UNSW Course Outline

BIOS2123 Ecosystem Conservation and Management - 2024

Published on the 06 Sep 2024

General Course Information

Course Code : BIOS2123
Year : 2024
Term : Term 3
Teaching Period : T3
Is a multi-term course? : No
Faculty : Faculty of Science
Academic Unit : School of Biological, Earth and Environmental Sciences
Delivery Mode : In Person
Delivery Format : Standard
Delivery Location : See School
Campus : Sydney
Study Level : Undergraduate
Units of Credit : 6

<u>Useful Links</u>

<u>Handbook</u> <u>Class Timetable</u>

Course Details & Outcomes

Course Description

This course is delivered in the field, taking students to the upper catchment of the Macquarie River and the major dam that regulates the river down to the internationally important and spectacular Macquarie Marshes. Students will visit an irrigation property, before spending

several days in the Macquarie Marshes, surveying and meeting key stakeholders who manage the Macquarie Marshes. The course focuses on advanced, practical management of environmental flows in rivers of the Murray-Darling Basin and conservation of endangered species and habitats endemic to Australia. Students will participate in the monitoring of wetland species, understanding conservation management and practical field skills required in monitoring environments. Practical training will include consideration of the implementation of conservation programs, including the social, institutional and logistical constraints placed on conservation management strategies.

Note: This course is available to students in Advanced Science (3962), Science (3970) and their associated dual programs, with a preference given to students in the Ecology major. Unfilled places are available to students in Environmental Management (3965), Life Science (3966) with preference given to students in Biology or Ecology Majors with a credit average.

This course involves compulsory fieldwork and students will incur personal expenses.

Course Aims

This field based course is designed to provide students with the opportunity to learn about ecosystems and their conservation management alongside academic and industry professionals. This provides a unique serviced learning opportunity to gain insight about conservation strategies currently in place and provide practical experience. Students will employ different techniques involved in ecosystem management and monitoring, and collect data and be able to demonstrate their understanding through the completion of various projects.

Course Learning Outcomes

Course Learning Outcomes
CLO1 : Evaluate current ecosystem conservation and management practices and develop an adaptive management plan for the Macquarie Marshes in the Murray-Darling Basin.
CLO2 : Identify key concepts and components of an ecosystem, potential threats to the ecosystem and how to mitigate them.
CLO3 : Communicate information relevant to the management of ecological values of the Macquarie Marshes to diverse stakeholders.
CLO4 : Conduct surveys of flora and fauna, including identification of species and estimates of abundance.
CLO5 : Correctly use technical research equipment in the field to identify and estimate abundance of species in the field.
CLO6 : Reflect on learning and experiences in the course to inform personal and professional development.

Course Learning Outcomes	Assessment Item
CLO1 : Evaluate current ecosystem conservation and management practices and develop an adaptive management plan for the Macquarie Marshes in the Murray-Darling Basin.	• Preparation exercises • Group presentation • Adaptive Management Plan for the Macquarie Marshes
CLO2 : Identify key concepts and components of an ecosystem, potential threats to the ecosystem and how to mitigate them.	• Preparation exercises • Group presentation • Adaptive Management Plan for the Macquarie Marshes
CLO3 : Communicate information relevant to the management of ecological values of the Macquarie Marshes to diverse stakeholders.	• Group presentation • Adaptive Management Plan for the Macquarie Marshes
CLO4 : Conduct surveys of flora and fauna, including identification of species and estimates of abundance.	• Adaptive Management Plan for the Macquarie Marshes
CLO5 : Correctly use technical research equipment in the field to identify and estimate abundance of species in the field.	• Adaptive Management Plan for the Macquarie Marshes
CLO6 : Reflect on learning and experiences in the course to inform personal and professional development.	• Reflective exercise

Learning and Teaching Technologies

Moodle - Learning Management System

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Preparation exercises Assessment Format: Individual	25%	
Group presentation Assessment Format: Group	25%	
Reflective exercise Assessment Format: Individual	15%	
Adaptive Management Plan for the Macquarie Marshes Assessment Format: Individual	35%	

Assessment Details
Preparation exercises

<u>Assessment Overview</u>

You will be provided with a series of scientific papers relating to the management of rivers and the Macquarie Marshes and their plants and animals. You will answer 11 short answer questions related to this material. You will also deliver a five-minute presentation (10%) on the conservation of a particular plant or animal in the Macquarie Marshes to your peers and course staff.

Feedback on the task is provided after presentations.

<u>Course Learning Outcomes</u>

- CLO1 : Evaluate current ecosystem conservation and management practices and develop an adaptive management plan for the Macquarie Marshes in the Murray-Darling Basin.
- CLO2 : Identify key concepts and components of an ecosystem, potential threats to the ecosystem and how to mitigate them.

<u>Generative AI Permission Level</u>

No Assistance

This assessment is designed for you to complete without the use of any generative AI. You are not permitted to use any generative AI tools, software or service to search for or generate information or answers.

For more information on Generative AI and permitted use please see here.

Group presentation

<u>Assessment Overview</u>

In a group of about 4-6 students, you will evaluate and contribute to discussion about adaptive management of the Macquarie Marshes. Your group will deliver a 15-20 minute presentation on the last day of the field course, outlining vision, objectives and specific monitoring for a group of organisms.

Feedback on the presentation is provided in the form of criticisms and discussions about the main theme after each presentation.

<u>Course Learning Outcomes</u>

- CLO1 : Evaluate current ecosystem conservation and management practices and develop an adaptive management plan for the Macquarie Marshes in the Murray-Darling Basin.
- CLO2 : Identify key concepts and components of an ecosystem, potential threats to the

ecosystem and how to mitigate them.
- CLO3 : Communicate information relevant to the management of ecological values of the Macquarie Marshes to diverse stakeholders.

<u>Generative AI Permission Level</u>

No Assistance

This assessment is designed for you to complete without the use of any generative AI. You are not permitted to use any generative AI tools, software or service to search for or generate information or answers.

For more information on Generative AI and permitted use please see [here](#).

Reflective exercise

<u>Assessment Overview</u>

You will submit a 1000 word written reflection, providing a general summary and addressing specific questions related to the river, what was learnt each day, practical experiences and key learnings, The task is due two weeks after completing the course.

Marks and brief written feedback will be provided within two weeks of submission on Moodle.

<u>Course Learning Outcomes</u>

- CLO6 : Reflect on learning and experiences in the course to inform personal and professional development.

<u>Generative AI Permission Level</u>

No Assistance

This assessment is designed for you to complete without the use of any generative AI. You are not permitted to use any generative AI tools, software or service to search for or generate information or answers.

For more information on Generative AI and permitted use please see [here](#).

Adaptive Management Plan for the Macquarie Marshes

<u>Assessment Overview</u>

You will develop an adaptive management plan for the Macquarie Marshes, focusing on key objectives for an assigned group of organisms, identifying a relevant monitoring schedule, to be submitted within four weeks of the completion of the course.

Marks and brief written feedback will be provided within two weeks of submission on Moodle.

Course Learning Outcomes

- CLO1 : Evaluate current ecosystem conservation and management practices and develop an adaptive management plan for the Macquarie Marshes in the Murray-Darling Basin.
- CLO2 : Identify key concepts and components of an ecosystem, potential threats to the ecosystem and how to mitigate them.
- CLO3 : Communicate information relevant to the management of ecological values of the Macquarie Marshes to diverse stakeholders.
- CLO4 : Conduct surveys of flora and fauna, including identification of species and estimates of abundance.
- CLO5 : Correctly use technical research equipment in the field to identify and estimate abundance of species in the field.

Generative AI Permission Level

Simple Editing Assistance

In completing this assessment, you are permitted to use standard editing and referencing functions in the software you use to complete your assessment. These functions are described below. You must not use any functions that generate or paraphrase passages of text or other media, whether based on your own work or not.

If your Convenor has concerns that your submission contains passages of AI-generated text or media, you may be asked to account for your work. If you are unable to satisfactorily demonstrate your understanding of your submission you may be referred to UNSW Conduct & Integrity Office for investigation for academic misconduct and possible penalties.

For more information on Generative AI and permitted use please see here.

General Assessment Information

Grading Basis

Standard

Course Schedule

Attendance Requirements

Not Applicable - as no class attendance is required

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
	Richard Kingsford					Yes	Yes
	Jodi Rowley					No	No

Other Useful Information

Academic Information

Upon your enrolment at UNSW, you share responsibility with us for maintaining a safe, harmonious and tolerant University environment.

You are required to:

- Comply with the University's conditions of enrolment.
- Act responsibly, ethically, safely and with integrity.
- Observe standards of equity and respect in dealing with every member of the UNSW community.
- Engage in lawful behaviour.
- Use and care for University resources in a responsible and appropriate manner.
- Maintain the University's reputation and good standing.

For more information, visit the UNSW Student Code of Conduct Website.

Academic Honesty and Plagarism

Referencing is a way of acknowledging the sources of information that you use to research your assignments. You need to provide a reference whenever you draw on someone else's words, ideas or research. Not referencing other people's work can constitute plagiarism.
Further information about referencing styles can be located at https://student.unsw.edu.au/referencing

Academic integrity is fundamental to success at university. Academic integrity can be defined as a commitment to six fundamental values in academic pursuits: honesty, trust, fairness, respect, responsibility and courage. At UNSW, this means that your work must be your own, and others' ideas should be appropriately acknowledged. If you don't follow these rules, plagiarism may be detected in your work.
Further information about academic integrity, plagiarism and the use of AI in assessments can be located at:

- The Current Students site,
- The ELISE training site, and
- The Use of AI for assessments site.

The Student Conduct and Integrity Unit provides further resources to assist you to understand

your conduct obligations as a student: https://student.unsw.edu.au/conduct

Submission of Assessment Tasks

Penalty for Late Submissions

UNSW has a standard late submission penalty of:

- 5% per day,
- for all assessments where a penalty applies,
- capped at five days (120 hours) from the assessment deadline, after which a student cannot submit an assessment, and
- no permitted variation.

Any variations to the above will be explicitly stated in the Course Outline for a given course or assessment task.

Students are expected to manage their time to meet deadlines and to request extensions as early as possible before the deadline.

Special Consideration

If circumstances prevent you from attending/completing an assessment task, you must officially apply for special consideration, usually within 3 days of the sitting date/due date. You can apply by logging onto myUNSW and following the link in the My Student Profile Tab. Medical documentation or other documentation explaining your absence must be submitted with your application. Once your application has been assessed, you will be contacted via your student email address to be advised of the official outcome and any actions that need to be taken from there. For more information about special consideration, please visit: https://student.unsw.edu.au/special-consideration

Important note: UNSW has a "fit to sit/submit" rule, which means that if you sit an exam or submit a piece of assessment, you are declaring yourself fit to do so and cannot later apply for Special Consideration. This is to ensure that if you feel unwell or are faced with significant circumstances beyond your control that affect your ability to study, you do not sit an examination or submit an assessment that does not reflect your best performance. Instead, you should apply for Special Consideration as soon as you realise you are not well enough or are otherwise unable to sit or submit an assessment.

Faculty-specific Information

Additional support for students

- [The Current Students Gateway](#)
- [Student Support](#)
- [Academic Skills and Support](#)
- [Student Wellbeing, Health and Safety](#)
- [Equitable Learning Services](#)
- [UNSW IT Service Centre](#)
- Science EDI Student [Initiatives](#), [Offerings](#) and [Guidelines](#)