



GSE 807

Environmental Measurement and Analysis

S1 External 2015

Dept of Environmental Sciences

Contents

<u>General Information</u>	2
<u>Learning Outcomes</u>	3
<u>Assessment Tasks</u>	3
<u>Delivery and Resources</u>	5
<u>Policies and Procedures</u>	9
<u>Graduate Capabilities</u>	10
<u>Assessment Submission and Marking Criteria</u>	
<u>a</u>	13
<u>Field Trip Work, Health and Safety</u>	16
<u>Requirements to Complete this Unit Successfully</u>	
<u>fully</u>	17
<u>Unit Homepage</u>	19

Disclaimer

Macquarie University has taken all reasonable measures to ensure the information in this publication is accurate and up-to-date. However, the information may change or become out-dated as a result of change in University policies, procedures or rules. The University reserves the right to make changes to any information in this publication without notice. Users of this publication are advised to check the website version of this publication [or the relevant faculty or department] before acting on any information in this publication.

General Information

Unit convenor and teaching staff

Convenor

Dr Kerrie Tomkins

kerrie.tomkins@mq.edu.au

By appointment

Mr Stuart Browning

stuart.browning@mq.edu.au

Mr Suraj Opatokun

suraj.opatokun@mq.edu.au

Dr Lynne McLoughlin

lynne.mcloughlin@mq.edu.au

Mr Phil Redpath

philared@gmail.com

Credit points

4

Prerequisites

[16cp in GSE or HGEO units at 800 level including GSE803] or [admission to MMarScMgt or MSc in (Biodiversity Conservation or Remote Sensing and GIS) or PGDipSc in (Biodiversity Conservation or Remote Sensing and GIS) or PGCertSc in Remote Sensing and GIS or MConsBiol or GradDipConsBiol]

Corequisites

Co-badged status

Unit description

This is an eight-day field unit which provides an integrated view of environmental issues – usually three physical parameters (typically: water quality; geomorphology; aquatic ecology) and two social parameters (typically: a survey of social attitudes; integrative management) of a particular region and the methods that might be used to assess and manage them. Students divide into teams and take part in each activity in the field (in 'field groups') and analyse the results (in team 'data groups'). Each student then completes a comprehensive report on the results. The region studied will normally be outside the Sydney metropolitan area (in the last few years the area chosen has been the Jervis Bay region on the New South Wales south coast). Note: permission to complete the unit without completion of GSE803 as a prerequisite will only be granted if the student has completed a science-based degree.

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:

- Design a field data collection program to address an environmental issue(s)
- Describe and select appropriate field survey and data collection methods
- Collect, analyse, link and evaluate different data sets and disciplinary perspectives related to a broadly defined environmental problem
- Identify and assess the implications of the data sets for management policies
- Develop skills in effective teamwork, communication of results and succinct report-writing

Assessment Tasks

Name	Weighting	Due
<u>Group Presentation of Results</u>	20%	17/4/2015
<u>Participation (field and data)</u>	20%	17/4/2015
<u>Individual Report</u>	60%	29/5/2015

Group Presentation of Results

Due: **17/4/2015**

Weighting: **20%**

Students will be divided into Data Groups prior to the field trip. On the last day of the field trip, each Data Group will give a 20 min presentation (plus 10 mins questions) of their aims, methods,

results and implications. All staff members will assess each presentation, and all members of the Data Group will receive the mean mark. Since the group is assessed as a whole, not individually, this is where good teamwork will pay off.

On successful completion you will be able to:

- Design a field data collection program to address an environmental issue(s)
- Describe and select appropriate field survey and data collection methods
- Collect, analyse, link and evaluate different data sets and disciplinary perspectives related to a broadly defined environmental problem
- Develop skills in effective teamwork, communication of results and succinct report-writing

Participation (field and data)

Due: **17/4/2015**

Weighting: **20%**

The participation and contribution of each student to field work and data analysis will be assessed by peer review. Each member of each Field Group and Data Group will complete an evaluation of the remaining members, providing a mark out of 10 with a written justification (max half a page) reflecting the quality of involvement in the field work and data analysis throughout the week. The final mark allocated to each student, will be the sum of the average of the individual marks for the field work and data analysis respectively. Students are expected to be pro-active and engaged in the field data collection and analysis. However marks of 10/10 will be viewed suspiciously unless fully justified.

On successful completion you will be able to:

- Design a field data collection program to address an environmental issue(s)
- Describe and select appropriate field survey and data collection methods
- Collect, analyse, link and evaluate different data sets and disciplinary perspectives related to a broadly defined environmental problem
- Develop skills in effective teamwork, communication of results and succinct report-writing

Individual Report

Due: **29/5/2015**

Weighting: **60%**

This major component of the unit assessment is undertaken by students individually, but utilises the group data that were collected during the field trip. The task is to write a comprehensive report on the management challenges and effectiveness of policy and practice in coastal zone management in the Jervis Bay area, including recommendations for future management. The report should include any relevant data collected in the field and other relevant sources such as scientific literature and grey literature. The management evaluation should take into account the relevant legislative and regulatory frameworks, as well as current and projected development

proposals, population projections and other relevant issues such as impacts of climate change.

On successful completion you will be able to:

- Collect, analyse, link and evaluate different data sets and disciplinary perspectives related to a broadly defined environmental problem
- Identify and assess the implications of the data sets for management policies
- Develop skills in effective teamwork, communication of results and succinct report-writing

Delivery and Resources

This unit comprises one pre-field trip briefing and an 8-day field trip to the Jervis Bay area on the south coast of NSW. Note: There is no formal examination for this unit.

1. Pre-field briefing

A field trip briefing will be held in the first few weeks of semester to cover:

- An overview of the unit, iLearn and assessments;
- An overview of the themes covered during the trip;
- Organisation of students into Field and Data Groups;
- Field trip logistics including organization of accommodation sharing arrangements and carpooling; and,
- Recommended pre-field trip preparation.

It is very important that students attend the briefing. Date, time and room to be advised.

2. Field trip

Dates: Saturday April 11 - Saturday April 18, 2015

Jervis Bay and its catchment on the south coast is the focus for the fieldwork. It is an area that is facing many of the environmental problems and issues common to coastal regions outside the major metropolitan areas. The impacts of future population growth in the region, and predicted sea level rise due to climate change, are of particular concern. The work that we do will contribute directly to the understanding of these problems and the development of management protocols to deal with them. Students will gain experience in field data collection in a range of discipline areas and will learn how to integrate those data sets to provide meaningful contributions to management decisions by Government authorities and community groups.

Organisation

The field trip will commence at 2:00pm on Saturday April 11, 2015 at the Huskisson Beach Tourist Resort (caravan park) and will finish at 10:30am on Saturday April 18, 2015. Details on the location, what to bring, etc will be provided in the briefing.

Group work

At the pre-field trip briefing, each student will be assigned to two different groups. One, the Field Groups (day groups), will be for field activities. The other, the Data Groups (evening groups), will be to analyse the data collected during the week by all Field Groups. In other words, activities in the field will be carried out in Field Groups, while the drawing together of, and reporting on, data collected by the various Field Groups will be carried out in Data Groups. Each Data Group will be made up of two or three people drawn from each Field Group. This will allow a mix of experiences and perspectives to be brought to the Data Groups, as well as representation from each day to assist with ensuring that the field data is collected appropriately and the data analysis is kept up to date.

Data collection and analysis will be undertaken over five days, covering the following five field components:

1. Terrestrial ecology
2. Water quality
3. Social analysis
4. Aquatic ecology
5. Coastal geomorphology

A staff member will be responsible for each of the field components. They will also guide the respective Data Group in their development of the data collection activities and methods of analysis.

Data Groups will meet on the first evening of the field trip to develop strategies to be followed by the Field Groups. They will continue to meet each evening to bring together the material collected each day. On the last full day of the field trip (i.e. Fri 17 April), each Data Group will give a brief presentation of their findings from the weeks work and provide a comprehensive dataset for all students to access for use in the preparation of their Individual Reports. The dataset should consist of one or more easily accessed files (i.e. word, excel) organised into one folder and uploaded to a USB. Each data group is advised to select one member to be responsible for keeping track of the data and for organising it to be delivered to the Convenor on the last day.

Timetable

Saturday 11 April

2:00 pm Arrive at the Huskisson Beach Tourist Resort, Jervis Bay

2:30 pm Orientation tour of area

5:30 pm Check-in and free time

7:30 pm Briefing in Data Groups

Sunday 12 April to Thursday 16 April

Field work as follows, departing the accommodation at 8 am, returning at approximately 3 pm each day, to continue on data generation e.g. plant identification, water quality measurements, etc.

Each Data Group should work on their data analysis in the evenings.

Field Group	Sun	Mon	Tues	Wed	Thu
1	Water quality	Aquatic ecology	Geomorphology	Terrestrial ecology	Social analysis
2	Aquatic ecology	Geomorphology	Terrestrial ecology	Social analysis	Water quality
3	Geomorphology	Terrestrial ecology	Social analysis	Water quality	Aquatic ecology
4	Terrestrial ecology	Social analysis	Water quality	Aquatic ecology	Geomorphology
5	Social analysis	Water quality	Aquatic ecology	Geomorphology	Terrestrial ecology
Evening	Data Analysis	Data Analysis	Data Analysis	Data Analysis	Data Analysis

Friday 17 April

8 am Final data analysis and preparation for the presentations

2 pm Group Presentations

6 pm Dinner at the Husky Pub

Saturday 18 April:

Clean up, pack up and depart by 10:30am.

Transport

Students need to make their own arrangements for transport to and from Huskisson and during the field trip. To assist, a car pool will be initiated at the pre-fieldtrip meeting.

Accommodation

Cabin accommodation has been organised for the group at the Huskisson Beach Tourist Resort. See: <https://huskissonbeach.holidayhaven.com.au/> It is expected that students will share with 2 or 3 others (max of 4-share, but more likely 3-share per cabin depending on the bed configuration; we will ensure that every student has their own bed).

The cabins are self-contained with kitchen facilities, ensuites, and single beds, double beds and/or bunks. All linen and towels are provided. The resort also has BBQ's, a pool, tennis court and is located on the beach front of Jervis Bay.

Meals

Students must self-cater all meals for the week. This includes taking a packed lunch, adequate water and snacks into the field each day. Since students are required to work on their data analysis in the evenings, it is recommended that meals are planned around this accordingly. For example, an idea would be to form small groups of 4 or so, where one person takes turns cooking each night for the other three who use the time to work on the data analysis. On the last night after the presentations, we will head to the Husky Pub for dinner.

The main street of Huskisson, which is a short walk from the caravan park, has a supermarket, restaurants, cafes, the Husky Pub and an RSL.

Field trip costs

The cost of the field trip is not included in the course fees, however all attempts have been made to keep these to a minimum. Additional costs that will need to be paid by each student include accommodation, meals and transport.

Payment for accommodation (7 nights) will need to be made to the University Cashier prior to the commencement of the field trip. The indicative cost is \$300 per person, but this will be finalised in the first few weeks depending on student numbers and sharing arrangements. Meals and transport are at own cost.

Essentials for field work

Each student will need to ensure that they are equipped with the following essentials for the field trip:

- Adequate food each day in the field (i.e. packed lunch)
- Adequate water each day in the field (minimum 1 ltr)
- Rain jacket
- Clothing appropriate for the weather, season and field task (e.g. warm jumper, long-sleeved shirt for sun protection)
 - Presentable street wear that is suitable to approach members of the public for interviews is also required for the social analysis component

- Cargo pants and shirts with pockets are recommended for the terrestrial ecology component
- Hat, sunglasses and sunscreen
- Closed shoes or boots (old sneakers are useful for the aquatic ecology component)
- Field book, clipboard, writing materials and camera
- Laptop and writing materials for working on the data analysis

All field measurement-related equipment will be supplied.

Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central](#). Students should be aware of the following policies in particular with regard to Learning and Teaching:

Academic Honesty Policy http://mq.edu.au/policy/docs/academic_honesty/policy.html

Assessment Policy <http://mq.edu.au/policy/docs/assessment/policy.html>

Grading Policy <http://mq.edu.au/policy/docs/grading/policy.html>

Grade Appeal Policy <http://mq.edu.au/policy/docs/gradeappeal/policy.html>

Grievance Management Policy http://mq.edu.au/policy/docs/grievance_management/policy.html

Disruption to Studies Policy http://www.mq.edu.au/policy/docs/disruption_studies/policy.html *The Disruption to Studies Policy is effective from March 3 2014 and replaces the Special Consideration Policy.*

In addition, a number of other policies can be found in the [Learning and Teaching Category](#) of 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/support/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://informatics.mq.edu.au/help/>.

When using the University's IT, you must adhere to the [Acceptable Use 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

- Design a field data collection program to address an environmental issue(s)
- Describe and select appropriate field survey and data collection methods
- Collect, analyse, link and evaluate different data sets and disciplinary perspectives related to a broadly defined environmental problem
- Identify and assess the implications of the data sets for management policies

Assessment tasks

- Group Presentation of Results
- Participation (field and data)
- Individual 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

- Design a field data collection program to address an environmental issue(s)
- Describe and select appropriate field survey and data collection methods
- Collect, analyse, link and evaluate different data sets and disciplinary perspectives related to a broadly defined environmental problem

Assessment tasks

- Group Presentation of Results
- Participation (field and data)
- Individual Report

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

- Design a field data collection program to address an environmental issue(s)
- Describe and select appropriate field survey and data collection methods
- Collect, analyse, link and evaluate different data sets and disciplinary perspectives related to a broadly defined environmental problem
- Identify and assess the implications of the data sets for management policies

Assessment tasks

- Group Presentation of Results
- Participation (field and data)
- Individual Report

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

- Describe and select appropriate field survey and data collection methods
- Collect, analyse, link and evaluate different data sets and disciplinary perspectives related to a broadly defined environmental problem
- Develop skills in effective teamwork, communication of results and succinct report-writing

Assessment tasks

- Group Presentation of Results
- Participation (field and data)
- Individual Report

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 outcome

- Develop skills in effective teamwork, communication of results and succinct report-writing

Assessment tasks

- Group Presentation of Results
- Participation (field and data)
- Individual Report

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

- Design a field data collection program to address an environmental issue(s)
- Identify and assess the implications of the data sets for management policies

Assessment tasks

- Group Presentation of Results
- Participation (field and data)
- Individual Report

Assessment Submission and Marking Criteria

Assessment submission

This unit uses electronic submission and marking. The required format and mode of submission is as follows. Note: there is no requirement to submit hard copies as well. Further details on how to use Turnitin will be provided separately.

Assessment	Submission Format
Group Presentations	Each Data Group must submit an electronic copy of their presentation and data to the Convenor on the last day of the field trip (Friday 17 April, 2015).
Peer Review	Each student must complete the peer-review evaluation for the members of their Data Group and Field Group on the last day of the field trip (Friday 17 April, 2015). The evaluation must be submitted through Turnitin (see iLearn for the relevant Assessment link).
Individual Report	The Individual Report must be submitted through Turnitin (See iLearn for the relevant Assessment link).

Marking criteria

The criteria that will be used in marking the presentations and individual report include the following, where the level of achievement is expected to be at the standard of a post-graduate student. GradeMark Rubrics will be used to mark and grade the final report.

General Assessment Criteria	Expectation of achievement at the post-graduate level
<ul style="list-style-type: none"> • Addressing the task that is specified (or answering the question that is asked) for each assessment, including staying within the word limit unless otherwise specified. 	<ul style="list-style-type: none"> • Students are able to complete the assessments as instructed.

<ul style="list-style-type: none"> Demonstration of knowledge and research skills through written material and verbal presentations. 	<ul style="list-style-type: none"> Students have engaged in the subject matter and task. Students can show understanding of the topic through an analysis and a well-developed discussion of the topic.
<ul style="list-style-type: none"> Demonstration of independent thinking through written material and verbal presentations. 	<ul style="list-style-type: none"> Students are able to demonstrate in-depth thinking through discussion that places the topic in the broader context. Students are able to demonstrate initiative and independent contributions through new ideas.
<ul style="list-style-type: none"> Appropriate use and citation of a wide range of relevant literature, including scientific research papers and reports. Citation of references within the text and reference list is correct and consistent, with no abbreviations. 	<ul style="list-style-type: none"> Students will undertake thorough literature searches and demonstrate appropriate selection of relevant articles in support of their arguments.
<ul style="list-style-type: none"> Demonstration of good planning with a clear structure, headings, and a logical argument based firmly on the literature cited. 	<ul style="list-style-type: none"> Students are able to structure written (and verbal) work to convey ideas clearly and logically.
<ul style="list-style-type: none"> Presentation of legible work with: correct grammar and spelling, correct use of professional terminology as appropriate, and correct use of SI units, abbreviations and acronyms. 	<ul style="list-style-type: none"> Students will submit work that is presented in a professional manner. <p>Note, it is expected that assessments will be done in Word or similar. You may hand write, but it won't be marked if it isn't readable.</p>
<ul style="list-style-type: none"> Figures, tables and other supporting information are legible and necessary, with reference to these in the text. Full and appropriate captions are included on each as well as the source where relevant. 	<ul style="list-style-type: none"> Students are able to use figures and tables to summarise or present information and data effectively.
<ul style="list-style-type: none"> Effective communication of research outcomes. 	<ul style="list-style-type: none"> Students are able to get their message across clearly and concisely.

Assessment grades

If you experience difficulty achieving a good standard in your written work, please let the convenor know ASAP. The University offers a variety of remedial writing courses and sources of advice that may help you. We emphasise the necessity for clear writing and its importance in your performance assessment.

Evaluation of assessments will be based on the Macquarie University scale: High Distinction (HD), Distinction (D), Credit (Cr), Pass (P) and Fail (Fail). Grades may be further refined by use of a "+" or "-" to indicate work towards the top or the bottom of each grade's band of marks. Feedback will also come in the form of written comments.

In the case of Group assessments, i.e. Assessment 1 (Group presentations), all members of the group will receive the same grade.

Academic Honesty

In completing and submitting the Assessments, students must be aware of, and adhere to, the University policy on Academic Honesty, which can be accessed here: http://www.mq.edu.au/policy/docs/academic_honesty/policy.html

The University implements the Academic Honesty Policy for **all** pieces of academic work by using a number of systems and checks, including:

- Copy detection software such as Turnitin
- Random sampling of assessment items to check for similarities
- Comparing student performance across a number of tasks
- Requiring students to defend submitted work e.g. oral exams or presentations

The penalties, where a person has been proven to have breached the policy (or any of its related procedures), are outlined here: http://www.mq.edu.au/policy/docs/academic_honesty/schedule_penalties.html

Each student is responsible for their own work and for reporting suspected breaches to the convenor or Head of Department together with all relevant materials or evidence of the basis of the allegation.

Penalties for late assessments and extension requests

All assessments must be completed and submitted, on time and in full, in order to receive a minimum pass grade.

Penalties for late written assessments will be a minimum of 10% per day (including weekend days) or part thereof. These deadlines and penalties **will** be imposed. Allowing some students to hand assessments in late is unfair to those who meet the deadlines.

The deadlines for assessments are not negotiable except in the circumstances outlined below. Please take note of the DAYS at which work is due and let the Convenor know of problems in advance or as soon as possible, not after the event: they are likely to be much more sympathetic and flexible if you follow this advice.

The University has a Disruption to Studies Policy, which can be accessed here: http://mq.edu.au/policy/docs/disruption_studies/policy.html

In accordance with the Policy, students that experience a disruption to studies which is serious, unavoidable and greater than 3 days as per the Policy guidelines, **and** wish to request an assessment extension on these grounds, must submit a formal application for special consideration to the Science Faculty. <http://science.mq.edu.au/current-students/postgraduate-students/>

If a student experiences a disruption to studies that is unavoidable, but not serious and is of 3 days or less in duration, they can apply for special consideration to the convenor under the following conditions:

- Personal illness or illness of a child – If an assessment is submitted after the due date, a medical certificate or a letter with appropriate supporting documents outlining the extenuating circumstances must be provided that covers the day that the assessment was due, and/or the days preceding.
- Work commitments - Work commitments will not be viewed as grounds for an extension unless your work commitment requires you to be away from home for at least 1 overnight or requires you to be at work for longer than 12 hours per day, e.g. field work or inter-state meetings.
- Other family commitments or emergencies - If you have other commitments that take you away from study you should plan for these in advance as part of an effective individual study plan. Extensions will only be considered if your ability to submit an assessment on time was caused by an unexpected event where you can demonstrate: that the event was not foreseeable or predictable **and** that the event substantially impacted upon your ability to complete the Assessment Task **and** that there was alternative option available.

The number of days of disruption and the timing of disruption will be taken into considered in determining whether special consideration should be granted or not. The ultimate grounds for the decision will be whether the disruption was unavoidable and fairness with respect to other students.

Field Trip Work, Health and Safety

The safety of you and those around you is our highest priority. Consequently, ALL participants in fieldwork activities are obliged to work and behave appropriately in the field, and to take care to protect their own health, safety and welfare and that of fellow fieldwork participants. You are required to follow instructions from the Fieldwork Leader at all times.

Prior to the fieldwork, you must let the Fieldwork Leader know of any allergies, special dietary requirements or medical considerations that may affect your ability to participate in fieldwork. You will need to complete a declaration of a known medical condition form, outlining a treatment plan for your condition. Details of your responsible next of kin must also be provided incase of emergencies.

You are required to wear and carry clothing and footwear as appropriate to the fieldwork situation. Your Fieldwork Leader will advise you as to what these are prior to the fieldtrip. Irrespective of the activity, footwear must be worn. For terrestrial fieldwork, ankle to knee protection must be worn either in the form of either long trousers or gaiters. For marine fieldwork, appropriate clothing to protect against sunburn and exposure should be worn. For all fieldwork activities, a hat, sunscreen, insect repellent and items to protect against unexpected weather changes, such as rain & cold, are strongly recommended. The Fieldwork Leader reserves the

right to exclude anyone that is ill-equipped from the activity.

If you are taking any medication, please ensure that you take sufficient supplies with you on the field trip. The University's staff are unable, by law, to provide this to you. This includes pain relief, such as panadol or nurofen, cold and flu medication and anti-histamines for allergies.

If you need to leave the field location for any reason prior to completion of the scheduled activities, you must first inform the Fieldwork Leader. In the event of illness or injury, please let the Fieldwork Leader know immediately. All injury's or incidents must be reported via the on-line reporting system: <http://www.ohs.mq.edu.au/form5a.php>

Alcohol is a significant contributing factor in many incidents and acts of prejudicial conduct. Alcohol must not be consumed when undertaking fieldwork activities or when using a motor vehicle/machinery. After-hours consumption of alcohol is at the discretion of the Fieldwork Leader. Anyone acting irresponsibly or in any way deemed to be a danger to themselves or others by the Fieldwork Leader will be required to leave the field trip, return to Sydney at their own expense and report to the Head of Department. The consequences of this may include exclusion from the Unit of study or your Degree program.

For more information, contact:

Russell Field

Fieldwork Manager (Dept of Environmental Sciences)

Macquarie University NSW 2109.

(W) 98508341

Requirements to Complete this Unit Successfully

Compulsory attendance and assessment submission

In order to successfully complete any GSE unit students must:

1. Attend at least 80% of scheduled lectures;
2. Attend and participate in all days of all scheduled field trips;
3. Complete all assignments or other assessment;
4. Reach a satisfactory postgraduate level of achievement in such assignments or other assessment as may be determined by the Convenor or Head of Department.

This means that you are required to attend the pre-field trip briefing (unless you are an external student), attend all days of the field trip and submit all pieces of assessment to receive a Passing grade for this unit.

Furthermore, since this unit is based entirely on field measurement and analysis, attendance and participation in **all** activities on **all days** of the field trip is compulsory. Non-attendance for any reason other than those outlined in the Disruption to Studies Policy will result in an automatic fail.

Workload requirements

The workload for units at Macquarie University is based on a minimum of 3 hours per credit point per week to receive a Pass grade (including 13 x weeks of semester and 2 x weeks of mid-semester break). For GSE807 this means that you are expected to spend a total of around 150 hours, on course learning activities to receive a Pass grade. This includes 8 days during the field trip.

A guide of the hours required to receive a Pass grade is outlined below. However, keep in mind that grades are awarded based on a demonstration of understanding and ability not on effort! Approximately 2 % of the course is class-room based, 53 % is field-based and the remaining 45 % is for individual study, primarily to complete the assessments and undertake further reading related to the unit.

Activity	Hours per semester	Percentage allocation
CLASS-ROOM BASED ALLOCATION:		
Pre-field trip briefing	3	2 %
FIELD TRIP ALLOCATION:		
8 days field trip to Jervis Bay	80	53 %
INDIVIDUAL STUDY ALLOCATION:		
Completion of assessments and additional reading	67	45 %
TOTAL	150	100 %

Course Rubric

In GSE807, it is expected that your assessments will be very high quality and demonstrate comprehension of course content including knowledge, skills and abilities which are at the standard of a postgraduate level. Grades for the unit as a whole will be awarded according to the following rubric.

	Developing	Functional	Proficient	Advanced
--	------------	------------	------------	----------

General description of the level of attainment	<p>Has not yet reached the desired standard.</p> <p>Limited understanding of required concepts and knowledge.</p> <p>A fail grade (or under some circumstances, a conceded pass) would be given.</p>	<p>Has reached basic academic standards. Work has limited translation of concepts and procedures to new contexts unless aided.</p> <p>A pass grade would be awarded.</p>	<p>Has completely reached the standards expected. Can work independently in new contexts, adapting procedures to meet the context.</p> <p>Demonstrates awareness of own limitations.</p> <p>A credit grade would be awarded.</p>	<p>Has gone beyond the expected standards. Exhibits high levels of independence and can use concepts to generate new ways of completing procedures. Can engage in productive critical reflection.</p> <p>A grade of distinction or high distinction would be awarded.</p>
---	---	---	---	---

Unit Homepage

This unit has a home page that can be accessed through the Macquarie University online facility (ilearn.mq.edu.au). It contains the usual discussion page, mail page and lecture notes page. As the semester progresses, it will be used to circulate data and other materials related to the course, field trips and assessments.