POSTGRADUATE PROGRAMS
School of
PUBLIC HEALTH AND COMMUNITY MEDICINE

PHCM9612

Environmental Health

Semester 1, 2011

THE UNIVERSITY OF NEW SOUTH WALES
SCHOOL OF PUBLIC HEALTH AND COMMUNITY MEDICINE

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Contents

Welcome

Welcome to the Semester 1 2011 course in Environmental Health!

Environmental Health is an interesting and evolving area of public health practice, and one that can truly be described as interdisciplinary. Good decision making in environmental health has far reaching implications for public health in general, perhaps even more than any other area of public health. Community engagement in understanding the challenges and participation in decision-making and action are essential for positive change in environmental health. Whatever your background, you can expect to find something to sink your teeth into in this comprehensive introduction to environmental health principles and practice.

About the course

The course takes a broad look at current concepts in environmental health in Australia and overseas. We will use current tools in environmental health (toxicology, epidemiology, risk assessment and health impact assessment) to review case studies in key areas, such as pollution in different media (air, water and soil etc), chemicals and pesticides, epidemics and food borne illness and the impact of climate change. Using examples from both Australia and overseas, we will consider environmental health priorities and social and cultural contexts in different countries and circumstances. Students will learn to investigate environmental health issues from a number of different perspectives (eg that of the scientific expert, the environmentalist, the community advocate etc) and to apply broader understandings of the causes and ways to protect health in the face of challenges in our environment.

Pre-requisites

There are no specific prerequisites for this course. However, students who have already undertaken the core courses 'Epidemiology and Statistics', 'Evidence Informed Decision Making' or equivalent prior learning in epidemiology may find the material on environmental epidemiology easier to understand. No prior knowledge of toxicology is assumed.

Units of credit

This course is a 6 unit course of the Master of Public Health Program, comprising 6 units of credit towards the total required for completion of the study program.

Course staff

Course convenor

A/Professor Melissa Haswell-Elkins MSc PhD
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Melissa is a highly experienced researcher in epidemiology, primary health care and health promotion and has applied her expertise in diverse areas including environmental health, infectious and parasitic diseases, HIV/AIDS, toxicology and chronic disease, mental health and wellbeing and young people's health. She has extensive experience living and working in rural settings in India and Thailand as well as with Aboriginal and Torres Strait Islander communities in Australia.

Special Contributor

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Damian Harkin completed a BA with a double major in Social Science and Policy and Development studies and a Masters in Public Health at UNSW. He is currently undertaking postgraduate research studies at SPHCM on access to sanitation and infection control. He is extremely interested in the intersection between public health and the environment.

Course aim

The overall aim of this course is to enable you to have a broad understanding of current issues in environmental health.

Course outcomes

The course is designed to enable you to:

- Explain the meaning and context of 'environmental health' in Australia and internationally
- Identify and analyse important contemporary environmental health issues in Australia and internationally

- Apply the tools of basic toxicology and epidemiology to environmental health issues
- Debate options for the prevention and management of environmental health problems.
- Identify different stakeholders in environmental health and consider the impact of different perspectives on public health decision making
- Locate high quality information about environmental health issues
- Research and analyse an environmental health issue of relevance to your background, work or community.

Graduate attributes and capabilities

This course relates to a number of the UNSW Graduate Attributes that the university seeks to foster in students, in particular:

- **Graduate Attribute 2:** an in-depth engagement with the relevant disciplinary knowledge in its interdisciplinary context
- **Graduate Attribute 5**: the skills to appropriately locate, evaluate and use relevant information
- **Graduate Attribute 8**: a capacity to contribute to, and work within, the international community

In addition, this course supports the attainment of capabilities that you will achieve across your studies in the Master of Public Health. For the complete list please refer to the School website. In particular this course provides learning opportunities that will nurture the following capabilities:

The knowledge and skills to:

- Interpret and apply research and research methods for policy and practice in public health contexts.
- Protect the health of populations and prevent communicable and non-communicable diseases through appropriate interventions.
- Promote the health of populations through research, practice, policy and advocacy.

The interactional abilities to:

- Strengthen relationships and communicate effectively to enhance public health outcomes.
- Engage with and contribute to local, national and international communities.

The personal attributes to:

- Apply analytical and critical thinking for evidence based problem solving.

Learning and teaching rationale

This course is approached on the basis that students bring a rich source of prior knowledge, skills and experience to the subject, from both their professional careers and personal lives. It has been our experience that students benefit from sharing these experiences. The course is therefore designed both to maximise the possibilities for sharing knowledge and experience, and to allow flexibility for students to explore topics that are most relevant to them. The activities and assessment tasks are designed with both these themes in mind.

Environmental health is a broad topic and its practitioners are diverse. Although there are some direct training courses (for Environmental Health Officers for example), many environmental health practitioners start with training in public health, toxicology, or urban development/planning and build experience through their workplaces or with further training. However, many generalist public health practitioners also conduct a considerable amount of work relevant to environmental health in their daily practice. This course will not equip you to work as an independent environmental health professional, but it will help you gain more understanding of the scope of environmental health and provide you with the skills and knowledge to conduct a basic review of an environmental health issue.

Teaching Strategies

This course has multiple components within its learning facilitation process, namely; a workshop with lectures and scenario group work, an on-line information sharing process within your Scenario group, two formal written assignments and ongoing participation and posting on the discussion board across all of the course topics.

The course consists of a two day **Workshop** (24 and 25 February 2011) and a 12 week program, which is delivered externally. This means that most of the work can be completed on days/times within your weekly program that suit you best.

In 2011 the two-day workshop is a compulsory component of the course: you are unable to enrol if you cannot attend the workshop. The sessions will consist of lectures introducing you to the basic principles of environmental health combined with periods of group work that will form the basis of your first assessments.

During the workshop, the class will work in smaller groups investigating a different environmental health issue embedded within an interesting social and cultural context. You will work within your group to identify information needs

across various dimensions of the issue that are required to guide an appropriate response. Each group member will take responsibility for an area of the topic to individually research and write a specific formal report (Task 1) that addresses the information needs of the group on that topic. Each student will post their topic report online for the benefit of their scenario group (on UNSW Blackboard) and will be able to engage in on-line discussion about the posted reports. The second assignment emerging from the scenario group exercise is a formal written paper providing a detailed description of the whole issue, bringing in the key aspects of the topic areas researched by group members and providing overall recommendations regarding the management of the issue in its context (Task 2).

The third assignment allows you to identify and discuss a broad issue facing environmental health that you feel is important and then describe a specific example of a situation where that issue is playing out at a local level. You will be required to research the literature and prepare an Environmental Health Report that addresses key questions, provides recommendations to deal with the issue at the local level and reflects back on how learning at the local level should be used to manage the broader, big picture challenge.

Throughout the semester, you are required to cover the key topic areas in Environmental Health that form the Sections of the Course Materials. Each week a question or discussion topic will be posted by the Course staff. You are strongly encouraged to engage in all of this discussion as it will solidify your understanding and confidence in the field of environmental health. You will become accustomed to the way that different perspectives, interpretations, experiences and sometimes personal values influence your understanding. To encourage full participation and enhanced learning among all students, 15% of your mark will be allocated to three of your postings on the discussion board that you identify as your most significant contributions to the discussion board.

Online learning component using UNSW Blackboard

UNSW Blackboard is a Learning Management System that supports university learning and teaching by extending the face-to-face learning environment to online learning spaces and providing virtual classrooms for distance learning courses. See: http://telt.unsw.edu.au/

The UNSW Blackboard component of this course provides:

1. Electronic access to Course Notes and Core Readings. Unless otherwise specified, web links to Further Readings are not provided - some web addresses are given in the course notes.

2. A scenario discussion facility for each group to support each other on their topic and place their formal on-line posting

3. A general class discussion facility for all students to:

    a. Discuss online the weekly topic and any other issues related to environmental health that come to your attention.
    (Note: 15% of your mark is allocated to the online discussions – see the assessment section below for more details)
    b. Post questions to the lecturer.

4. A place where you get to know more about your peers and chat socially amongst yourselves.

If you are an international student, it is particularly important that you learn to use this facility and contribute to discussions. Some students are unfamiliar with and daunted by using UNSW Blackboard. We encourage you to see UNSW Blackboard as a friendly opportunity to sit down with a cup of tea and chat to your colleagues. If you have access to campus you can attend the UNSW Blackboard tutorial in the Residential Week that is specially designed for students.

Please log on in Week 1 of the course and introduce yourself in the 'My Learning Community' area of the course site. If you have any questions or concerns about using UNSW Blackboard, please get in touch with the course convenor.

Assessed Components posted on Blackboard

Tasks 1 and 4 of your assessable components will be directly associated with work completed on Blackboard.

Task 1: Formal online posting of your topic report

Each person will take responsibility for researching the literature and preparing a report on one area of the topic, provide a formal online post (on UNSW Blackboard) at the end of Week 5 (April 1) that addresses the information needs, and submit a written paper on this area on Monday of Week 8 (April 18) of the course.

The formal posting will enable each individual's research to inform the whole group, allowing each member to make their own interpretation and recommendations for response to the overall Scenario. Attendance at the workshop, your participation in this presentation, contribution to planning for

the group report (at a later date) and your topic report will comprise 20% of your course mark.

Your group will meet online (on UNSW Blackboard) and you are highly encouraged to contribute to discussions throughout the tasks. More details about this task are included in the Assessment section below.

Task 4: Submitting your three most significant on-line contributions to the class discussion area

Each week the lecturer will initiate a discussion related to the Section material for the week (for most of the 12 sections) and invite everyone to discuss issues of interest. Previous students have emphasised the value of these discussions, both for the opportunity to develop their own contributions as well as from the contributions of others and the interesting debates that ensue. As a result of previous feedback, we have made it a requirement for students to submit their three most significant contributions to the general discussion board during the 12 weeks. You will be required to present these three and briefly describe why you feel they were significant to the learning process.

Guidance for using UNSW Blackboard

The School runs a Blackboard tutorial during residential week at the start of each semester. If you are unable to attend this tutorial, guidance for using UNSW Blackboard, including some basic tips, can be found at:
http://support.telt.unsw.edu.au/blackboard

If you are still experiencing difficulties with UNSW Blackboard, please contact the UNSW IT Service Desk for assistance.

Assessment

The aim of the assessments in this course is to develop your skills in critical thinking in relation to environmental health and to meaningfully engage and contribute to real-life environmental health scenarios both individually and in a group setting.

Overview of assessment tasks

Task	Content	Due Date	Weighting
1	Scenario Group Work: Communicating, Planning On-line posting of your individual topic report for your scenario group	At the Workshop Week 5 April 1 (online posting of your topic report)	5% 20%
2	Overall scenario report with recommendations for action on the environmental health issue in context	Week 8 April 18 (formal report)	20%
3	Environmental Health Report	Week 8 (topic) April 22 Week 12 (report) May 23	40%
4	Your three most significant contributions to on line discussions for Course sessions (note: this does not include your scenario group work) and why	Week 13 May 30	15%

Details of assessment requirements

Task 1: Scenario Group Work: Communicating, Planning and on line posting of an individual topic report for your scenario group

Due Dates: Attendance at the Two Day Workshop February 24, 25) (5%) and Formal online posting of your report (20%) due 5:00pm – Friday, April 1 (End of Week 5) Combined Weighting: 25%

During the compulsory workshop, you will join a group that is faced with a scenario and supporting introductory information about a topical issue in environmental health.

Your group will examine the scenario, identify information needs across the various dimensions of the issue that are required to guide appropriate decision making and responses and commence a brief research process. Following the identification of the issues, the group will develop a plan to enable research of the breadth of issues by the group members. Each member of the group will negotiate a different component of the scenario for individual research (for example the epidemiology, toxicology or social and cultural aspects of the scenario).

At the end of the workshop, each group will be expected to deliver a brief presentation to the class about the key aspects of the circumstances in the scenario and the group's strategy and plan for information gathering to address the issues raised.

You will then spend the next 5 weeks researching the literature in this area and communicating with your group online about each others' progress. We encourage you to share articles or highlight important aspects of the scenario that relate to other people's topics as you explore the literature related to your own.

Each group member is then required to prepare a formal report about their individual topic area and **post it on-line for the benefit of your scenario colleagues** at the end of Week 5 (Friday, April 1).

Your report will cover the aspect of the scenario that you have researched, with a general background on your own topic area informed by the recent literature, plus a detailed analysis of your topic as it specifically relates to the Scenario context. The minimum length for Part 1 is 1200 words but longer papers will not be penalised if they keep to the point and are not wordy.

You will be marked on the quality of the information you provide to the group in terms of its specific relevance to the context of the Scenario (how well does it meet the information needs in relation to what is known) and usefulness to informing appropriate action.

You will not be able to pass the subject without posting your contribution.

To summarise, this task involves attendance at the workshop, participation in your group's presentation, your contribution to planning and ongoing communication with your group and your formal online posting.

The written assessment is expected to be your own individual work even if you worked on the assignment in a group or discussed it in your tutorial group. It is essential that you abide by academic standards and that your assignment is not the result of collusion or that of plagiarism. Please see UNSW definition of collusion and plagiarism in the course notes.

Task 2: Individual Formal Report and Recommendations for Responding to the Scenario

Due date: 5:00 pm – Monday, April 18 (Beginning of Week 8)

Weighting: 20%

Task description:

After you have placed your formal posting online and engaged in questions and discussion (see Task 1), you then have 2 weeks to complete an individual overall report about the scenario. You are free to utilise and reference the on-line reports posted by your scenario colleagues but you will need to integrate the information yourself, together with additional research you undertake, and create an original piece of work.

During the 2 week period, we encourage you to both ask and answer questions and engage in discussion with the other members of the group about the information presented on the topics being examined.

Task 2 requires you to demonstrate that you have gained an in depth understanding of the Scenario overall, building on the work and postings of your group members. You will conclude with key recommendations for a response to the situation. Your paper should be at least 1600 words in length – longer papers will not be penalised if they keep to the point and are not wordy. The report will be marked according to the criteria below.

More discussion and details about what is expected for this task will be provided at the workshop.

The written assessment is expected to be your own individual work even if you worked on the assignment in a group or discussed it in your tutorial group. It is essential that you abide by academic standards and that your assignment is not the result of collusion or that of plagiarism. Please see UNSW definition of collusion and plagiarism in the course notes.

Task 3: Environmental Health Report

Due date: 5:00 pm – Monday, May 23 (Beginning of Week 12)
You must post your topic online by April 22, Week 8
(topic to be posted online (on UNSW Blackboard)

Weighting: 40%

Task description: Think Global Act Local

For this task, you are asked to identify and discuss a broad challenge facing environmental health that you feel is very important to public health (e.g. a big picture issue). Examples might include global warming or air pollution. Then you will be required to select a specific example in a particular location where health risks or health impacts may be occurring as a component of the big picture issue you identified. Examples could include the severe bushfires in Victoria, the recent floods or Cyclone Yasi in Queensland, or something occurring in your own local community. Begin your paper by discussing the broader challenge and explain how the specific/ local issue may be related or contributing to it. In your conclusion, make an effort to reflect upon what you have learned as you investigated the specific/local issue with respect to its relevance (or lack or relevance) to the way we could/should be facing the larger challenge.

You can choose an environmental health issue that affects you in your home, your workplace or your community although this isn't necessary. Some examples are provided below.

The task requires you to conduct a detailed analysis of this issue and prepare a 2500-3000 word report that provides a succinct and critical overview of the issue, using the following as a content guide:

- What is the big picture issue you are concerned about?
- Why is it such an important environmental health issue?
- What specific issue will you be examining and how does relate to the bigger picture issue?
- Describe the relevant aspects of the location where the issue is/was occurring. Who are the relevant stakeholders at the local level?
- What epidemiological studies have been conducted about this specific issue (locally or in other places)? What do they demonstrate?
- What are the potential effects on human health?
- Is any toxicological or infectious disease information relevant? Briefly summarise key points.
- What government policy or legislation is relevant?

- What are the possible ways of managing the issue, and the benefits and disadvantages of these?
- What are the implications of this issue for your home, workplace, community etc?
- How you recommend this issue should be managed at the local level?
- What learning from your investigation of the local/specific issue do you think is relevant to the way we could/should to face the larger, big picture challenge?

It is important that you try and locate high quality information on this issue. Using newspaper reports as your sole source for this assignment is not appropriate. This task requires you to write scientifically and ensure that all your information is properly referenced. Rather than simply quoting key sources, you should critically analyse sources of information and indicate its relevance (or not) to your local issue. You are also expected to assess different perspectives on the issue.

The assignment will be marked on your ability to synthesise the information available into a concise and thoughtful summary of the most important issues. Take care not to exceed the specified word limit.

Make sure you choose an *environmental health* topic, not simply an *environmental* one. There must be some implications for human health. To give you an idea, here are some examples of big picture issues / and some topics that have the potential to examine at specific or local level that you may choose to explore:

- Marine pollution / the Gulf of Mexico oil spill, agricultural or stormwater pollution
- Water supply / recycling of grey water and/or treated effluent
- Water treatment / fluoridation of water supplies, chlorine disinfection of drinking water, blue-green algal toxicity
- Land degradation / salinity in rural Australia
- Health of the Built Environment / *Legionella* in cooling towers, indoor air pollution, 'sick building syndrome'
- Community health and wellbeing / the social impact of a motorway, aircraft noise
- Air pollution / motor vehicles,
- Rapid technological change / radiation, mobile phones, phone towers, hazardous waste, medical waste disposal
- Energy Sources / nuclear energy industry in Australia, wind farms
- Intensive food production methods / avian influenza, pesticide exposure, genetically modified foods
- Population Growth, urbanisation / depression
- Climate change / expanding vector ranges malaria, dengue fever, a specific extreme weather events

You must post your proposed topic online by the end of Week 8. If you decide you want to change your topic, please contact the Course Convenor before proceeding.

Task 4: Your three most significant on-line contributions to the class discussion area

Due date: 5:00 pm – Monday, May 30 (Week 13)

Weighting: 15%

Task description: Effectively communicating with colleagues across the broad range of topics of environmental health

Each week the course staff will pose a question or a discussion topic around the week's course materials (for most of the 12 sections) and invite everyone to discuss the issue on the general discussion board of Blackboard. These discussions have proven to be of great learning value and we strongly encourage students to remain continually engaged in all the material covered and keep a copy of their postings under the topics. Task 4 requires students to submit a copy of their three most significant contributions to the general discussion board during the 12 weeks with dates of your posting and the section it pertains to. For each selected posting, you must provide a brief description (2-3 sentences) of why you feel it was significant to the learning process.

The three online contributions and descriptions for each should be submitted as a single assessment item.

Assessment Criteria for Tasks 1, 2 and 3

Assessment Tasks 1, 2 and 3 will be marked according to the following criteria:

Integration and synthesis

- You are able to assess different perspectives and sources of information and integrate these into a comprehensive understanding of the topic
- You articulate management problems and solutions for key environmental health issues

Intellectual coherence

- There is a logical flow of ideas in your work
- Conclusions are supported by evidence and argument
- Referencing is clear and appropriate
- Presentation is clear and concise

Critical analysis

- ❖ You critically analyse information sources
- ❖ You take a questioning, critical and rigorous approach to your work

Reflection

- ❖ You consider the relevance of information you have been provided with or located
- ❖ You identify values that are important in environmental health and reflect on your own value system
- ❖ You formulate key questions for yourself and answer these through further scholarship

Assessment Criteria for Task 4

Your selection and explanation of your on-line postings to the General Discussion Board will be assessed by any of the above criteria that are applicable in the particular case. Basically we are looking for questions/ discussion items that stimulate your own and others thinking about environmental health challenges.

Learning outcomes addressed

The four marked components of the course are designed to demonstrate students' attainment of the course outcomes in the contributions they make towards a collective group effort (Task 1 and 4) and an individual effort (Task 2 and 3). Your work should demonstrate your understanding and ability to describe:

- o the meaning and context of 'environmental health' in Australia and/or internationally depending on your topic choice and context (How does your investigation fit in the bigger picture?)
- o the identification and analysis of an important contemporary environmental health issue (Why is it important?)
- o high quality information in the literature that should inform responses to an environmental health issue (What is known? What is uncertain? How might it relate to the specific context?)
- o the different stakeholders in environmental health and the impact of different perspectives on public health decision making (Who is involved; What does each contribute? Whose health and wellbeing is at risk? How can the various parties work together?)

- the application of basic toxicology and/or communicable disease and epidemiology to investigate an environmental health issue* (How do we know there is a health risk? who is most at risk of exposure/health effects?)
- the relative merits of options for the prevention and management of specific environmental health problems (What are the options; which seems best and why?)

The written assessment is expected to be your own individual work even if you worked on the assignment in a group or discussed it in your tutorial group. It is essential that you abide by academic standards and that your assignment is not the result of collusion or that of plagiarism. Please see UNSW definition of collusion and plagiarism in the course notes.

Grading and marking

Grades to be used are represented by the following symbols:
HD, DN, CR, PS, FL

HD This grade represents a High Distinction. This level of performance involves all of the characteristics of a DN performance but also a level of excellence that makes it outstanding. The level of originality, creativity, or depth of thought and understanding shown would be higher than normally expected for postgraduate students. It demonstrates a higher order of critical thinking and reflection than that demonstrated at the level of DN.

DN This grade represents a Distinction. This level of performance involves all of the characteristics of a CR performance but also a level of originality, creativity, or depth of thought and understanding. The work might involve a high level of abstract thinking, or the ability to take an idea or an application into a new context, understand the demands of that context and make modifications. Specific assessment criteria relevant to this assignment are adequately addressed and ALL aspects well done. (This distinguishes it from a CR in which one or two aspects may be incomplete or otherwise not well done.)

CR This grade represents a Credit. The assignment or project comes together to make a broadly coherent whole. The response answers the question, makes a good argument, draws on appropriate evidence, and shows some selectivity and judgment in deciding what is important and what is not. Communication is clear and effective. Specific assessment criteria relevant to this assignment are adequately addressed. (One or two aspects may not be well done but the overall result is still MORE THAN satisfactory).

PS This grade represents a pass. The student has demonstrated understanding of the basic aspects of the topic, but they may be minimally integrated and fail to make a convincing coherent statement or argument. Written work may be descriptive rather than analytical. It may rely too much on retelling other sources such as texts and lecture notes, with little evidence that the student is capable of transforming these into a personal understanding. Significant elements of the assignment are treated superficially. Assessment criteria relevant to the assignment are sufficiently addressed to warrant a PS however the overall standard is no more than satisfactory.

FL This grade represents a clear fail. This grade is used when the student has misunderstood the point of the assignment, or failed to address the most important aspects of the topic. In other words a substantial failure, which would need major work before it could be passed.

NOTE: Students are expected to meet UNSW standards of academic writing and in particular must meet standards of referencing described by the Learning Centre. Failure to reference correctly may limit marks to PS or below. Plagiarism or collusion will result in an automatic FL.

Submitting your assignments

1. All assignments must have a cover sheet attached. Cover sheets can be downloaded from the school website: http://www.sphcm.med.unsw.edu.au/sphcmweb.nsf/page/AdminForms
2. Extensions of up to one week are only granted if requested before the due date. Longer extensions, up to a maximum of two weeks, are only considered with medical certificate unless other appropriate reason is given.
3. Assignments will not be marked if submitted after other students' assignments are returned.
4. Only FL assignments can be resubmitted. The maximum grade that can be achieved after re-marking is a PS.
5. Assignments will be marked within two weeks of due date. Feedback may not reach students until 3 weeks after assignment submission.
6. **All assignments must be posted on Blackboard with a cover sheet attached.**
7. All late assignments (unless extension or exemption previously agreed) will drop a grade. This rule applies if the assignment is one day or one week late.

Feedback on assessment

You will receive detailed feedback on your assessment tasks. Please email the lecturer if you wish to discuss aspects of your assessment tasks individually.

Academic honesty and plagiarism

What is Plagiarism?

Plagiarism is the presentation of the thoughts or work of another as one's own.* Examples include:

- direct duplication of the thoughts or work of another, including by copying material, ideas or concepts from a book, article, report or other written document (whether published or unpublished), composition, artwork, design, drawing, circuitry, computer program or software, web site, Internet, other electronic resource, or another person's assignment without appropriate acknowledgement;
- paraphrasing another person's work with very minor changes keeping the meaning, form and/or progression of ideas of the original;
- piecing together sections of the work of others into a new whole;
- presenting an assessment item as independent work when it has been produced in whole or part in collusion with other people, for example, another student or a tutor; and
- claiming credit for a proportion a work contributed to a group assessment item that is greater than that actually contributed.†

For the purposes of this policy, submitting an assessment item that has already been submitted for academic credit elsewhere may be considered plagiarism.

Knowingly permitting your work to be copied by another student may also be considered to be plagiarism.

Note that an assessment item produced in oral, not written, form, or involving live presentation, may similarly contain plagiarised material.

The inclusion of the thoughts or work of another with attribution appropriate to the academic discipline does *not* amount to plagiarism.

The Learning Centre website is main repository for resources for staff and students on plagiarism and academic honesty. These resources can be located via:
www.lc.unsw.edu.au/plagiarism

The Learning Centre also provides substantial educational written materials, workshops, and tutorials to aid students, for example, in:

- correct referencing practices;
- paraphrasing, summarising, essay writing, and time management;
- appropriate use of, and attribution for, a range of materials including text, images, formulae and concepts.

Individual assistance is available on request from The Learning Centre.
Students are also reminded that careful time management is an important part of study and one of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting, and the proper referencing of sources in preparing all assessment items.

* Based on that proposed to the University of Newcastle by the St James Ethics Centre. Used with kind permission from the University of Newcastle
† Adapted with kind permission from the University of Melbourne.

Please note: Any assignment submitted electronically may be checked at random for plagiarism using the tool, Turnitin. For more on how to avoid plagiarism, see section on plagiarism.

Collusion

The School recognises and encourages the need of external students to have contact with each other and where possible collaborate in their studies. However, there have been instances where students have copied each other's material and submitted it as their own. Lecturers, despite their heavy workload, are alert to this practice. It is emphasised that where collusion can be shown, the students involved may be required to rewrite and re-submit their assignments or may be awarded a fail for the assignment or may be failed in the whole course and even be excluded from the University for misconduct. You should not attempt the assignment questions together and submit the same work as someone else. **It is also not acceptable to submit an assignment which has been submitted by a student in a previous year.**

Referencing

It is your responsibility to learn one of the accepted academic methods for acknowledging sources of information (citing references). Guidelines for acknowledging sources of information can be found on the following websites:

Faculty of Medicine
http://web.med.unsw.edu.au/infoskills/cite.htm

SPHCM
http://www.sphcm.med.unsw.edu.au/sphcmweb.nsf/page/AssessmentGuidelines

The Learning Centre
http://www.lc.unsw.edu.au/olib.html#Referencing

Readings and resources

1. Course notes and readings

Course notes and a *Core Reading* for each section are provided. In addition, a *Further Reading* section is provided for your own interest/self-directed learning.

2. Activities and study questions

These accompany each section. You can complete these and include them in on-line discussion.

3. Textbook

The text ***'Environmental Health in Australia and New Zealand'*, edited by Nancy Cromar, Scott Cameron and Howard Fallowfield, Oxford University Press, 2004** is recommended. This textbook provides a very good overview of the field of environmental health in Australia, with excellent chapters covering the key principles. You can purchase this book through the UNSW bookshop. A copy is held in Open Reserve at UNSW library. Key chapters that we will be using have been copied and are provided in your course notes.

Another textbook you may find useful that has a more US based perspective is:
Friis, RH. ***'Essentials of Environmental Health'***, Jones and Bartlett Publishers, 2007.

A useful chapter on environmental health with a more international perspective is:
Butler CD, McMichael AJ. *Environmental Health* in Sidel V, Levy B eds. '***Social Injustice and Public Health'***, Oxford University Press, Oxford, 2006: 318-336

4. Library Subject Guide: Environmental Health

The Library has developed an Environmental Health Library Subject Guide to support this course. This provides access to key databases, journals and websites relevant to environmental health- see http://subjectguides.library.unsw.edu.au/content.php?pid=25625&sid=186045

5. Virtual Library: Public Health

The Virtual Public Health Library brings together public health sites and resources from around the world in a systematic and easily accessible way for all those wishing to be in touch with the most relevant and meaningful public health resources. It has a specific section on Environmental Health- see http://vph.sphcm.med.unsw.edu.au/ and follow the links to Environmental Health.

Continual course improvement

Periodically student evaluative feedback on both courses and teaching is gathered. The UNSW's Course and Teaching Evaluation and Improvement (CATEI) Processes are used along with student focus groups, student forums, and at times additional evaluation and improvement instruments developed in consultation with the Faculty of Medicine's Program Evaluation and Improvement Group. Student feedback is taken seriously, and continual improvements are made to the course based in part on such feedback.

Evaluation activities across the Faculty are strongly linked to improvements and ensuring support for learning and teaching activities for both students and staff.

In order to improve this course we will ask you for your views about the weekly sessions and the assessment tasks. We will also ask you to complete the CATEI form at the end of the course.

Additional support to students

IT requirements for UNSW students

Our courses have online components which have been developed and are taught on the assumption that all students meet the UNSW IT Requirements Policy. Viewable online at:
http://www.its.unsw.edu.au/policies/policies_home.html

UNSW IT Service Desk (UNSW Blackboard support)

The IT Service Desk is your central point of contact for assistance and support with UNSW Blackboard, UniPass, zPass, UniMail, UniWide, zMail and Anti-virus software. Contact them directly for assistance with IT related matters, including UNSW Blackboard:

Website:	http://www.it.unsw.edu.au/index.html
Phone:	+61 (2) 9385 1333
Email:	servicedesk@unsw.edu.au
Location:	UNSW Library level 2

UNSW library support

Staff at the library can help you:

- find information resources for your assignments
- access electronic resources & databases
- advise you on library and information services.

Information about UNSW library assistance is available at:

Library Homepage:	http://www.library.unsw.edu.au/
Postgraduate Services:	http://www.library.unsw.edu.au/servicesfor/PGandH.html
Tel:	02 9385 2650
Location:	UNSW Library, Level 2 Service desk

Library resources

Online training and resources

There are a variety of online tutorials and resources available to Postgraduate students to help equip you with the information skills you will need to get started in your program. It is **highly recommended** that you complete these tutorials and get familiar with the resources available prior to commencing your studies and assignments. http://elise.library.unsw.edu.au/home/welcome.html

Online Information Skills Tutorial - ELISE Plus

This is a task-based approach to the information literacy and the skills you need to be effective. It contains modules on searching databases (which include videos and screen captures), evaluating different types of resources like peer-reviewed journals and websites and citing references. This tutorial is designed to help students learn more about: searching for information to complete assignments and projects, and self-directed learning. Entering coursework students should complete the ELISE quiz: http://eliseplus.library.unsw.edu.au/

The ELISE postgraduate tutorial – ELISE Advanced

The five modules will step you through the fundamental processes of research and information seeking, they cover; selecting and searching, finding and using and critically evaluating all sources of information.
http://pgelise.library.unsw.edu.au/

Subject guides

Use these guides as a quick and easy pathway to locating resources in your subject area. These excellent guides bring together the core web and print resources in one place and provide a one click portal into the online resources.
http://subjectguides.library.unsw.edu.au/

Learning Centre

The Learning Centre provides a wide range of workshops and study skill resources to students enrolled in degree programs at the University. Students can access information on: Essay and assignment writing, Exam skills, Reading and writing skills, Referencing and plagiarism, Organisation skills, Oral presentations. See:
http://www.lc.unsw.edu.au

Administrative matters

All administrative matters are covered comprehensively on the SPHCM Website. Check for details on how to access email, obtain your UniPass etc. at:
http://www.sphcm.med.unsw.edu.au/sphcmweb.nsf/page/StudentResources

See the school website for information on school assessment guidelines, including extensions and late assignments:
http://www.sphcm.med.unsw.edu.au/SPHCMWeb.nsf/page/AssessmentGuidelines

If you do not have a handbook you can pick one up from the Postgraduate Coursework Office, Level 2 Samuels Building or download if from the web.
http://www.sphcm.med.unsw.edu.au/SPHCMWeb.nsf/page/Current%20Students

For any further assistance, you can contact:

Postgraduate Office
School of Public Health and Community Medicine
The University of New South Wales
Level 2, Samuels Building
UNSW Sydney NSW 2052, Australia

T: + 61 (2) 9385 1699 - Graduate Health Management Programs
T: + 61 (2) 9385 2507 - Graduate Public Health Programs
T: + 61 (2) 9385 1928 - Graduate Clinical Education Programs

F: + 61 (2) 9385 1526
E: postgrad-sphcm@unsw.edu.au

Other matters

Occupational Health & Safety:
http://www.hr.unsw.edu.au/ohswc/ohswc_home.html

Complaints procedures: https://my.unsw.edu.au/student/atoz/Complaints.html

Equity & Diversity: https://my.unsw.edu.au/student/atoz/EquityDiversity.html

Course schedule

Date	Topic/Section	Assessment
Week 1 (28 Feb)	Introduction to Environmental Health	
Week 2 (7 March)	Environmental Epidemiology	
Week 3 (14 March)	Environmental Toxicology	
Week 4 (21 March)	Risk Assessment Risk Communication	
Week 5 (28 March)	Health Impact Assessment and Equity	Post your Task 1 topic report online to your scenario group by **5pm on April 1**
Week 6 (4 April)	Air pollution	
Week 7 (11 April)	Water	Submit Task 2 Overall Scenario Report by **5pm on April 18**
Week 8 (18 April)	a) Pesticides and agricultural pollution b) Food-borne illness (1)	Post report topic online for approval (by April 22)
Mid-session break		
Week 9 (2 May)	a) Epidemics and emerging infectious diseases b) Food-borne illness (2)	
Week 10 (9 May)	Environmental Health in Indigenous Australian communities	
Week 11 (16 May)	Climate and health	
Week 12 (23 May)	Ecological/ environmental sustainability	Submit Task 3 Report (by **5pm on May 23**)
Week 13 (30 May)	End of Course	Submit your three selected online postings and description (by 5pm on May 30)