

PHCM9612

Environmental Health

Semester 2, 2009



UNSW
THE UNIVERSITY OF NEW SOUTH WALES

SCHOOL OF PUBLIC HEALTH
AND COMMUNITY MEDICINE

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Welcome

Welcome to the 2009 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. 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 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 of ill health to environmental health issues.

Pre-requisites

There are no specific prerequisites for this course. However, students who have already undertaken the core course 'Epidemiology for Public Health' or equivalent prior learning in epidemiology will 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

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Alison is a medical doctor and a public health physician. She is employed as a lecturer in the School of Public Health and Community Medicine, where she teaches in both the undergraduate medical and postgraduate public health programs.

Alison's interest in environmental health developed when she worked for several years in an urban public health unit in Sydney, and later for NSW Health, where she was responsible for investigating and managing environmental health issues, such as air quality, assessment of contaminated sites, and review of risk assessments for major developments.

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

This course relates to a number of the UNSW Graduate Attributes UNSW seeks to foster in students. In particular in relation to this course these are:

- **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 you achieving a range 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 give you an understanding of the scope of environmental health and provide you with the skills to conduct a basic review of an environmental health issue.

The course consists of a one day **Workshop** and a 12 week program, which is delivered externally. This means that most of the work can be completed on days/times that suit you best. During the first half of the course students will be involved in an on-line role play which will require you to be actively present on line.

The workshop is optional to accommodate students who are currently working overseas. However it is highly recommended that you attend if you can: past students have provided very positive feedback about the benefit of attending a face to face workshop.

The My eLearning Vista component of this course also consists of a weekly discussion thread around the topic of the week. In past years this has been a rich source of discussion and learning. As you will be involved in an on-line inter-disciplinary activity in 2009, discussions on Vista will not be assessed. However, you will still benefit from taking part, and the lecturer will be available to facilitate these discussions. In the early weeks, the lecturer will initiate these discussions, but it is expected that you will initiate discussion of topics that you are interested in and share things you have learnt with your colleagues. 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 My eLearning Vista. I encourage you to see My eLearning Vista 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 one of the My eLearning Vista tutorials that are specially designed for students.

Please log on in Week 1 of the course and introduce yourself, whether you attended the workshop or not. If you have any questions or concerns about using My eLearning Vista please get in touch with the lecturer. For technical issues, contact Karsten Sommer (see contact details below).



Online learning component

The My eLearning Vista 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- for some web addresses are given in the course notes.
2. A discussion facility for you to:
 - a. Discuss the weekly topic and any other issues related to environmental health that come to your attention.
 - b. Post questions to the lecturer.
3. A coffee shop facility for you to chat socially amongst yourselves.
4. The Buyat Bay on-line scenario materials (see Student Briefing on My eLearning Vista)

You are required, for the purposes of assessment, to participate in the My eLearning Vista component of this course (see details below).

Guidance for using My eLearning Vista

The School runs a My eLearning Vista tutorial during residential week at the start of each semester. If you are unable to attend this tutorial, guidance for using My eLearning Vista, including some basic tips, can be found at:

<http://www.sphcm.med.unsw.edu.au/sphcmweb.nsf/page/OnlineLearning>

You need to scroll down to find these documents which are PDF files. If you are still experiencing difficulties with My eLearning Vista, please contact Karsten Sommer (k.sommer@unsw.edu.au) or 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 in real-life environmental health scenarios.

Overview of assessment tasks

Task	Content	Due Date	Weighting
1	Buyat Bay Reports	Week 8	50%
2	Environmental Health Report	Week 10 (topic) Week 13 (report)	50%

Details of assessment requirements

Task1: Buyat Bay Scenario

Due date: 5:00 pm - 13/09/08

Weighting: 50%

Task description:

In this task you will be participating in an on-line role play with postgraduate students from Mining Engineering at UNSW. Based on real life events related to a gold mine in Indonesia, the role play is designed to provide you with an opportunity to gain a greater appreciation of inter-disciplinary perspectives to inform your professional practice. Full details of the task are available in the ***Student Briefing*** on MyeLearning Vista.

There are two pieces of assessment for this task:

1. Group Contribution Documentation (40%)
2. Individual Reflective Report (60%)

Both of these need to be submitted by 5.00 pm on **Sunday, 13 September, 2009**. You need to read full details of how to complete and submit these assignments in the ***Student Briefing***.

Task 2: Environmental Health Report

Due date: 5:00 pm – 31/10/08
(topic to be posted on line by 10/10/08)

Weighting: 50%

Task description:

Choose an environmental health issue that affects you in your home, your workplace or your community. This could be a strictly local issue or one that affects a whole country. Some examples are provided below.

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 headings as a guide:

- What is the background and context to the issue?
- Why is this an important environmental health issue?
- Who are the relevant stakeholders?
- What epidemiological studies have been conducted about this issue? What do they demonstrate?
- Is any toxicological information relevant? Briefly summarise key points.
- What are the potential effects on human health?
- 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 do you recommend this issue be managed in the future?

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. 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. Examples of appropriate topics that may be relevant to your circumstances include:

- recycling of grey water and/or treated effluent
- fluoridation of water supplies
- chlorine disinfection of drinking water
- salinity in rural Australia
- stormwater pollution
- legionella in cooling towers
- the impact of a motorway
- motor vehicle pollution
- indoor air pollution
- radiation and mobile phones/phone towers
- a nuclear energy industry in Australia
- wind farms
- the impact of aircraft noise
- 'sick building syndrome'
- lead contamination in soil/food/water
- hazardous waste/medical waste disposal
- avian influenza
- pesticides and human health
- malaria and the impact of deforestation
- the health effects of climate change

You must post your proposed topic online by Week 10

This written assessment is expected to be your own individual work. It is essential that you abide by academic standards and that your assignment is not the result of collusion or plagiarism. Please see definitions in the course notes.

Assessment Task 2 will be marked according to the following criteria:

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

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

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

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. Please make every effort to submit your assignments on time. 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. This may be postponed by late receipt of assignments.
6. **All assignments must be posted on My eLearning Vista 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

At UNSW plagiarism is considered to be a form of academic misconduct and is viewed very seriously. The following notes describe what plagiarism is. You need to ensure you understand what it is so you avoid it in any of your assignments or other work:

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.

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:

UNSW Library

<http://info.library.unsw.edu.au/skills/howto/referencing/lrefbfm.html>

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

We have not located a good textbook that comprehensively covers the field of Environmental Health for international students. However, many of the readings suggested relate to issues in both industrialised and developing countries and will be of use for international students.

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/environment>

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 (My eLearning Vista support)

The IT Service Desk is your central point of contact for assistance and support with My eLearning Vista, UDUS, UniMail, UniPass and UniWide. Contact them directly for assistance with IT related matters, including My eLearning Vista:

Website: <http://www.disconnect.unsw.edu.au/>

Tel: +61 (2) 9385 1333

Location: UNSW Library

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://info.library.unsw.edu.au/Welcome.html>

Postgraduate Services: <http://info.library.unsw.edu.au/web/services/postgraduates.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://info.library.unsw.edu.au/skills/tutorials.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 in Vista.

<http://info.library.unsw.edu.au/skills/tutorials/InfoSkills/index.htm>

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://info.library.unsw.edu.au/web/guides/guides.html>

How to use guides

Essential guides to show you how to use the library's fundamental search tools: Sirius (the gateway to all of our electronic resources), the catalogue (LRD) and the databases. Easy to use, they will step you through the mechanics of "How" via video, screen captures and text.

<http://info.library.unsw.edu.au/skills/howto/howto.html>

Database Help sheets

"Cheat-sheets" to enable you to learn how to search the databases more effectively, these provide tips and tricks on searching individual databases.

<http://info.library.unsw.edu.au/skills/helpsheets.html>

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 – see

<http://vph.sphcm.med.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/StudentResources>

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:

<https://my.unsw.edu.au/student/atoz/OccupationalHealth.html>

Grievance procedures:

<https://my.unsw.edu.au/student/atoz/GrievanceProcedures.html>

Equity & Diversity:

<https://my.unsw.edu.au/student/atoz/EquityDiversity.html>

Course schedule

Date	Topic/Section	Assessment
Week 1 (20/7/09)	Introduction to Environmental Health	
Week 2 (27/7/09)	Environmental Epidemiology	
Week 3 (3/8/09)	Environmental Toxicology	
Week 4 (10/8/09)	Risk Assessment Risk Communication	
Week 5 (17/8/09)	Health Impact Assessment and Equity	
Week 6 (24/8/09)	Air pollution	
Week 7 (31/8/09)	Water	Submit Buyat Bay Reports (by 5pm 13/9/09)
Mid-session break 5/9/09-13/9/09		
Week 8 (14/9/09)	a) Pesticides and agricultural pollution b) Food-borne illness (1)	
Week 9 (21/9/09)	a) Epidemics and emerging infectious diseases b) Food-borne illness (2)	
Week 10 (28/9/09)	Environmental Health in Indigenous communities	Post report topic online lecturer (by 3/10/09)
Week 11 (5/10/09)	Climate and health	
Week 12 (12/10/09)	Ecological/ environmental sustainability	Submit Report (by 5pm 25/10/09)