

- NSW Environment Protection Agency (EPA) http://www.epa.nsw.gov.au/
- • World Health Organisation (WHO) Public Health and Environment http://www.who.int/phe/en/
- • US Centers for Disease Control and Prevention (CDC) National Center for Environmental Health https://www.cdc.gov/nceh/
- • Co-operative Research Centre (CRC) for Contamination Assessment and Remediation of the Environment (CARE) http://www.crccare.com/
- • Australian Indigenous Health InfoNet http://www.healthinfonet.ecu.edu.au/
- • Environmental Health Australia knowledge centre https://www.eh.org.au/resources/knowledge-centre
- • NSW Ministry of Health Environmental Health Branch http://www.health.nsw.gov.au/environment/Pages/default.aspx
- • WHO International Agency for Research on Cancer (IARC) https://www.iarc.fr/
- Pure Earth https://www.pureearth.org/

Unit Schedule

Week	Date	Topic
1	31 July	Introduction to the unit
2	7 August	Risk assessment and management. Case studies.
3	14 August	Hazardous materials: the good, the bad and the ugly
4	21 August	**ONLINE MODULE 1** Pollution: a global public health crisis
5	28 August	Air quality: indoor, outdoor
6	4 September	Food safety
7	11 September	**ONLINE MODULE 2** Weather, climate and environmental health

	15 September - *30 September*	***UNIVERSITY RECESS***
8	2 October	Certain infectious and parasitic diseases
9	9 October	Water and sanitation in developing countries
10	16 October	**ONLINE MODULE 3** Conflict, natural hazard crises and environmental health
11	23 October	Environmental justice
12	30 October	ENVS819 open house
13	6 November	Student research project presentations

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- Academic Appeals Policy
- Academic Integrity Policy
- Academic Progression Policy
- Assessment Policy
- Fitness to Practice Procedure
- Grade Appeal Policy
- Complaint Management Procedure for Students and Members of the Public
- Special Consideration Policy *(**Note:** The Special Consideration Policy is effective from 4 December 2017 and replaces the Disruption to Studies Policy.)*

Undergraduate students seeking more policy resources can visit the Student Policy Gateway (https://students.mq.edu.au/support/study/student-policy-gateway). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

If you would like to see all the policies relevant to Learning and Teaching visit Policy Central (https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central).

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/study/getting-started/student-conduct

Results

Results shown in *iLearn*, or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in eStudent. For more information visit ask.mq.edu.au.

Student Support

Macquarie University provides a range of support services for students. For details, visit http://students.mq.edu.au/support/

Learning Skills

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study strategies to improve your marks and take control of your study.

- Workshops
- StudyWise
- Academic Integrity Module for Students
- Ask a Learning Adviser

Student Services and Support

Students with a disability are encouraged to contact the Disability Service who can provide appropriate help with any issues that arise during their studies.

Student Enquiries

For all student enquiries, visit Student Connect at ask.mq.edu.au

IT Help

For help with University computer systems and technology, visit http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/.

When using the University's IT, you must adhere to the Acceptable Use of IT Resources Policy. The policy applies to all who connect to the MQ network including students.

Graduate Capabilities

PG - Capable of Professional and Personal Judgment and Initiative

Our postgraduates will demonstrate a high standard of discernment and common sense in their professional and personal judgment. They will have the ability to make informed choices and decisions that reflect both the nature of their professional work and their personal perspectives.

This graduate capability is supported by:

Learning outcomes

- Develop critical, analytical and integrative thinking and deep research skills by class discussions and reading key environmental health reports, journals, and internet resources.
- Appreciate the interdisciplinary nature of environmental health professionals skills and knowledge in the context of other units of study.

Assessment tasks

- Online module 1: Pollution
- Online module 2: Climate
- Research literature review
- Online module 3: conflict EH
- Research project report

PG - Discipline Knowledge and Skills

Our postgraduates will be able to demonstrate a significantly enhanced depth and breadth of knowledge, scholarly understanding, and specific subject content knowledge in their chosen fields.

This graduate capability is supported by:

Learning outcomes

- Develop a broad understanding and knowledge of the nature of environmental health issues at different geographic scales - local, regional, national and global.
- Develop critical, analytical and integrative thinking and deep research skills by class discussions and reading key environmental health reports, journals, and internet resources.
- Prepare and present a detailed research investigation on a specific environmental health topic utilising advanced science communication skills and considered opinion highlighting the nature of the issue, population affected, key findings and

recommendations.
- Gain the confidence and capacity to contribute to public discourse on a range of environmental health issues.
- Appreciate the interdisciplinary nature of environmental health professionals skills and knowledge in the context of other units of study.

Assessment tasks

- Online module 1: Pollution
- Online module 2: Climate
- Research literature review
- Online module 3: conflict EH
- Research project report
- Class presentation
- Participation and engagement

PG - Critical, Analytical and Integrative Thinking

Our postgraduates will be capable of utilising and reflecting on prior knowledge and experience, of applying higher level critical thinking skills, and of integrating and synthesising learning and knowledge from a range of sources and environments. A characteristic of this form of thinking is the generation of new, professionally oriented knowledge through personal or group-based critique of practice and theory.

This graduate capability is supported by:

Learning outcomes

- Develop critical, analytical and integrative thinking and deep research skills by class discussions and reading key environmental health reports, journals, and internet resources.
- Prepare and present a detailed research investigation on a specific environmental health topic utilising advanced science communication skills and considered opinion highlighting the nature of the issue, population affected, key findings and recommendations.
- Gain the confidence and capacity to contribute to public discourse on a range of environmental health issues.
- Appreciate the interdisciplinary nature of environmental health professionals skills and knowledge in the context of other units of study.

Assessment tasks

- Online module 1: Pollution

- Online module 2: Climate
- Research literature review
- Online module 3: conflict EH
- Research project report
- Class presentation
- Participation and engagement

PG - Research and Problem Solving Capability

Our postgraduates will be capable of systematic enquiry; able to use research skills to create new knowledge that can be applied to real world issues, or contribute to a field of study or practice to enhance society. They will be capable of creative questioning, problem finding and problem solving.

This graduate capability is supported by:

Learning outcomes

- Develop a broad understanding and knowledge of the nature of environmental health issues at different geographic scales - local, regional, national and global.
- Prepare and present a detailed research investigation on a specific environmental health topic utilising advanced science communication skills and considered opinion highlighting the nature of the issue, population affected, key findings and recommendations.

Assessment tasks

- Online module 1: Pollution
- Online module 2: Climate
- Research literature review
- Online module 3: conflict EH
- Research project report
- Class presentation

PG - Effective Communication

Our postgraduates will be able to communicate effectively and convey their views to different social, cultural, and professional audiences. They will be able to use a variety of technologically supported media to communicate with empathy using a range of written, spoken or visual formats.

This graduate capability is supported by:

Learning outcomes

- Develop a broad understanding and knowledge of the nature of environmental health

issues at different geographic scales - local, regional, national and global.
- Develop critical, analytical and integrative thinking and deep research skills by class discussions and reading key environmental health reports, journals, and internet resources.
- Prepare and present a detailed research investigation on a specific environmental health topic utilising advanced science communication skills and considered opinion highlighting the nature of the issue, population affected, key findings and recommendations.
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Assessment tasks

- Online module 1: Pollution
- Online module 2: Climate
- Research literature review
- Online module 3: conflict EH
- Research project report
- Class presentation
- Participation and engagement

PG - Engaged and Responsible, Active and Ethical Citizens

Our postgraduates will be ethically aware and capable of confident transformative action in relation to their professional responsibilities and the wider community. They will have a sense of connectedness with others and country and have a sense of mutual obligation. They will be able to appreciate the impact of their professional roles for social justice and inclusion related to national and global issues

This graduate capability is supported by:

Learning outcomes

- Develop a broad understanding and knowledge of the nature of environmental health issues at different geographic scales - local, regional, national and global.
- Develop critical, analytical and integrative thinking and deep research skills by class discussions and reading key environmental health reports, journals, and internet resources.
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