



UNSW Course Outline

BIOS2061 Vertebrate Zoology - 2024

Published on the 29 May 2024

General Course Information

Course Code : BIOS2061

Year : 2024

Term : Term 2

Teaching Period : T2

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

Australia has a high diversity of globally unique vertebrate species (e.g., platypus, possums, frogs, parrots, snakes etc.). This course examines the evolution, diversity and natural history of these animals with a special emphasis on how their bodies work and how they cope with

Australia's challenging environments. It covers the evolutionary origins and relationships between the major vertebrate groups and explores their diversity of form, function and behavior. There is a detailed investigation of birds and mammals, particularly their origins, life history and emerging conservation issues. Practical work involves examining living and preserved specimens (including dissections on fish) and a field trip around Sydney studying vertebrates in the wild.

Course Aims

- To impart a fundamental understanding about the evolution and diversity of organisms classified as vertebrates (Phylum Chordata)
- To teach students the origins of the major groups of Vertebrates
- To introduce the principles of taxonomy in the classification of living organisms
- To explore conservation issues facing vertebrates with an emphasis on the Australian fauna and potentially innovative ways to secure the future for critically endangered species.

Relationship to Other Courses

There are NO course prerequisites for BIOS2061. Even if you haven't done any biology before, you will be fine with this course. All we expect is a keen interest in the topic, a love for and fascination with animals, and an open mind ready to enjoy learning about the world's extraordinary vertebrate animals--in particular those from Australia. We present the course with a balanced four-dimensional focus so as well as learning about modern vertebrates, it also involves learning about how they came to be the way we see them today and what we need to learn from this deep-time perspective about how best to conserve them, keeping them happy and healthy into the future.

In 2nd year, useful companion subjects are BIOS 2011 (Evolutionary and Physiological Ecology), BIOS 2031 (Biology of Invertebrates) and BIOS 2051 (Plant Biology).

Course Learning Outcomes

Course Learning Outcomes
CL01 : Explain the evolutionary interrelationships between the major groups within the Phylum Chordata.
CL02 : Explain how the modern biogeographic distribution patterns of the global groups of vertebrates developed over time.
CL03 : Explain and compare current theories about the origins of the different groups and about the origins of the key features that distinguish the major lineages in the Phylum Chordata.
CL04 : Evaluate the major challenges and potential solutions for implementing effective, long-term programs to conserve the different threatened vertebrates in Australia.
CL05 : Examine and learn about key internal and external anatomical features of the major groups of vertebrates using basic dissection techniques.

Course Learning Outcomes	Assessment Item
CL01 : Explain the evolutionary interrelationships between the major groups within the Phylum Chordata.	<ul style="list-style-type: none"> • Practical Class Reports • First Practical Test • Final Practical Test • Final Exam
CL02 : Explain how the modern biogeographic distribution patterns of the global groups of vertebrates developed over time.	<ul style="list-style-type: none"> • Practical Class Reports • First Practical Test • Final Practical Test • Final Exam
CL03 : Explain and compare current theories about the origins of the different groups and about the origins of the key features that distinguish the major lineages in the Phylum Chordata.	<ul style="list-style-type: none"> • Practical Class Reports • First Practical Test • Final Practical Test • Final Exam
CL04 : Evaluate the major challenges and potential solutions for implementing effective, long-term programs to conserve the different threatened vertebrates in Australia.	<ul style="list-style-type: none"> • Practical Class Reports • First Practical Test • Final Practical Test • Final Exam
CL05 : Examine and learn about key internal and external anatomical features of the major groups of vertebrates using basic dissection techniques.	<ul style="list-style-type: none"> • Practical Class Reports • First Practical Test • Final Practical Test

Learning and Teaching Technologies

Moodle - Learning Management System | Blackboard Collaborate

Learning and Teaching in this course

Teaching includes lectures and practicals, with continuous assessment. As well as being introduced to theories currently used in our understanding of the origin of vertebrates and their traits, students will be challenged to continually evaluate the basis and evidence for these theories.

Suggested approaches to learning in the course, and resource materials

Students should approach each component of the course with the aim of evaluating whether particular aspects of biology are relevant to management decisions in the context of the particular conservation issue presented. As this is a fundamental knowledge course, memory work will be a necessary component. There is also a large volume of material which student will encounter so students are strongly encouraged to study as they go. Relying solely upon last minute preparation for the final practical and theory exams is NOT advised.

You are expected to attend all your scheduled practical class sessions and attendance will be monitored. After lectures and practicals, much of the material can be studied independently, with the aid of lecture outlines, revision exercises and references contained in lecture notes.

Each assessment appears in the schedule with the code of the class to which it relates most strongly. However, this course aims to develop the ability to integrate different strands of information, so a student might use information from any of the classes in any of the assessments, especially in the theory exam.

Additional Course Information

Students enrolled in this course will explore the evolutionary origins and relationships between the major groups of vertebrates, learning about their diversity of form, function and behaviour. Topics covered include the rise and diversification of hagfish and lamprey, sharks and rays, bony fish, frogs and salamanders, lizards, snakes, turtles, crocodiles, dinosaurs and birds, and mammals.

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Practical Class Reports Assessment Format: Individual	30%	Start Date: Wks 1-3,5,7,9 Due Date: Wks 1-3,5,7,9
First Practical Test Assessment Format: Individual	10%	Start Date: 22/06/2023 9am or 1pm
Final Practical Test Assessment Format: Individual	20%	Start Date: 3 August 9am or 1pm Due Date: 3 August
Final Exam Assessment Format: Individual	40%	Start Date: During the exam period

Assessment Details

Practical Class Reports

Assessment Overview

You will have the chance to submit 6 reports relating to the following topics covered in the Practicals: chordates; sharks; bony fish; frogs & reptiles; birds; and mammals. The bird assessment will be based on a two-hour field trip to Centennial Park that will occur during the normal lab session time on that day. The purpose of these reports is to provide feedback to you about how well you have absorbed the content presented in these topic areas throughout the course. Some of the reports will involve producing drawings of objects studied in the lab sessions. You will receive written assessments of your reports so that you will more fully understand the concepts that have been presented, and be better prepared for the final practical test in Week 10. Each of the 6 reports is worth 5% adding up to a total of 30% of the course grade.

Course Learning Outcomes

- CL01 : Explain the evolutionary interrelationships between the major groups within the Phylum Chordata.
- CL02 : Explain how the modern biogeographic distribution patterns of the global groups of vertebrates developed over time.
- CL03 : Explain and compare current theories about the origins of the different groups and about the origins of the key features that distinguish the major lineages in the Phylum Chordata.
- CL04 : Evaluate the major challenges and potential solutions for implementing effective, long-term programs to conserve the different threatened vertebrates in Australia.
- CL05 : Examine and learn about key internal and external anatomical features of the major groups of vertebrates using basic dissection techniques.

Detailed Assessment Description

You will have the chance to submit 6 reports relating to the following topics covered in the Practicals: chordates; sharks; bony fish; frogs & reptiles; birds; and mammals. The bird assessment will be based on a two-hour field trip to Centennial Park that will occur during the normal lab session time on that day. The purpose of these reports is to provide feedback to you about how well you have absorbed the content presented in these topic areas throughout the course. Some of the reports will involve producing drawings of objects studied in the lab sessions. You will receive written assessments of your reports so that you will more fully understand the concepts that have been presented, and be better prepared for the final practical test in Week 10. Each of the 6 reports is worth 5%, adding up to a total of 30% of the course grade.

Assessment information

There are six lab reports assessed in this course. These are based on material given in the practicals on:

- 1 - chordates – lab material covered in Week 1
- 2 - sharks – lab material covered in Week 2
- 3 - fish – lab material covered in Week 3
- 4 - frogs and reptiles (“herps”) – lab material covered in Week 5
- 5 - mammals – lab material covered in Week 7
- 6 - birds – lab material covered in Week 9

Unless otherwise notified, lab reports must be submitted at the end of the practical, or a date specified by the relevant lecturer or via Moodle notification. Late submissions will have marks deducted (10% per day). If you have a problem that affects your work, you should immediately apply for special consideration and contact the course convenor/manager if you need an extension.

Lab reports will be returned with feedback (marks and/or written comments) 1-2 weeks following submission.

Assignment submission Turnitin type

Not Applicable

First Practical Test

Assessment Overview

The Practical Test at the end of Week 4 is focused on content delivered and explored during the

previous practical sessions. This test is intended to provide you with feedback about how well you are progressing in terms of absorbing the learning outcomes associated with each lab class. This will be a MCQ test with the opportunity to examine specimens presented for consideration in relation to individual questions.

Course Learning Outcomes

- CL01 : Explain the evolutionary interrelationships between the major groups within the Phylum Chordata.
- CL02 : Explain how the modern biogeographic distribution patterns of the global groups of vertebrates developed over time.
- CL03 : Explain and compare current theories about the origins of the different groups and about the origins of the key features that distinguish the major lineages in the Phylum Chordata.
- CL04 : Evaluate the major challenges and potential solutions for implementing effective, long-term programs to conserve the different threatened vertebrates in Australia.
- CL05 : Examine and learn about key internal and external anatomical features of the major groups of vertebrates using basic dissection techniques.

Detailed Assessment Description

The Practical Test at the end of Week 4 is focused on content delivered and explored during the previous practical sessions. This test is intended to provide you with feedback about how well you are progressing in terms of absorbing the learning outcomes associated with each lab class. This will be an online Multiple Choice Questionnaire, conducted in the BEES computer laboratory.

Assignment submission Turnitin type

Not Applicable

Final Practical Test

Assessment Overview

The Final Practical Test will assess your understanding about all of the content that has been presented in the labs, but primarily the labs that occurred after the first Practical Test in Week 4. This test is designed as a summative assessment of the learning outcomes for the Practical classes covered in weeks 1-9. This Final Practical Test will typically be scheduled in week 10. It will consist of multiple-choice questions associated with specimens that have been seen in the Practicals. Further details will be confirmed during the course.

Course Learning Outcomes

- CL01 : Explain the evolutionary interrelationships between the major groups within the Phylum Chordata.
- CL02 : Explain how the modern biogeographic distribution patterns of the global groups of

vertebrates developed over time.

- CLO3 : Explain and compare current theories about the origins of the different groups and about the origins of the key features that distinguish the major lineages in the Phylum Chordata.
- CLO4 : Evaluate the major challenges and potential solutions for implementing effective, long-term programs to conserve the different threatened vertebrates in Australia.
- CLO5 : Examine and learn about key internal and external anatomical features of the major groups of vertebrates using basic dissection techniques.

Detailed Assessment Description

The Final Practical Test will assess your understanding about all of the content that has been presented in the labs, but primarily the labs that occurred after the first Practical Test in Week 4. This test is designed as a summative assessment of the learning outcomes for the Practical classes covered in weeks 1-9. This Final Practical Test will typically be scheduled in week 10. It will consist of multiple-choice questions associated with specimens that have been seen in the Practicals. Further details will be confirmed during the course.

Assignment submission Turnitin type

Not Applicable

Final Exam

Assessment Overview

The final exam is designed to assess your learning and problem-solving skills on all topics delivered in lectures across all weeks of the term. The exam is typically 2hrs 10 minutes and consists of MCQ - details will be confirmed during the course. The examination will occur during the official university examination period. Feedback is available through inquiry with the course convenor.

Course Learning Outcomes

- CLO1 : Explain the evolutionary interrelationships between the major groups within the Phylum Chordata.
- CLO2 : Explain how the modern biogeographic distribution patterns of the global groups of vertebrates developed over time.
- CLO3 : Explain and compare current theories about the origins of the different groups and about the origins of the key features that distinguish the major lineages in the Phylum Chordata.
- CLO4 : Evaluate the major challenges and potential solutions for implementing effective, long-term programs to conserve the different threatened vertebrates in Australia.

Detailed Assessment Description

The final exam is designed to assess your learning and problem-solving skills on all topics

delivered in lectures across all weeks of the term. The exam is typically 2hrs 10 minutes and consists of MCQ - details will be confirmed during the course. The examination will occur during the official university examination period. Feedback is available through inquiry with the course convenor.

Assignment submission Turnitin type

Not Applicable

General Assessment Information

Suggested approaches to learning in the course, and resource materials

Because this is a fundamental knowledge course, memory work will be a necessary component. There is also a large volume of material which students will encounter, so students are strongly encouraged to study as they go. Relying solely upon last minute preparation for the lab quiz and final prac exam is NOT advised.

Further information about specific tasks will be available on Moodle throughout the course. If you have a problem that affects your work, you should immediately apply for special consideration for that particular assignment.

The final examination will be scheduled by the examinations branch. Students should be available for examination throughout the entire UNSW mid-year examination period.

Supplementary examinations will only be granted to students who miss the final examination due to illness or other unexpected reasons outside their control. A student who wishes to apply for a supplementary examination should apply for special consideration through the normal procedure

Grading Basis

Standard

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 27 May - 2 June	Lecture	Mon 27 May: Introduction to course & Chordates - Prof. Mike Archer
	Lecture	Tues 28 May: Evolution - Prof. Mike Archer
	Lecture	Weds 29 May: Fish1 - Prof. Iain Suthers
	Online Activity	Tue 28 May 9-11am or 1-3pm: Chordates E-book - Prof. Mike Archer
	Laboratory	Thurs 30 May 9-11am or 1-3pm: Introduction to the Vertebrates - Prof. Mike Archer
	Assessment	Lab report Chordates (5%). Turn it in before you leave at the end of your lab session on 30 May.
Week 2 : 3 June - 9 June	Lecture	Mon 3 June: Fish 2 - Prof. Iain Suthers
	Lecture	Tues 4 June: Fish 3 - Prof. Iain Suthers
	Lecture	Weds 5 June: Fish 4 - Prof. Iain Suthers
	Laboratory	Tues 4 June 9-11am or 1-3pm: Bony Fish 1 - Prof. Iain Suthers
	Laboratory	Thurs 6 June 9-11am or 1-3pm: Bony Fish 2 - Prof. Iain Suthers
	Assessment	Lab Report Bony Fish (5%).
Week 3 : 10 June - 16 June	Lecture	Mon 10 June No lecture because of the King's Birthday
	Lecture	Tues 11 June 12-1pm: Classification & Cladistics- Prof. Suzanne Hand
	Lecture	Weds 12 June 1-2pm: Tetrapods Dr Blake Dickson
	Laboratory	Tues 11 June 9-11am or 1-3pm: Sharks 1 - Prof. Mike Archer
	Laboratory	Thurs 13 June 9-11am or 1-3pm: Sharks 2 - Prof. Mike Archer
	Assessment	Lab report Sharks (5%). Turn it in before you leave your lab session on 13 June
Week 4 : 17 June - 23 June	Lecture	Mon 17 June: Frogs 1 - Dr Jodi Rowley
	Lecture	Tues 18 June: Frogs 2 - Dr Jodi Rowley
	Lecture	Weds 19 June: Reptiles 1 - Dr Jodi Rowley
	Laboratory	Tues 18 June 9-11am or 1-3pm: Tetrapods - Prof. Mike Archer
	Assessment	Thurs 20 June 9-11am or 1-3pm: First Practical Test (10%)
Week 5 : 24 June - 30 June	Lecture	Mon 24 June: Reptiles 2 - Dr Jodi Rowley
	Lecture	Tues 25 June: Birds 1 - Prof. Richard Kingsford
	Lecture	Weds 26 June: Birds 2 - Prof. Richard Kingsford
	Laboratory	Tues 25 June 9-11am or 1-3pm: Frogs & Lizards - Dr Jodi Rowley
	Laboratory	Thurs 27 June 9-11am or 1-3pm: Turtles, crocs & snakes - Dr Jodi Rowley
	Assessment	Lab report Frogs & Reptiles (5%). Turn it in before you leave your lab session on 27 June
Week 6 : 1 July - 7 July	Other	No classes
Week 7 : 8 July - 14 July	Lecture	Mon 8 July: Birds 3 - Prof. Richard Kingsford
	Lecture	Tues 9 July: Birds 4 - Prof. Richard Kingsford
	Lecture	Weds 10 July: Birds 5 - Prof. Richard Kingsford
	Laboratory	Tues 11 July 9-11am or 1-3pm: Birds & Dinosaurs - Prof. Richard Kingsford
	Laboratory	Thurs 11 July 10-11am or 1-2pm: Birds in their habitat--Centennial Park - Prof. Richard Kingsford
	Assessment	Lab report Birds (5%)
Week 8 : 15 July - 21 July	Lecture	Mon 15 July: Mammals 1: Origins of Mammals - Prof. Mike Archer
	Lecture	Tues 16 July: Mammals 2: Monotremes - Prof. Mike Archer
	Lecture	Weds 17 July: Mammals 3: Marsupials 1 - Prof. Mike Archer
	Laboratory	Tues 16 July 9-11am or 1-3pm: Mammals 1: Dentitions, The Whole Tooth and Nothing But - Prof. Mike Archer
	Laboratory	Thurs 18 July 10-11am or 1-2 pm: Zoomobile - Prof. Mike Archer
	Assessment	You need to complete and submit your answer to the 'Diet in mammals based on features of the dentition' challenge by the end of Week 8. It's at the end of your worksheet for the lab on 16 July.
Week 9 : 22 July - 28 July	Lecture	Mon 22 July: Mammals 4: Marsupials 2 - Prof. Mike Archer

	Lecture	Tues 23 July: Mammals 5: Placentals - Dr Matt McCurry
	Lecture	Weds 24 July: Mammals 6: End of Extinction - Prof. Mike Archer
	Laboratory	Tues 23 July 9-11am or 1-3pm: Mammals 2: Monotremes & Marsupials - Prof. Mike Archer
	Laboratory	Thurs 25 July 9-11am or 1-3pm: Mammals 3: Placentals - Prof. Mike Archer
	Assessment	Lab report Birds (5%)
Week 10 : 29 July - 4 August	Lecture	Mon 29 July: Mammals 7: Marine Mammals - Dr Matt McCurry
	Lecture	Wed 2 August 12-1pm: Using the past of vertebrates to save their future - Prof. Mike Archer
	Lecture	Weds 31 July: TBD
	Laboratory	Tues 30 July: No practical session
	Assessment	Thurs 1 August 9-11am or 1-3pm: Practical Exam (20%)

Attendance Requirements

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

General Schedule Information

You are expected to attend all your scheduled laboratory classes. If you miss any of these, your progress will be significantly hindered. Any alterations to the schedule will be announced on Moodle. If you miss a class, it is your responsibility to (i) catch up on the course material, and (ii) find out the details of any announcements. Students whose attendance at classes or assessment is affected by obligatory religious ceremonies should discuss ways of dealing with this clash via the official Special Consideration process prior to, or at the commencement of, the course; you may be required to show proof of the nature of the ceremony and your obligation to attend.

Most lectures, although recorded, will be given face-to-face at 3-4 pm on Mondays (G02 E19 PO's), Tuesdays (G1 Civil Engineering) and Wednesdays (Mathews C). Any changes to this arrangement will be announced on Moodle. Attendance at these F2F lectures is not required but recommended as an additional opportunity to interact with the lecturers and potentially ask questions.

Course Resources

Prescribed Resources

Because this course is designed to develop and evaluate students' ability to select and criticize material, students make their own choices of reading matter from the material presented in classes and course manual.

Recommended Resources

While there is no textbook required for this course, there are some recommended readings:

Archer, M., Hand, S.J., Long, J., Worthy, T.H., Schouten, P., 2023. *Prehistoric Australasia: Visions of Evolution and Extinction*. Published by CSIRO (<https://www.publish.csiro.au/book/6994/>).

Pough, F.H. and Janis, C.M. (2022). *Vertebrate Life*. 11th Edition. Oxford University Press (Sinauer), USA. Be sure to get the latest edition as it is completely revised from earlier editions (e.g. 5th).

Adams, B. J. (2018). *Van de Graaf's Photographic Atlas for the Biology Laboratory*. 8th Edition. Morton Publishing Company, Englewood, Colorado.

Shubin, N. (2009). *Your Inner Fish: The Amazing Discovery of Our 375-Million-Year-Old Ancestor*. Penguin, 2009.

Additional Costs

There are no additional costs.

Course Evaluation and Development

This course has been progressively modified over the years, and general reviews and revisions occurred during 2019, 2020 and 2024 in preparation for changed rules about on-line teaching and learning.

Student feedback on the course is gathered annually, using various means, including the Course and Teaching Evaluation and Improvement (CATEI) Process and myExperience.

This feedback is generally positive, and written comments show that any aspect of the course which one student disliked was usually well-liked by another student. Nevertheless, all suggestions for improvement are considered carefully with a view to acting on them constructively where possible. We have reduced the scope of some exercises, and have added more direction to the lab notes where there are large numbers of specimens to examine.

In 2023, myExperience was open to students during term and closed prior to the exam period. We expect the same opportunities for evaluation to occur in 2024.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Michael Archer					No	Yes
Administrator	Troy Myers					No	No
Lecturer	Iain Suthers					No	No
	Richard Kingsford					No	No
	Jodi Rowley					No	No
	Suzanne Hand					No	No
	Matthew McCurry					No	No
	Blake Dickson					No	No
Lab staff	Bernadette Phu					No	No
Demonstrator	Anna Gillespie					No	No
Lecturer	Simon Gorta					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 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](#)