



## UNSW Course Outline

# BIOS2051 Plant Biology - 2024

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## General Course Information

**Course Code :** BIOS2051

**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 :** Kensington

**Campus :** Sydney

**Study Level :** Undergraduate

**Units of Credit :** 6

### Useful Links

[Handbook Class Timetable](#)

## Course Details & Outcomes

### Course Description

This course is a dynamic second-year course within the School of Biological, Earth and Environmental Sciences. It offers a comprehensive exploration of plant biology, with a focus on Australia's native flora. The course blends theoretical study with practical experience through lab work and field trips to Sydney's regional national parks. Key topics include plant identification,

edible botany, plant ecology, and biogeography. Students gain hands-on experience identifying plants and understanding their adaptations to terrestrial ecosystems. These experiences offer excellent preparation for third-year courses like Advanced Field Biology (BIOS3601), Life in Arid Lands (BIOS3161), and Plant Ecology (BIOS3061). Potential students should note the course includes mandatory field trips during class time and lab work. BIOS2051 is an excellent choice for those aiming for careers in botany, environmental science, or broader biological fields.

## **Course Aims**

Plant Biology aims to provide students with a comprehensive understanding of plant biology, emphasizing Australia's native flora. It strives to blend theoretical knowledge with practical skills in plant identification and analysis. The course seeks to impart an understanding of plant adaptations to terrestrial ecosystems, giving students hands-on experience through lab work and field trips. By connecting classroom learning with real-world applications, the course equips students for future advanced studies and careers in botany, environmental science, or broader biological fields. The ultimate goal is to foster a deep appreciation and understanding of the biological diversity and ecological significance of plants.

# Course Learning Outcomes

Course Learning Outcomes
CLO1 : Interpret the functional and biological diversity of flowering plants in various ecosystems, particularly within the Australian flora.
CLO2 : Explain how plants have evolved to survive and thrive in terrestrial ecosystems.
CLO3 : Identify plants from the Australian flora.
CLO4 : Connect fundamental aspects of plant biology, ecology and biogeography with current research issues and trends in botany.

Course Learning Outcomes	Assessment Item
CLO1 : Interpret the functional and biological diversity of flowering plants in various ecosystems, particularly within the Australian flora.	<ul style="list-style-type: none"><li>• Final Examination</li><li>• Climate Change Vulnerability Assessment</li><li>• Practical Skills Test</li><li>• Plant identification in the real world</li></ul>
CLO2 : Explain how plants have evolved to survive and thrive in terrestrial ecosystems.	<ul style="list-style-type: none"><li>• Final Examination</li><li>• Climate Change Vulnerability Assessment</li><li>• Practical Skills Test</li><li>• Plant identification in the real world</li></ul>
CLO3 : Identify plants from the Australian flora.	<ul style="list-style-type: none"><li>• Plant identification in the real world</li></ul>
CLO4 : Connect fundamental aspects of plant biology, ecology and biogeography with current research issues and trends in botany.	<ul style="list-style-type: none"><li>• Final Examination</li><li>• Climate Change Vulnerability Assessment</li><li>• Practical Skills Test</li></ul>

## Learning and Teaching Technologies

Moodle - Learning Management System | Echo 360

## Assessments

### Assessment Structure

Assessment Item	Weight	Relevant Dates
Final Examination Assessment Format: Individual	25%	
Climate Change Vulnerability Assessment Assessment Format: Individual	20%	Due Date: Not Applicable
Practical Skills Test Assessment Format: Individual	30%	
Plant identification in the real world Assessment Format: Individual	25%	

# Assessment Details

## Final Examination

### Assessment Overview

In the final exam, you will be expected to demonstrate a comprehensive understanding of the concepts taught throughout the course, including the ecology and evolution of plants. The exam typically includes a variety of question formats, such as short answers and essay questions, aimed at testing your ability to integrate and apply the concepts learned.

The final exam is typically conducted during the formal examination period, with a duration of two hours. It's crucial to understand that this assessment is integrative and designed to test your ability to put concepts together, rather than just memorize information. Feedback is available upon request.

### Course Learning Outcomes

- CL01 : Interpret the functional and biological diversity of flowering plants in various ecosystems, particularly within the Australian flora.
- CL02 : Explain how plants have evolved to survive and thrive in terrestrial ecosystems.
- CL04 : Connect fundamental aspects of plant biology, ecology and biogeography with current research issues and trends in botany.

### Generative AI Permission Level

#### 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](#).

## Climate Change Vulnerability Assessment

### Assessment Overview

In this assessment, you will investigate the impact of climate change on a specific Australian native plant species, submitting your findings in two parts.

Firstly, you'll complete a spreadsheet ranking the species' vulnerability to climate change, justifying your rankings with referenced research. This spreadsheet is based on an international standard for climate change vulnerability assessment.

Secondly, you'll submit a succinct one-page summary of your findings intended for a high-level

audience. This document should demonstrate clear writing, logical flow, accurate referencing, and balanced communication of certainty and uncertainty.

Your research should primarily leverage academic resources and trusted botanical databases. Both components are due together in week 8. Feedback on both components will focus on your comprehension, research process, and writing skills, enhancing your understanding and skillset in plant biology. The feedback will be provided within two weeks.

### **Course Learning Outcomes**

- CL01 : Interpret the functional and biological diversity of flowering plants in various ecosystems, particularly within the Australian flora.
- CL02 : Explain how plants have evolved to survive and thrive in terrestrial ecosystems.
- CL04 : Connect fundamental aspects of plant biology, ecology and biogeography with current research issues and trends in botany.

### **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](#).

## **Practical Skills Test**

### **Assessment Overview**

In BIOS2051: Plant Biology, you will be evaluated on your practical skills through two stages of assessment, testing your abilities in areas such as plant identification, key family identification, anatomical identification, section preparation, and the effective use of botanical resources online.

The first phase is an online quiz where you will be asked a variety of questions aimed at assessing your mastery of these key practical skills. This quiz typically takes place in week 3 and has a 15% weighting for the overall assessment. Feedback for the online quiz will be provided in

a timely manner, ensuring you receive it before the consensus date in Week 4.

The second phase is an in-class test during the final lab week (weighting 15%). In this practical test, you'll be expected to demonstrate your skills in a live environment, working with real plant samples and botanical resources.

Both assessments are essential for passing the course. Questions typically include multiple-choice, short-answer, and practical demonstration types.

For the in-class test, feedback will be given on your test papers and made available soon after the session concludes. Both forms of feedback aim to enhance your understanding and practical skills in plant biology.

### **Course Learning Outcomes**

- CL01 : Interpret the functional and biological diversity of flowering plants in various ecosystems, particularly within the Australian flora.
- CL02 : Explain how plants have evolved to survive and thrive in terrestrial ecosystems.
- CL04 : Connect fundamental aspects of plant biology, ecology and biogeography with current research issues and trends in botany.

### **Generative AI Permission Level**

#### **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](#).

## **Plant identification in the real world**

### **Assessment Overview**

In this hands-on, field-based assignment, you'll have the opportunity to put your plant identification skills to the test in real-world situations. This assessment is divided into two tasks and is designed to enhance your observation skills and understanding of botanical fieldwork and herbarium practices.

The first task, due in week 5, requires you to capture identifiable photographs of native plants. You will then need to identify the plant in the photograph and provide a reasoned argument for your identification process.

For the second task, you'll be expected to collect weed specimens from your surroundings due at the beginning of week 7. You will need to maintain detailed field notes on each specimen and prepare a sample for herbarium submission. This task will deepen your understanding of how herbarium collections function and further develop your fieldwork observational skills.

Feedback will be provided by academic staff in the form of comments on your specimens, field notes, and identification arguments. This feedback will be invaluable in honing your botanical skills and understanding.

### Course Learning Outcomes

- CL01 : Interpret the functional and biological diversity of flowering plants in various ecosystems, particularly within the Australian flora.
- CL02 : Explain how plants have evolved to survive and thrive in terrestrial ecosystems.
- CL03 : Identify plants from the Australian flora.

### Generative AI Permission Level

**Not Applicable**

Generative AI is not considered to be of assistance to you in completing this assessment. If you do use generative AI in completing this assessment, you should attribute its use.

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

Computer vision assistance is allowed

## General Assessment Information

### Grading Basis

Standard

## Course Schedule

## Attendance Requirements

Students are strongly encouraged to attend all classes and review lecture recordings.

## Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
	Will Cornwell					Yes	Yes

# 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 Plagiarism

**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](#)