Faculty of Medicine and Health
School of Medical Sciences

NEUR4411
Behavioural Perspectives in Neuroscience

T1 2021

COURSE OUTLINE

CRICOS Provider Code 00098G

NEUR4411- Course Outline - 2021

1. Information about the Course

NB: Some of this information is available at https://www.handbook.unsw.edu.au/undergraduate/courses/2021/NEUR4411/

Year of Delivery	***2021***
Course Code	***NEUR4411***
Course Name	***Behavioural Perspectives in Neuroscience***
Academic Unit	***Neuroscience***
Level of Course	***Honours***
Units of Credit	6UOC
Session(s) Offered	T1
Hours per Week	2
Number of Weeks	10 weeks
Commencement Date	Week 1: Tuesday, 16th February, 2021

Summary of Course Structure (for details see 'Course Schedule')

Component	HPW	Time	Day	Location
Seminars	*2*	*10 am - 12 pm*	*Tuesday*	*MAT 310*

Special Details	Important announcements and any changes to this document will be posted on the Moodle course website. This document will be available on the site.

2. Staff Involved in the Course

Convenor/Lecturer	Dr Kelly Clemens	MAT 909	k.clemens@unsw.edu.au
Co-convenor/Lecturer	Dr Belinda Liddell	MAT 1100	b.liddell@unsw.edu.au
Guest Lecturers			
	A/Prof Denovan Begg	MAT 708	d.begg@unsw.edu.au
	Dr Justine Fam	MAT 706	j.fam@unsw.edu.au
	Dr Karly Turner	MAT 404	karly.turner@unsw.edu.au
	Dr Colin Palmer	MAT 1015	colin.palmer@unsw.edu.au
	Prof Tom Whitford	MAT 913	t.whitford@unsw.edu.au

3. Course Details

Course Description & Aims	The course is an introduction to behavioural neuroscience, focusing on traditional approaches, the integration of technological advances into behavioural neuroscience and translational outcomes. The **aims** of the course are to provide you with: • Understanding of how basic research in behavioural neuroscience is used to advance treatments in neurological and mental health disorders • Knowledge of behavioural neuroscience and how it relates to human disorders, in particular mental health • New approaches and techniques used in behavioural neuroscience, including potential limitations or pitfalls
Student Learning Outcomes	The ***learning outcomes*** of this course (that will be assessed through oral and written assessments and exams) are as follows: 1. You will demonstrate knowledge and general empirical understanding of the techniques and approaches used in the study of behavioural neuroscience in humans and animals. 2. You will demonstrate a broad overview of the area of behavioural neuroscience, including strengths and limitations 3. You will demonstrate the skills of critical thinking, conceptual analysis, and oral and written expression.

5. Course Schedule

Weekly seminars by guest lecturers will follow the following format:

- *50 min - Introduction to topic, focusing on discipline-specific techniques and approaches.*
    - *What is the big question we are trying to answer in this field?*
    - *How can this question 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 1 week prior <u>but are not examinable</u>. Seminars will not be recorded.

Tue. 16-2 **Week 1: Introduction to NEUR4411, including information for assessments**
Modeling mental health disorders: Addiction
Dr Kelly Clemens

Tue. 23-2 **Week 2: Modeling mental health disorders: Impulsivity and compulsivity**
Dr Karly Turner

Tue. 2-3 **Week 3: Oxytocin – more than just a love hormone?**
Dr Justine Fam

Tue. 9-3 **<u>Week 4: Group Presentations 1</u>**
Dr Kelly Clemens/Dr Belinda Liddell

Tue. 16-3 **<u>Week 5: Group Presentations 2</u>**
Dr Kelly Clemens/Dr Belinda Liddell

Tue. 23-3 Week 6: Flexibility Week (no classes - <u>essay due 26/3/21</u>)

Tue. 30-3 **Week 7: Modelling Reward Dysfunction: Obesity**
A/Prof Denovan Begg

Tue. 6-4 **Week 8: Determining biomarkers of PTSD: the role of human brain imaging**
Dr Belinda Liddell

Tue 13-4 **Week 9: Exploring the basis of auditory hallucinations in schizophrenia**
Prof Tom Whitford

Tue. 20-4 **Week 10: Sensory experience and cortical function in autism**
Dr Colin Palmer

Tue. 4-5 **<u>Final Exam</u>**

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6. Assessment Tasks

Assessment
Your mark for the course is derived from:

1. **Group Presentation (1 x 30%)** **30%**
   - Topics and format will be given in class week one

2. **Essay** **30%**
   - Topic will be given in class week one
   - Due Friday 26th of March (5pm)
   - A late penalty of 10%/day will apply

3. **Exam**
   - Short answer questions **40%**
   - Tuesday May 4th, 10 am – 12 pm MAT 310 or online

UNSW Academic Honesty and Plagiarism

Academic honesty and plagiarism includes misconduct such as cheating (on exams or by copying other students' assignments) and plagiarism. To avoid plagiarism, you must acknowledge others people's work by referencing it. If you are unsure about what constitutes plagiarism, please talk with the lecturers or tutors. Please read the following explanation carefully, and note the website you can also consult (http://www.lc.unsw.edu.au/plagiarism/index.html).

The penalties for academic dishonesty are severe, and can at the very least mean failure in the assignment or exam or the course, and also can mean exclusion from the university for two years. Please read the UNSW academic honesty policy at http://www.lc.unsw.edu.au/plagiarism/index.html

Useful links

- Transitioning to Online Learning https://www.covid19studyonline.unsw.edu.au/
- Guide to Online Study https://student.unsw.edu.au/online-study
- UNSW Student Life Hub https://student.unsw.edu.au/hub#
- Equitable Learning Services https://student.unsw.edu.au/els
- UNSW policy regarding Special Consideration https://student.unsw.edu.au/special-consideration