Contents

General Information .................................................. 2
Learning Outcomes .................................................. 3
General Assessment Information ................................. 3
Assessment Tasks ..................................................... 5
Delivery and Resources ............................................. 7
Policies and Procedures ............................................. 11

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.

Notice
As part of Phase 3 of our return to campus plan, most units will now run tutorials, seminars and other small group activities on campus, and most will keep an online version available to those students unable to return or those who choose to continue their studies online.

To check the availability of face-to-face activities for your unit, please go to timetable viewer. To check detailed information on unit assessments visit your unit’s iLearn space or consult your unit convenor.
### General Information

**Unit convenor and teaching staff**

**Convenor**
Tim Ralph  
[tim.ralph@mq.edu.au](mailto:tim.ralph@mq.edu.au)
Contact via via iLearn

**Professor**
Kirstie Fryirs  
[kirstie.fryirs@mq.edu.au](mailto:kirstie.fryirs@mq.edu.au)
Contact via via iLearn

**Associate Professor**
Paul Beggs  
[paul.beggs@mq.edu.au](mailto:paul.beggs@mq.edu.au)
Contact via via iLearn

**Senior Lecturer**
Michael Chang  
[michael.chang@mq.edu.au](mailto:michael.chang@mq.edu.au)
Contact via via iLearn

**Credit points**

10

**Prerequisites**
Admission to MEnv or GradDipEnv or GradCertEnv or MEnvPlan or MSusDev or GradDipSusDev or GradCertSusDev or MSc or MScInnovationEnvSc or MScInnovationGeologyGeophys

**Corequisites**

**Co-badged status**
ENVS1017 The Living Environment
Unit description
This unit is for students from a broad range of backgrounds interested in pursuing postgraduate study in earth and environmental sciences and management. Environmental concepts and topics are examined that are central to understanding the living environment – dynamic landscapes, water, air and environmental systems that underpin life on Earth. The unit focuses on terrestrial, coastal, and atmospheric environments, and we make use of geographic information systems (GIS) to visualise and aid spatial analysis and interpretation. This unit uses the local environment as a living laboratory to explore a combination of theory, field, modelling and analysis skills related to river health and water quality, wetlands, coasts and micro-climatic processes. The foundation knowledge and skills developed relating to environmental science, management and sustainability will facilitate higher-level studies, and are desirable for environmental careers in consultancies, government agencies, and non-government organisations.

Important Academic Dates
Information about important academic dates including deadlines for withdrawing from units are available at https://students.mq.edu.au/important-dates

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

ULO1: Explain critical interactions between the land surface, water and the atmosphere that create, modify and sustain the Earth’s living environment
ULO2: Demonstrate understanding of key physical environmental processes and the role of human interactions and modifications
ULO3: Apply skills in field and laboratory data collection, numeracy and analysis
ULO4: Establish skills in science communication, including research, writing and critique of scientific literature
ULO5: Use spatial information science tools to visualise and analyse biophysical environments

General Assessment Information
Assessment Criteria
Assessment at Macquarie University is standards-based, as outlined in the Assessment Policy. This means that your work will be assessed against clear criteria, and these criteria will be made available when the assessment tasks are released to you on iLearn.

Submission of Assessments
Your two major assignments must be submitted online through Turnitin, unless otherwise instructed during the unit. Links for the submission of each assignment will be available on iLear.
Your quizzes are to be completed on iLearn, and your final exam will be hosted online through iLearn during the formal examination period. The due dates for all assessment tasks are not negotiable. If you have commitments that will significantly impact your study during the session then you must plan for this in advance as part of an effective individual study plan.

**Hurdle Requirement**

A hurdle requirement is an activity for which a minimum level of performance or participation is a condition of passing the unit (see the Assessment Policy). *In this unit, the hurdle requirement is that each student attends and satisfactorily completes seven (7) out of the nine (9) practical classes offered.* For internal (weekday attendance) students this means attending and fully completing your scheduled classes each week. For external (infrequent attendance) students, the hurdle is the same but your practical classes will be held during two weekend on-campus sessions and online. Failure to meet the hurdle requirement will result in failure of the unit.

**Marking of Assessments**

Your two major assignments will be marked through Turnitin and feedback will be noted on the assignment. Do not submit your assignments via email or in hard copy. Your grades will be returned using the Grades Report on iLearn. Grades from your quizzes and the final exam will also be made available on iLearn.

Due to the large number of students in the unit (>350), we aim to return your assignments with feedback within 2-3 weeks of the date that you submit your assignment, and certainly well before your next assignment is due. We appreciate your patience and will advise you through iLearn when your marked assignments and feedback are available for viewing.

**Penalties for Late Assessments**

The penalty for late submission of assessments in this unit is **ten percent (10%) of the assessment value per day**, calculated from the due time and date. This means that if the assignment is worth a total of 30 marks (or 30% of the unit) you will lose 3 marks for each day late. This is a hefty penalty designed to make you aware of the importance of organising yourself around assessment due dates. The penalty will be applied over weekdays and weekends unless you have been granted an extension by the lecturer responsible for the assignment prior to the due date.

**Extensions for Assessments**

To obtain an extension for an assessment task, you will need to follow the formal process as outlined in the Special Consideration Policy, and you must provide appropriate supporting documentation (e.g. medical certificate - see advice for Special Consideration Requests). The final decision regarding the granting of an extension and/or a late penalty lies with the unit convenor and lecturer responsible for the assignment. *Seek permission for an extension well before the due date* unless this is absolutely impossible. Let us know of problems in advance or as soon as possible, not after the event. We are likely to be much more sympathetic and flexible in our requirements if you follow this advice.
Final Exam

Details of exam conditions and timetables can be found via the Student Portal. It is very important to note that the final exam period includes weekdays and weekends and all students are expected to complete the exam at the time specified in the exam timetable. The timetable will be available in Draft form approximately eight weeks before the commencement of the exams and in Final form four weeks before the commencement of exams.

For unavoidable disruptions during exams, you should apply for Special Consideration as soon as possible. If a Supplementary Examination is granted as a result of the Special Consideration process, the exam time will be scheduled after the conclusion of the official examination period and you will receive an individual notification one week prior to the exam with the exact date and time of the Supplementary Examination. Note that it is Macquarie University policy to not set early examinations - all students are expected to ensure that they are available until the final day of the official examination period. You are required to download your room and seat number from the exam website before the exam.

Assessment Tasks

<table>
<thead>
<tr>
<th>Name</th>
<th>Weighting</th>
<th>Hurdle</th>
<th>Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental mapping and analysis</td>
<td>30%</td>
<td>No</td>
<td>Week 12</td>
</tr>
<tr>
<td>Scientific Report</td>
<td>30%</td>
<td>No</td>
<td>Week 6</td>
</tr>
<tr>
<td>Quizzes</td>
<td>10%</td>
<td>No</td>
<td>Weeks 1, 4, 6, 9, 11</td>
</tr>
<tr>
<td>Final exam</td>
<td>30%</td>
<td>No</td>
<td>Final Exam Period</td>
</tr>
</tbody>
</table>

Environmental mapping and analysis

Assessment Type 1: Quantitative analysis task
Indicative Time on Task 2: 20 hours
Due: Week 12
Weighting: 30%

Tests the use of spatial information science to visualise biophysical environments and to interpret a real-world dataset

On successful completion you will be able to:
- Explain critical interactions between the land surface, water and the atmosphere that create, modify and sustain the Earth’s living environment
- Demonstrate understanding of key physical environmental processes and the role of
human interactions and modifications
• Apply skills in field and laboratory data collection, numeracy and analysis
• Establish skills in science communication, including research, writing and critique of scientific literature
• Use spatial information science tools to visualise and analyse biophysical environments

Scientific Report
Assessment Type 1: Report
Indicative Time on Task 2: 20 hours
Due: Week 6
Weighting: 30%

Tests ability to conduct research, collect, analyse and interpret data, and to write a scientific report supported by appropriate literature

On successful completion you will be able to:
• Explain critical interactions between the land surface, water and the atmosphere that create, modify and sustain the Earth’s living environment
• Demonstrate understanding of key physical environmental processes and the role of human interactions and modifications
• Apply skills in field and laboratory data collection, numeracy and analysis
• Establish skills in science communication, including research, writing and critique of scientific literature

Quizzes
Assessment Type 1: Quiz/Test
Indicative Time on Task 2: 8 hours
Due: Weeks 1, 4, 6, 9, 11
Weighting: 10%

Assessable quizzes on the unit content, to be completed in iLearn

On successful completion you will be able to:
• Explain critical interactions between the land surface, water and the atmosphere that create, modify and sustain the Earth’s living environment
Demonstrate understanding of key physical environmental processes and the role of human interactions and modifications

Final exam
Assessment Type 1: Examination
Indicative Time on Task 2: 20 hours
Due: Final Exam Period
Weighting: 30%

Requires problem-solving skills and discipline knowledge

On successful completion you will be able to:

• Explain critical interactions between the land surface, water and the atmosphere that create, modify and sustain the Earth’s living environment
• Demonstrate understanding of key physical environmental processes and the role of human interactions and modifications
• Apply skills in field and laboratory data collection, numeracy and analysis
• Establish skills in science communication, including research, writing and critique of scientific literature

1 If you need help with your assignment, please contact:

• the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
• the Learning Skills Unit for academic skills support.

2 Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

Delivery and Resources
Classes
The class timetable can be found through the Timetable portal.

A detailed class schedule with workshop and practical topics, assessment due dates, etc. will be made available to all enrolled students through iLearn.

The unit is taught via workshops (equivalent to interactive online lectures), practical classes, readings, and various assessment tasks. Students must make regular use of iLearn to access teaching and learning materials, to submit assessment tasks, to stay in touch with the unit, to
contact lecturers and tutors, and to discuss issues and concepts with classmates.

We also recommend that you follow current developments in the multidisciplinary field of environmental science and management by staying abreast of the news.

**Unit Organisation**

This unit starts with an introductory workshop and an overview of library and scientific writing skills. Following this, there are several core modules and then we conclude the unit with an important unit summary workshop, including exam information and study tips.

**Internal (Weekday Attendance) Students:** a summary of what you need to do

*We expect you to attend two online 1-hour workshops and one face-to-face 2-hour practical class each week (unless that day/week is marked in the schedule as having no class).* You should devote 9 hours per week (on average) to a 10 credit point unit such as this, which means that you should spend several hours per week working towards completion of assessments, readings, etc. for the unit outside of your online and face-to-face classes.

The workshops will be hosted online through Zoom. Recordings will be made available for revision purposes on iLearn.

You must attend the practical classes in person - this is part of the hurdle requirement that stipulates that you must satisfactorily complete 7 out of the 9 practical classes to pass this unit.

The 2-hour “hands-on” practical classes will be held either in a computer laboratory, in the field (i.e. outside!), or online, as specified in the class schedule. They are designed to help you work towards the major assignments, to allow you to build on your understanding of core material from workshops, readings and other activities, and to develop some valuable generic and discipline-specific skills. Meet in your usual practical classroom every week then proceed with your tutor to the field when required, unless the class is to be held online or you are directed otherwise via iLearn. Look at the class schedule on iLearn to find out whether you need field equipment (e.g. enclosed shoes, hat/raincoat, water bottle, etc.) for your class.

**External (Infrequent Attendance) Students:** a summary of what you need to do

*We expect you to attend the two online workshops each week or to watch the recorded versions that will be made available on iLearn.* Obviously, you will require access to the internet to regularly access iLearn in order to complete this unit. In total, we also expect you to devote 9 hours per week (on average) to a 10 credit point unit such as this.

*We also expect you to complete online practicals each week (when offered), and to attend two weekend on-campus sessions where you will have face-to-face classes for the remaining practicals - this is part of the hurdle requirement that stipulates that you must satisfactorily complete 7 out of the 9 practical classes to pass this unit.*

Two weekend on-campus sessions will be held, which will run from 9.00 am - 4 pm on Saturday in Weeks 3 and 10. Information and an itinerary for each on-campus session will be provided on iLearn. You will spend some time outdoors in the field, so ensure you have sturdy, enclosed
footwear (no sandals or thongs), sunscreen, a hat and a raincoat. Water, lunch and snacks for both days are your own responsibility. Few food outlets are available on campus on weekends.

These are the only occasions we'll meet face-to-face, so you need to be fully prepared in order to obtain the maximum benefit. In the weeks prior to the on-campus sessions, listen to all the workshops available and complete the recommended readings. You’re encouraged to look at the online practical materials before you come on campus, but your activities will be explained during the face-to-face sessions.

**Required and Recommended Texts and/or Materials**

*There is no set textbook for this unit, but there are recommended readings for each module as noted on iLearn.*

**Technology Used and Required**

This unit will use iLearn and associated technology. See the Instructions on how to log in to iLearn and the iLearn quick guides for students which will help you:

- **Getting started** - Find out how to navigate and familiarise yourself with the iLearn environment
- **Activities** - Learn how to effectively complete the activities required of you in iLearn
- **Assignments and Gradebook** - Find out how to submit assessments and view your grades using iLearn
- **Online study tips** - Studying online is a unique experience, learn how to navigate it here
- **Discussion forums** - Explore the different types, and features of discussion forums in iLearn

**Computer-Based Learning**

There are essential computer-based components of this unit, including workshops recorded through Zoom, some weekly practical exercises, and online discussion forums for communicating with staff and other students in this unit. You can undertake this work from off-campus or on-campus, including through the computer labs (when they are not booked for classes) or in the Library. If you’re unsure of how to connect to the internet or use the computer system, help can be obtained at: [http://students.mq.edu.au/support/](http://students.mq.edu.au/support/).

Please note that at the beginning of each session our class lists are often incomplete (due to late transfers and changes of enrollment). In the first week of semester, if your name is missing from the enrollment list, you may not yet have access to the system. Try a couple of times, to make sure you have not made a typing error (remember your username and password are Case Sensitive). If later in the session you suddenly find that your access to the iLearn site has been mysteriously barred, it is probably because your Student Services Fee has not been paid (this is imposed by the University Administration, not us).

**General Discussion Forum and Announcements**

The "General Discussion Forum" link on the unit’s homepage is a communication system between you and the rest of the class (a bit like an online tutorial or bulletin board). In this unit,
we use it to discuss important issues related to the unit. You are expected to read every posting to the discussion forum because important administrative and academic information will be posted there - it is your responsibility to stay up-to-date. This is particularly important for External students.

Unit-wide announcements will be shared through the Announcements function in iLearn under very important circumstances.

**What is Required to Complete This Unit Satisfactorily?**

*You must receive a unit mark of at least 50 % (Pass; P grade) and you must complete the hurdle requirement to pass this unit.*

The Faculty Board has resolved that from S1 2018 all 1000-level units in the Faculty of Science and Engineering will have a compulsory (hurdle) requirement on participation in tutorials, practicals and laboratories. Participation is not simply attendance - 7 out 9 practicals require your attendance and satisfactory completion.

*You should complete the full unit workload.* We expect you to work 9 hours per week on this unit. Obviously this is dependent on the speed at which you learn and your ability to study effectively. You may need to spend extra time on different parts of the course content. Depending on when assignments are due, this workload will be spread over the semester. It is critical that you manage your time effectively throughout the session and work around other units and commitments you may have. A guide of hours typically required to receive a Pass grade is outlined below. However, keep in mind, grades are awarded on a demonstration of understanding and ability, not on time or effort!

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hours Per Teaching Week</th>
<th>No. of Weeks</th>
<th>Hours Per Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshops (online)</td>
<td>2</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>Practicals</td>
<td>2</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>Quizzes</td>
<td></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Assignment 1</td>
<td></td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Assignment 2</td>
<td></td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Other (independent study, reading, exam revision, etc.)</td>
<td>3</td>
<td>15</td>
<td>45</td>
</tr>
<tr>
<td><strong>Total for semester</strong></td>
<td></td>
<td></td>
<td><strong>135</strong></td>
</tr>
<tr>
<td><strong>Per week (15 weeks)</strong></td>
<td></td>
<td></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

*You should understand and perform according to the general unit criteria.* In this unit we expect quality in your assignments and a level of knowledge and comprehension of course content that sets the foundations for further study in Earth and Environmental Science. Grades
for each assessment task and the unit as a whole will be awarded according to the following general criteria (course rubric):

<table>
<thead>
<tr>
<th></th>
<th>Developing</th>
<th>Functional</th>
<th>Proficient</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General description of</strong></td>
<td>Has not yet reached the desired standard. A <em>Fail</em> grade (or under some instances a <em>Conceded Pass</em>) would be given.</td>
<td>Has reached basic academic standards. A <em>Pass</em> grade would be awarded.</td>
<td>Has completely reached the standards expected. A <em>Credit</em> would be awarded.</td>
<td>Has gone beyond the expected standard. A grade of <em>Distinction</em> or <em>High Distinction</em> would be awarded.</td>
</tr>
<tr>
<td><strong>Knowledge and</strong></td>
<td>Limited understanding of required concepts and knowledge.</td>
<td>Can accurately reproduce required facts, but has limited depth of understanding of basic concepts.</td>
<td>Exhibits breadth and depth of understanding. Uses terminology accurately in new contexts and transfers ideas to new situations.</td>
<td>Exhibits breadth and depth of understanding of concepts. Can engage in productive critical reflection.</td>
</tr>
<tr>
<td><strong>understanding</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Analysis</strong></td>
<td>Data analysis skills are limited.</td>
<td>Data analysis skills are largely descriptive with limited capacity to combine multiple factors.</td>
<td>Can synthesise data and critique the value and importance of scientific arguments.</td>
<td>Data analysis is sophisticated and is capable of placing examples in context of big ideas, problems and solutions.</td>
</tr>
<tr>
<td><strong>Information literacy</strong></td>
<td>Uses immediately available information without discretion.</td>
<td>Can select useful information. Does not always discriminate between types of sources of information.</td>
<td>Independently selects useful information and can discriminate between types of sources of information.</td>
<td>Independently selects useful information and can critically discriminate between types of sources of information.</td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td>Poor written communication skills (e.g. spelling and grammar). Does not demonstrate an understanding of what is expected in assignment writing and presentation.</td>
<td>Communicates ideas adequately in writing. Adheres to most basic requirements for written work and assignment presentation.</td>
<td>Communicates effectively and clearly in writing. Adheres to all expectations of assignment writing and presentation.</td>
<td>Communicates adeptly in writing. Adheres to all expectations of assignment writing and presentation.</td>
</tr>
<tr>
<td><strong>and writing skills</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Policies and Procedures**

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

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

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

### Student Code of Conduct

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

### Results

Results published on platform other than eStudent, (eg. iLearn, Coursera etc.) 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 or if you are a Global MBA student contact globalmba.support@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 help you improve your marks and take control of your study.

- Getting help with your assignment
- Workshops
- StudyWise
- Academic Integrity Module

The Library provides online and face to face support to help you find and use relevant information resources.

- Subject and Research Guides
- Ask a Librarian
Student Enquiry Service
For all student enquiries, visit Student Connect at ask.mq.edu.au
If you are a Global MBA student contact globalmba.support@mq.edu.au

Equity 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.

IT Help
For help with University computer systems and technology, visit http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/.
When using the University’s IT, you must adhere to the Acceptable Use of IT Resources Policy. The policy applies to all who connect to the MQ network including students.