

ENVS1017

The Living Environment

Session 1, In person-scheduled-infrequent, North Ryde 2023

School of Natural Sciences

Contents

| General Information | 2 |
|------------------------------------|-------|
| Learning Outcomes | 3 |
| General Assessment Information | 3 |
| Assessment Tasks | 5 |
| Delivery and Resources | 7 |
| Unit Schedule | 12 |
| Policies and Procedures | 12 |
| Learning Outcomes and Assessment M | lappi |
| ng | 14 |

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General Information

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Credit points

10

Prerequisites

Corequisites

Co-badged status

ENVS6202 The Living Environment

Unit description

The living environment is all around us – dynamic landscapes, water, air and environmental systems that underpin life on Earth. This unit focuses on critical environmental processes that create and modify physical environments on land, at the coast, and in the atmosphere. Issues of variability, change and human impacts on the environment are examined. We link theory and practical field, modelling and analysis skills to view and understand complex Earth-surface environments. Field and laboratory activities include assessment of river health and water quality, wetlands, coasts and anthropogenic impacts, and measurement of micro-climatic processes. Geographic information systems (GIS) are introduced to visualise and aid spatial analysis and interpretation of the environment. This unit is fundamental to all natural sciences, but particularly earth and environmental sciences, environmental management and ecology. The content is relevant for various environmental science and management careers including consultancies, government agencies, and non-government organisations, where many gradates find employment.

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:

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: Demonstrate 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

Requirements to Pass this Unit

To pass, you must achieve a total mark equal to or greater than 50% for the unit.

Special Consideration

The <u>Special Consideration Policy</u> aims to support students who have been impacted by short-term circumstances or events that are serious, unavoidable and significantly disruptive, and which may affect their performance in assessment. If you experience circumstances or events

that affect your ability to complete the assessments or other activities in this unit on time, please inform the convenor and submit a Special Consideration request through ask.mq.edu.au.

Assessment Submission Deadlines and Late Submissions

Online quizzes, in-class activities, or scheduled exams must be undertaken at the time indicated in the unit guide. All other assessments must be submitted by 23:55 (11.55 pm) on their due date. Should any quizzes, exams or assessment tasks be missed due to illness or misadventure, students should apply for Special Consideration.

For ENVS1017 and ENVS6202, unless special consideration has been sought and approved:

- Late submissions will not be allowed for quizzes.
- Late submissions will be allowed for the two major assignments.
- Late submissions will not be allowed for the final exam.

Late Assessment Submission Penalty

Unless a Special Consideration request has been submitted and approved, a 5% penalty (of the total possible mark of the task) will be applied for each day a written report or presentation assessment is not submitted, up until the 7th day (including weekends). After the 7th day, a grade of '0' will be awarded even if the assessment is submitted. The submission time for all uploaded assessments is **23:55 (11:55 pm)**. A 1-hour grace period will be provided to students who experience a technical concern.

For any late submission of time-sensitive tasks, such as scheduled tests/exams, performance assessments/presentations, and/or scheduled practical assessments/labs, please apply for Spec ial Consideration.

Submission of Assessments

The two major assignments must be submitted online through <u>Turnitin</u>, unless otherwise instructed during the unit. Links for the submission of each assignment will be available on <u>iLearn</u>. 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.

Assessment Criteria

Assessment at Macquarie University is standards-based, as outlined in the <u>Assessment Policy</u>. 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.

Assessment Marking and Feedback

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

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.

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. Please see the general faculty information above regarding penalties for late submissions of assessment tasks.

Final Exam

Details of exam conditions and timetables can be found via the <u>Student Portal</u>. 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

| Name | Weighting | Hurdle | Due |
|------------------------------------|-----------|--------|---------------------------|
| Quizzes | 10% | No | Weeks 2, 5, 7, 10, and 12 |
| Scientific Report | 30% | No | Week 6 |
| Environmental mapping and analysis | 30% | No | Week 13 |
| Final exam | 30% | No | Final exam period |

Quizzes

Assessment Type 1: Quiz/Test

Indicative Time on Task ²: 8 hours Due: **Weeks 2, 5, 7, 10, and 12**

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

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

Environmental mapping and analysis

Assessment Type 1: Quantitative analysis task

Indicative Time on Task 2: 20 hours

Due: Week 13 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
- Demonstrate skills in science communication, including research, writing and critique of scientific literature
- · Use spatial information science tools to visualise and analyse biophysical environments

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

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
- the Writing Centre for academic skills support.

Delivery and Resources

COVID Information

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

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

The safety of students and staff is our primary concern, and we must all work together to maintain a COVID-free campus. For the latest information on the University's response to COVID-19, please refer to the Coronavirus infection page on the Macquarie website: https://www.mq.edu.au/about/coronavirus-faqs. Remember to check this page regularly in case the information and requirements change during semester. If there are any changes to this unit in relation to COVID, these will be communicated via iLearn.

Classes

The class timetable can be found through the <u>Timetable</u> portal. A detailed class schedule with workshop and practical topics, assessment due dates, etc. will be made available to all enrolled students through <u>iLearn</u>.

The unit is taught via 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 fields of environmental science and management by staying abreast of the news.

Unit Organisation

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

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

We expect you to attend one online 2-hour lecture 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 lectures will be hosted online through Zoom/Echo360. Recordings will be made available for revision purposes on iLearn.

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 lectures, 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 one online 2-hour lecture 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 an online practicals each week (when offered), and to attend two 1-day weekend on-campus sessions where you will have face-to-face classes for the remaining practicals.

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.

Off-shore Students

Off-shore students must *email the convenor* as soon as possible to discuss study options.

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 and in Leganto.

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
- <u>Assignments and Gradebook</u> 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
- <u>Discussion forums</u> Explore the different types, and features of discussion forums in iLearn

Computer-Based Learning

There are essential computer-based components of this unit, including online lectures, 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: https://students.mg.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 SeNsltlvE). 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) to pass this unit.

You should complete the full unit workload. We expect you to work an average of ~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!

| Activity | Hours Per Teaching Week | No. of Weeks | Hours Per Session |
|-------------------|-------------------------|--------------|-------------------|
| Lectures (online) | 2 | 13 | 26 |
| Practicals | 2 | 9 | 18 |
| Quizzes | | | 8 |

Unit guide ENVS1017 The Living Environment

| Assignment 1 | | | 20 |
|---|------|----|-----|
| Assignment 2 | | | 20 |
| Other (independent study, reading, exam revision, etc.) | ~2.5 | 13 | 43 |
| Total for semester | | | 135 |
| Per week (15 weeks) | | | 9 |

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. Grades for each assessment task and the unit as a whole will be awarded according to the following general criteria (course rubric):

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

Unit Schedule

Please see the weekly class schedule provided on iLearn.

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://policies.mq.edu.au). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- Academic Appeals Policy
- Academic Integrity Policy
- Academic Progression Policy
- Assessment Policy
- Fitness to Practice Procedure
- · Assessment Procedure
- Complaints Resolution Procedure for Students and Members of the Public
- Special Consideration Policy

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

To find other policies relating to Teaching and Learning, visit Policy Central (https://policies.mq.e du.au) and use the search tool.

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

Academic Integrity

At Macquarie, we believe <u>academic integrity</u> – honesty, respect, trust, responsibility, fairness and courage – is at the core of learning, teaching and research. We recognise that meeting the expectations required to complete your assessments can be challenging. So, we offer you a range of resources and services to help you reach your potential, including free <u>online writing and maths support</u>, academic skills development and wellbeing consultations.

Student Support

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

The Writing Centre

The Writing Centre provides resources to develop your English language proficiency, academic writing, and communication skills.

- Workshops
- · Chat with a WriteWISE peer writing leader
- Access StudyWISE
- Upload an assignment to Studiosity
- Complete the 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 Services and Support

Macquarie University offers a range of Student Support Services including:

- IT Support
- · Accessibility and disability support with study
- Mental health support
- Safety support to respond to bullying, harassment, sexual harassment and sexual assault
- Social support including information about finances, tenancy and legal issues
- Student Advocacy provides independent advice on MQ policies, procedures, and processes

Student Enquiries

Got a question? Ask us via AskMQ, or contact Service Connect.

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 <u>Acceptable Use of IT Resources Policy</u>. The policy applies to all who connect to the MQ network including students.

Learning Outcomes and Assessment Mapping

Note that the learning outcomes and mapping to assessment tasks that are prepopulated from CMS are incorrect. The following is the correct assessment mapping information.

ULO1 - Explain critical interactions between the land surface, water and the atmosphere that create, modify and sustain the Earth's living environment

4 assessment tasks mapped: Quizzes, Scientific Report, Environmental Mapping and Analysis, Final Exam

ULO2 - Demonstrate understanding of key physical environmental processes and the role of human interactions and modifications

4 assessment tasks mapped: Quizzes, Scientific Report, Environmental Mapping and Analysis, Final Exam

ULO3 - Apply skills in field and laboratory data collection, numeracy and analysis

3 assessment tasks mapped: Scientific Report, Environmental Mapping and Analysis, Final Exam

ULO4 - Establish skills in science communication, including research, writing and critique of scientific literature

3 assessment tasks mapped: Scientific Report, Environmental Mapping and Analysis, Final Exam

ULO5 - Use spatial information science tools to visualise and analyse biophysical environments

1 assessment task mapped: Environmental Mapping and Analysis