

NEUR4411

Behavioural Perspectives in Neuroscience

Course Outline
Term 1, 2022

School of Medical Sciences
Faculty of Medicine & Health

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1. Staff

All staff teaching in this course are from the School of Psychology. Consultation is by appointment only and may be face-to-face or via Teams.

Position	Name	Email	Consultation times and locations
Course Convenor	Dr Kelly Clemens	k.clemens@unsw.edu.au	By appointment
Co- convenor	Dr Belinda Liddell	b.liddell@unsw.edu.au	By appointment
Guest Lecturers	A/Prof Denovan Begg	d.begg@unsw.edu.au	By appointment
	Dr Justine Fam	j.fam@unsw.edu.au	By appointment
	Dr Karly Turner	karly.turner@unsw.edu.au	By appointment
	Dr Colin Palmer	colin.palmer@unsw.edu.au	By appointment
	Prof Tom Whitford	t.whiford@unsw.edu.au	By appointment

2. Course information

Units of credit: 6

Pre-requisite(s): Enrolled in Neuroscience Honours

Teaching times and locations: Tue 10-12, MAT 310

http://timetable.unsw.edu.au/2022/NEUR4411.html

2.1 Course summary

Neuroscience is conceived of as a core field of knowledge to which many different disciplines contribute. Neuroscience is primarily an experimental discipline and so a proper appreciation of neuroscience requires an understanding of both what is known, and of the limitations imposed by our study tools. This course exposes student to current behavioural neuroscience thought and techniques.

The lectures by discipline experts (basic scientists in animal and human research) will cover the scope and range of approaches in neuroscience and provides the student with a broad base of knowledge from which to appreciate neuroscientific developments.

The weekly seminars will engage students in critical analysis and thinking, including critical analysis of recent technical and theoretical advances in each experts' field.

2.2 Course aims

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

2.3 Course learning outcomes (CLO)

At the successful completion of this course you (the student) should be able to:

- 1. Demonstrate knowledge and general empirical understanding of the techniques and approaches used in the study of behavioural neuroscience in humans and animals.
- 2. Analyze the context in which behavioural neuroscience lies, especially with respect to translation from basic science to the clinic.
- 3. Demonstrate the skills of critical thinking, conceptual analysis, and oral and written expression.

2.4 Relationship between course and program learning outcomes and assessments

Course Learning Outcome (CLO)	LO Statement	Related Tasks & Assessment
CLO 1	Demonstrate knowledge and general empirical understanding of the techniques and approaches used in the study of behavioural neuroscience in humans and animals.	Exam
CLO 2	Analyse the context in which behavioural neuroscience lies, especially with respect to translation from basic science to the clinic.	Essay, Exam
CLO 3	Demonstrate the skills of critical thinking, conceptual analysis, and oral and written expression.	Group Presentation, Essay

Note: there is 1 x Presentation, 1 x Essay and 1 x Exam

3. Strategies and approaches to learning

3.1 Learning and teaching activities

This course involves compulsory weekly 2-hour seminars that will adhere to the following format:

- 50 min Introduction to topic, focusing on discipline-specific techniques and approaches.
 - o What is the big question we are trying to answer in this field?
 - O How can this guestion be addressed using behavioural neuroscience?

- 10 min break
- 50 min In depth discussion of empirical paper showing application of this approach
- 10 minutes for general questions and discussion

Required readings will be posted to Moodle 1 week prior to class.

3.2 Expectations of students

Students are reminded that UNSW recommends that a 6 units-of-credit course should involve about 150 hours of study and learning activities. The formal learning activities total approximately 20 hours contact-time throughout the term and students are expected (and strongly recommended) to do at least the same number of hours of additional study (outside of assessments).

Each seminar is interactive and involves discussion, therefore students are strongly encouraged to participate in-person. If unable to attend due to medical (e.g. COVID) or other necessary reasons, immediately contact the course co-ordinator and provision will be made to join via Teams or Zoom. Evidence relating to the absence must be submitted. **Sessions will not be recorded**.

Students are expected to participate through discussion in seminars and with questions in the two group presentation sessions. This will lead to a more enjoyable and richer learning experience for all involved.

4. Course schedule and structure

Tue. 15-2	Week 1: Introduction to NEUR4411, including information for assessments		
	Modeling mental health disorders: Addiction		
	Dr Kelly Clemens		
Tue. 22-2	Week 2: Modeling mental health disorders: Impulsivity and compulsivity		
	Dr Karly Turner		
Tue. 1-3	Week 3: Oxytocin – more than just a love hormone?		
	Dr Justine Fam		
Tue. 8-3	Week 4: Group Presentations 1		
	Dr Kelly Clemens/Dr Belinda Liddell		
Tue. 15-3	Week 5: Group Presentations 2		
	Dr Kelly Clemens/Dr Belinda Liddell		
Tue. 22-3	Week 6: Flexibility Week (no classes - essay due 25/3/22)		

Tue. 29-3 Week 7: Modelling Reward Dysfunction: Obesity

A/Prof Denovan Begg

Tue. 5-4 Week 8: Determining biomarkers of PTSD: the role of human brain imaging

Dr Belinda Liddell

Tue 12-4 Week 9: Exploring the basis of auditory hallucinations in schizophrenia

Prof Tom Whitford

Tue. 19-4 Week 10: Sensory experience and cortical function in autism

Dr Colin Palmer

Tue. 3-5 Final Exam

Exam Period: 29 April – 12 May

Supplementary Exam Period: 23 May - 27 May

5. Assessment

5.1 Assessment tasks

Assessment task	Length	Weight	Due date and time
Assessment 1: Group Presentation	20-30 min	30%	Week 4 or 5
Assessment 2: Essay	4 pages (double spaced, not including references)	30%	End of Flex Week 5 pm, Friday 25 March
Assessment 3: Exam	7-10 short answer questions, 2 hours	40%	10-12 pm Tuesday 3 rd of May

Group Presentation (30%):

Students will be required to participate in a single 20-30 minute group presentation carried out in class. 5-10 minutes will be allocated for questions and discussion.

Students will be allocated to groups (2-4 students/group, depending on class size) to present a journal article assigned by the course coordinators. This presentation will be prepared using PowerPoint and delivered in class. Group allocation and papers will be assigned in Week 1 of class with details posted on Moodle.

Essay (30%):

Students will write a 4-page (double spaced) essay on a contemporary issue in behavioural neuroscience. The exact topic will vary from year to year. Students will be required to summarise and critically evaluate the primary literature and provide references to justify their stance. The essay topic will be revealed in Week 1 of class with details posted in Moodle.

Exam (40%):

Short answer questions from the weekly seminars and assigned readings. The exam will be prepared for delivery either in person or online via Moodle.

Further information

UNSW grading system: https://student.unsw.edu.au/grades

UNSW assessment policy: https://student.unsw.edu.au/assessment

5.2 Assessment criteria and standards

Group Presentation:

Students will be marked individually based on their performance. General feedback will be provided to the class and further discussion on request from the course coordinator. Marks will be allocated based on the content and clarity of each individual's presentation (visual and verbal), as well as capacity to answer questions and engage in discussion. Specific assessment criteria will be posted to Moodle in Week 1.

Essay:

Students will receive marks based on the structure, content and narrative of the essay, as well how well they use evidence to support any arguments, and their ability to show evidence of critical thinking and insight. Brief written feedback will be provided by the tutor/course coordinator. Specific assessment criteria will be posted to Moodle in Week 1.

Exam:

Assessment will probe an understanding of the topics covered and will be marked by the tutor and / or course coordinator.

5.3 Submission of assessment tasks

Group Presentation: Will occur in person during the allocated class time.

Essay: Is to be submitted via Moodle and will be checked with Turnitin plagiarism detector.

Exam: This will either be held in-person under exam conditions or online via Moodle during the allocated exam time. Answers may also be checked with Turnitin for plagiarism.

Late Submission

Students must attempt all assignments. Late submissions will be penalized at 5% per day capped at five days (120 hours). Students will not be permitted to submit their assessments after this date.

Special Consideration

If you experience a short-term event beyond your control (exceptional circumstances) that impacts your performance in a particular assessment task, you can apply for Special Considerations.

You must apply for Special Consideration via my UNSW **before** the start of your exam or due date for your assessment, except where your circumstances of illness or misadventure stop you from doing so.

If your circumstances stop you from applying before your exam or assessment due date, you must **apply** within 3 working days of the assessment, or the period covered by your supporting documentation.

More information can be found on the **Special Consideration website**.

Equitable Learning Services

If you have a long-term medical or mental health condition, are living with a disability or are the primary carer for someone with a disability, <u>Equitable Learning Services</u> can provide you with ongoing support throughout your studies.

5.4. Feedback on assessment

Group Presentation: Feedback will be provided in class.

Essay: Brief written feedback will be provided as comments on essays in Moodle.

Exam: No feedback will be provided.

6. Academic integrity, referencing 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.

Please use Vancouver or APA referencing style for this course.

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 and plagiarism can be located at:

- The Current Students site https://student.unsw.edu.au/plagiarism, and
- The ELISE training site http://subjectguides.library.unsw.edu.au/elise/presenting

¹ International Center for Academic Integrity, 'The Fundamental Values of Academic Integrity', T. Fishman (ed), Clemson University, 2013.

The Conduct and Integrity Unit provides further resources to assist you to understand your conduct obligations as a student: https://student.unsw.edu.au/conduct.

7. Readings and resources

There are no assigned texts for this course. Weekly readings will be provided ahead of time by each quest lecturer.

8. Administrative matters

Student enquiries should be submitted via student portal https://portal.insight.unsw.edu.au/web-forms/

9. Additional support for students

- The Current Students Gateway: https://student.unsw.edu.au/
- Academic Skills and Support: https://student.unsw.edu.au/academic-skills
- Student Wellbeing and Health https://www.student.unsw.edu.au/wellbeing
- UNSW IT Service Centre: https://www.myit.unsw.edu.au/services/students
- UNSW Student Life Hub: https://student.unsw.edu.au/hub#main-content
- Student Support and Development: https://student.unsw.edu.au/support
- IT, eLearning and Apps: https://student.unsw.edu.au/elearning
- Student Support and Success Advisors: https://student.unsw.edu.au/advisors
- Equitable Learning Services (Formerly Disability Support Unit): https://student.unsw.edu.au/els
- Transitioning to Online Learning https://www.covid19studyonline.unsw.edu.au/
- Guide to Online Study https://student.unsw.edu.au/online-study