UNSW Course Outline

NEUR4421 Biomedical Perspectives in Neuroscience - 2024

Published on the 12 May 2024

General Course Information

Course Code : NEUR4421
Year : 2024
Term : Term 2
Teaching Period : T2
Is a multi-term course? : No
Faculty : Faculty of Medicine and Health
Academic Unit : School of Biomedical 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 offers workshops on specific and current 'hot topic' issues in biomedical

neurobiology, where you will be exposed to the latest research. Hands-on activities will give you real insight into modern neuroscience techniques, their correct implementation and their limitations. It is designed specifically for Neuroscience Honours students.

Course Aims

The aims of this course are to develop your:

- theoretical knowledge base in biomedical neuroscience.
- capacity for critical analysis of the primary literature.
- ability to concisely present scientific data.
- ability to communicate scientific research to a lay audience.

Relationship to Other Courses

Assistance with progression checking:

If you are unsure how this course fits within your program, you can seek guidance on optimising your program structure from staff at the Nucleus Student Hub.

- Progression plans for UNSW Medicine and Health programs can be found on the UNSW Medicine & Health website.
- Progression plans for UNSW Science programs can be found on the UNSW Science website.

Course Learning Outcomes

Course Learning Outcomes
CLO1 : Articulate a broad understanding of a body of knowledge and theoretical concepts in the biomedical neuroscience field.
CLO2 : Apply skills of critical thinking, conceptual analysis, and consolidation of scientific literature.
CLO3 : Collaboratively present research findings from the scientific literature.
CLO4 : Effectively communicate scientific research to a lay audience.

Course Learning Outcomes	Assessment Item
CLO1 : Articulate a broad understanding of a body of knowledge and theoretical concepts in the biomedical neuroscience field.	• Student Journal Presentation • Online Quizzes (40%)
CLO2 : Apply skills of critical thinking, conceptual analysis, and consolidation of scientific literature.	• Student Journal Presentation
CLO3 : Collaboratively present research findings from the scientific literature.	• Student Journal Presentation
CLO4 : Effectively communicate scientific research to a lay audience.	• 3 Minute Thesis Presentation

Learning and Teaching Technologies

Moodle - Learning Management System | Microsoft Teams

Learning and Teaching in this course

All course materials and course announcements are provided on the course learning management system, Moodle (or Open Access).

By accessing and using the ICT resources provided by UNSW, you are agreeing to abide by the 'Acceptable Use of UNSW ICT Resources' policy particularly on respect for intellectual property and copyright, legal and ethical use of ICT resources and security and privacy.

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
3 Minute Thesis Presentation Assessment Format: Individual	30%	Start Date: Not Applicable Due Date: Week 12: 12 August - 18 August
Student Journal Presentation Assessment Format: Group	30%	Start Date: 2 weeks prior to presentation Due Date: During assigned elective workshop.
Online Quizzes (40%) Assessment Format: Individual	40%	Due Date: 1 week after each workshop.

Assessment Details

3 Minute Thesis Presentation

Assessment Overview

An essential skill for a modern scientist is the ability to communicate research projects and findings to a broad audience. This is particularly important in an academic setting as the research conducted at universities and research institutes is primarily funded through public money.

You will prepare a 3 minute presentation of your thesis research *to date* in accordance with the 3MT® rules towards the end of term. A marking rubric will be provided on the Learning Management System.

You will receive written feedback from the course convenor(s), Neuroscience Honours committee members and peers. Your presentation will be marked by the course convenor(s) and Neuroscience Honours committee members.

Course Learning Outcomes

- CLO4 : Effectively communicate scientific research to a lay audience.

Detailed Assessment Description

Detailed information about this assessment will be provided on the course Moodle page.

Assessment Length

3 minutes

Submission notes

Refer to Moodle for submission information.

Assessment information

Use of Generative Artificial Intelligence (AI) in the assessment is permitted for SIMPLE EDITING ASSISTANCE. This means, for this assessment task, you may use AI-based software to *research* and *prepare* prior to presenting your assessment. You are permitted to use a standard editing and referencing functions in word processing software in the creation of your presentation. You must not use any functions that generate or paraphrase passages of text, whether based on your own work or not. Your oral presentation must be in your own words entirely.

You must acknowledge any such use in your presentation.

This assessment is an oral presentation and does not entail a submission of your work. However, if during your presentation, your marker has concerns that your presentation contains passages of AI-generated text you may be asked to further explain your project and show evidence of the workup of your presentation. If you are unable to satisfactorily demonstrate that the entirety of your presentation was in your own words you may be referred to UNSW Conduct & Integrity Office for investigation for academic misconduct and possible penalties.

UNSW Pro-Vice Chancellor Education and Student Experience (PVCESE) provides guidance on the use of generative Artificial Intelligence in assessments.

Assignment submission Turnitin type

Not Applicable

Student Journal Presentation

Assessment Overview

You will present, in small groups, a journal article to the class using PowerPoint or equivalent in one of your elective workshops (weeks 2 - 10). The presentation will include an explanation of the motivation for the study, a description of the experimental approach, and a critical analysis of the results and the authors' conclusions.

The journal club presentation will be marked by the course convenor(s) and workshop facilitator(s). This group mark contributes 25% of the total mark for this assessment. An individual peer review assessment will contribute 5% of the total mark. A marking rubric will be provided on the Learning Management System.

The group will receive written feedback from the workshop facilitator, the course convenor, and

peers.

Course Learning Outcomes

- CLO1 : Articulate a broad understanding of a body of knowledge and theoretical concepts in the biomedical neuroscience field.
- CLO2 : Apply skills of critical thinking, conceptual analysis, and consolidation of scientific literature.
- CLO3 : Collaboratively present research findings from the scientific literature.

Detailed Assessment Description

Detailed information about this assessment will be provided on the course Moodle page.

Assessment Length

30 minutes

Submission notes

Refer to Moodle for submission information.

Assessment information

Use of Generative Artificial Intelligence (AI) in the assessment is permitted for SIMPLE EDITING ASSISTANCE. This means, for this assessment task, you may use AI-based software to *research* and *prepare* prior to presenting your assessment. You are permitted to use a standard editing and referencing functions in word processing software in the creation of your presentation. You must not use any functions that generate or paraphrase passages of text, whether based on your own work or not. Your oral presentation must be in your own words entirely.

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Assignment submission Turnitin type

Not Applicable

Online Quizzes (40%)

Assessment Overview

Workshops will be followed by quizzes, which are designed to assess your understanding of the content presented. These quizzes will be accessible via the online Learning Management System and typically consist of multiple-choice or short answer questions. You will receive feedback after completion of each quiz.

Number of quizzes: You are required to attend 4 workshops; 2 mandatory workshops (at the beginning of term and/or towards end of term) and 2 elective workshops (weeks 2 - 10). There is one quiz associated with each workshop. Therefore, you will attempt 4 quizzes which are summed to make up the total 40% for this assessment.

Course Learning Outcomes

- CLO1 : Articulate a broad understanding of a body of knowledge and theoretical concepts in the biomedical neuroscience field.

Detailed Assessment Description

Detailed information about this assessment will be provided on the course Moodle page.

Assessment Length

20-30 minutes

Submission notes

Refer to Moodle for submission information.

Assessment information

Use of Generative Artificial Intelligence (AI) in the assessment is NOT PERMITTED. It is prohibited to use any software or service to search for or generate information or answers. If such use is detected, it will be regarded as serious academic misconduct and subject to the standard penalties, which may include 00FL, suspension and exclusion.

UNSW Pro-Vice Chancellor Education and Student Experience (PVCESE) provides guidance on the use of generative Artificial Intelligence in assessments.

Assignment submission Turnitin type

This is not a Turnitin assignment

General Assessment Information

Detailed instructions regarding assessments for this course are provided on the course Moodle page.

For student information on results, grades, and guides to assessment see: https://student.unsw.edu.au/assessment

Grading Basis

Standard

Requirements to pass course

In order to pass this course students must:

- Achieve a composite grade of at least 50 out of 100
- Meet any additional requirements specified in the assessment details section and on Moodle.

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 27 May - 2 June	Workshop	Introduction, statistics, & thesis writing [Mandatory Workshop]
Week 2 : 3 June - 9 June	Assessment	Quiz: Introduction, statistics, & thesis writing
Week 4 : 17 June - 23 June	Workshop	Neuroanatomy and brain atlas construction [Elective Workshop]
Week 5 : 24 June - 30 June	Workshop	The neuropsychology of healthy ageing and falls in older adults [Elective Workshop]
	Assessment	Quiz: Neuroanatomy and brain atlas construction.
Week 7 : 8 July - 14 July	Workshop	Recording/Imaging neuronal and glial activity [Elective Workshop]
	Assessment	Quiz: The neuropsychology of healthy ageing and falls in older adults
Week 8 : 15 July - 21 July	Workshop	Primer on transgenic technology [Elective workshop]
	Assessment	Quiz: Recording/Imaging neuronal and glial activity
Week 9 : 22 July - 28 July	Assessment	Quiz: Primer on transgenic technology
Week 10 : 29 July - 4 August	Workshop	Careers & Communication [Mandatory Workshop]
Week 11 : 5 August - 11 August	Assessment	Quiz: Careers & Communication
Week 12 : 12 August - 18 August	Assessment	3 Minute Thesis Presentation

Attendance Requirements

Students are required to attend the two mandatory workshops and two elective workshops. Parts of the workshops require the students to prepare beforehand. Arrival more than 15 minutes after the start of the class will be recorded as nonattendance. Satisfactory completion of the work set for each class is essential. Non-attendance for other than documented medical or other serious reasons, or unsatisfactory performance, may result in an additional practical assessment or in ineligibility to pass the course.

General Schedule Information

The times and locations of classes can be found on the course Moodle.

The expected engagement for all UNSW 6UOC courses is 150 hours per term. This includes workshops, readings, completion of assessments, and assessment preparation.

Course Resources

Recommended Resources

Recommended resources for this course are provided on the course Moodle page.

Additional Costs

There are no additional costs associated with this course.

Course Evaluation and Development

Student feedback is taken seriously, and continual improvements are made to the course based, in part, on such feedback.

We use student feedback from myExperience surveys to develop and make improvements to the course each year. We do this by identifying areas of the course that require development from both the rating responses and written comments. Please spare a few minutes to complete the myExperience surveys for this course posted at the top of the Moodle page at the end of term.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Jennie Cederholm		Level 3SW, Wallace Wurth building		by appointment	Yes	Yes
	John Power		Level 3SW, Wallace Wurth building		by appointment	Yes	No

Other Useful Information

Academic Information

As a student of UNSW Medicine & Health you are expected to familiarise yourself with the contents of this course outline and the UNSW Student Code and policies and procedures related to your studies.

Student Code of Conduct

Throughout your time studying at UNSW Medicine & Health, you share a responsibility with us for maintaining a safe, harmonious and tolerant University environment. This includes within the courses you undertake during your degree and your interactions with the UNSW community, both on campus and online.

The UNSW Student Code of Conduct website provides a framework for the standard of conduct expected of UNSW students with respect to both academic integrity and your responsibility as a UNSW citizen.

Where the University believes a student may have breached the code, the University may take disciplinary action in accordance with the Student Misconduct Procedure.

The Student Conduct and Integrity Office provides further resources to assist you to understand your conduct obligations as a student at UNSW.

Academic Honesty and Plagarism

Academic integrity

UNSW has an ongoing commitment to fostering a culture of learning informed by academic integrity. All UNSW staff and students have a responsibility to adhere to the principle of academic integrity, and ethical scholarship of learning is fundamental to your success at UNSW Medicine & Health.

Plagiarism, contract cheating, and inappropriate use of generative AI undermine academic integrity and are not tolerated at UNSW. For more information see the Academic Integrity and Plagiarism toolkit.

In addition to the information you are required to review in your ELISE training, UNSW Medicine & Health strongly recommends that you complete the Working with Academic Integrity module before submitting your first assessment task.

Referencing

Referencing is a way of acknowledging the sources of information that you use to research your assignments. Preferred referencing styles vary among UNSW Medicine & Health disciplines, so check your course Learning Management System (e.g. Moodle or Open Learning) page for

information on preferred referencing styles.

For further information on referencing support and styles, see the Current Student Referencing page.

Academic misconduct and plagiarism

At UNSW, academic misconduct is managed in accordance with the Student Misconduct Procedure. Allegations of plagiarism are generally handled according to the UNSW Plagiarism Management Procedure. Plagiarism is defined in the UNSW Plagiarism Policy and is not tolerated at UNSW.

Use of Generative AI and other tools in your assessment

UNSW has provided guiding statements for the use of Generative AI in assessments. This will differ, depending on the individual assessment task, your course requirements, and the course stage within your program.

Your course convenor will outline if and how you can use Generative AI in each your assessment tasks. Options for the use of generative AI include: (1) no assistance; (2) simple editing assistance; (3) planning assistance; and (4) full assistance with attribution.

You may be required to submit the original generative AI responses, or drafts of your original work. Inappropriate use of generative AI is considered academic misconduct.

See your course Moodle (or Open Learning) page for the full instructions for individual assessment tasks for your course.

Submission of Assessment Tasks

Special Consideration

In cases where illness, misadventure or other circumstances beyond your control will prevent you from submitting your assessment by the due date and you require an extension, you need to formally apply for Special Consideration through myUNSW.

UNSW has a **Fit to Sit/Submit rule**, which means that by sitting or submitting an assessment on the scheduled assessment date, you are declaring that you are fit to do so and cannot later apply for Special Consideration.

Timed online assessment tasks

If you experience a technical or connection problem during a timed online assessment, such as a timed quiz, you can apply for Special Consideration. To be eligible to apply you need to contact the Course Convenor and advise them of the issue immediately. You will need to submit an application for Special Consideration immediately, and upload screenshots, error messages or other evidence of the technical issue as supporting documentation. Additional information can be found on: https://student.unsw.edu.au/special-consideration

Examinations

Information about the conduct of examinations in your course is provided on your course Moodle page.

Other assessment tasks

Late submission of assessment tasks

UNSW has standard late submission penalties as outlined in the UNSW Assessment Implementation Procedure, with no permitted variation. All late assignments (unless extension or exemption previously agreed) will be penalised by 5% of the maximum mark per calendar day (including Saturday, Sunday and public holidays).

Late submissions penalties are capped at five calendar days (120 hours). This means that a student is not permitted to submit an assessment more than 5 calendar days (120 hours) after the due date for that assessment (unless extension or exemption previously agreed).

Failure to complete an assessment task

You are expected to complete all assessment tasks for your courses. In some courses, there will be a minimum pass mark required on a specific assessment task (a “hurdle task”) due to the need to assure clinical competency.

Where a hurdle task is applicable, additional information is provided in the assessment information on your course Moodle page.

Feedback on assessments

Feedback on your performance in assessment tasks will be provided to you in a timely manner.

For assessment tasks completed within the teaching period of a course, other than a final assessment, feedback will be provided within 10 working days of submission, under normal circumstances.

Feedback on continuous assessment tasks (e.g. laboratory and studio-based, workplace-based, weekly quizzes) will be provided prior to the midpoint of the course.

Any variation from the above information that is specific to an assessment task will be clearly indicated in the course and assessment information provided to you on your course Moodle (or Open Learning) page.

Faculty-specific Information

Additional support for students

The university offers a wide range of support services that are available for students. Here are some links for you to explore.

- The Current Students Gateway: https://student.unsw.edu.au
- Academic Skills and Support: https://student.unsw.edu.au/academic-skills
- Student support: https://www.student.unsw.edu.au/support
- Student Wellbeing, Health and Safety: https://student.unsw.edu.au/wellbeing

Mind Smart Guides are a series of mental health self-help resources designed to give you the psychological flexibility, resilience and self-management skills you need to thrive at university and at work.

- Mind Smart Guides: https://student.unsw.edu.au/mindsmart
- Equitable Learning Services: https://student.unsw.edu.au/els
- Guide to studying online: https://www.student.unsw.edu.au/online-study

Most courses in UNSW Medicine & Health use Moodle as your Learning Management System. Guidance for using UNSW Moodle can be found on the Current Student page. Difficulties with

Moodle should be logged with the IT Service Centre.

- Moodle Support: https://student.unsw.edu.au/moodle-support

The IT Service Desk is your central point of contact for assistance and support with remote and on-campus study.

- UNSW IT Service Centre: https://www.myit.unsw.edu.au/services/students

Course evaluation and development

At UNSW Medicine & Health, students take an active role in designing their courses and their overall student experience. We regularly seek feedback from students, and continuous improvements are made based on your input. Towards the end of the term, you will be asked to participate in the myExperience survey, which serves as a source of evaluative feedback from students. Your input to this quality enhancement process is valuable in helping us meet your learning needs and deliver an effective and enriching learning experience. Student responses are carefully considered, and the action taken to enhance educational quality is documented in the myFeedback Matters section of your Moodle (or Open Learning) course page.

School-specific Information

Laboratory or practical class safety.

For courses where there is a laboratory or practical-based component, students are required to wear the specified personal protective equipment (e.g., laboratory coat, covered shoes, safety glasses) indicated in the associated student risk assessments. The student risk assessments will be provided on the course Moodle page and must be read and acknowledged prior to the class.

Master of Science in Health Data Science courses

Courses in the Master of Science in Health Data Science are hosted through Open Learning. Additional resources are available on the Health Data Science Student Hub.

Recording of lectures, tutorials and other teaching activities (MSc. HDS only)

Lectures, tutorials and other teaching activities may be recorded. Students should be advised

that they are consenting to the recording by their enrolment in the course or participation in the activity. The purpose of audio and video recordings is to enhance the student experience by supporting engaged learning in an online teaching environment and ensure equitable access to all course resources for our students. If you have concerns about accessing course recordings, or being recorded, please contact the Course Convenor.

School Contact Information

School guidelines on contacting staff:

Course questions

All questions related to course content should be posted on Moodle (or Open Learning) or as directed by your Course Convenor.

In cases where email communication with course convenors is necessary, we kindly request the following:

- Use your official email address for any correspondence with teaching staff.
- We expect a high standard of communication. All communication should avoid using short-hand or texting language.
- Include your full name, student ID, and your course code and name in all communication.

Our course convenors are expected to respond to emails during standard working hours of Monday to Friday, 9am-5pm.

Administrative questions

If you have an administrative question about your program of study at the School please submit your enquiry online at UNSW Ask Us.

Complaints and appeals

Student complaints and appeals: https://student.unsw.edu.au/complaints

If you have any grievances about your studies, we invite you to address these initially to the Course Convenor. If the response does not meet your expectations, you may then contact:

School Grievance Officer, Prof Nick Di Girolamo (n.digirolamo@unsw.edu.au)

Health Data Science programs: School Grievance Officer, Dr Sanja Lujic (s.lujic@unsw.edu.au)