NEUR4411
Behavioural Perspectives in Neuroscience

TI 2021

COURSE OUTLINE
1. Information about the Course
NB: Some of this information is available at https://www.handbook.unsw.edu.au/undergraduate/courses/2021/NEUR4411/

<table>
<thead>
<tr>
<th>Year of Delivery</th>
<th>2021</th>
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<tbody>
<tr>
<td>Course Code</td>
<td>NEUR4411</td>
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<tr>
<td>Course Name</td>
<td>Behavioural Perspectives in Neuroscience</td>
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<tr>
<td>Academic Unit</td>
<td>Neuroscience</td>
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<tr>
<td>Level of Course</td>
<td>Honours</td>
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<tr>
<td>Units of Credit</td>
<td>6UOC</td>
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<tr>
<td>Session(s) Offered</td>
<td>T1</td>
</tr>
<tr>
<td>Hours per Week</td>
<td>2</td>
</tr>
<tr>
<td>Number of Weeks</td>
<td>10 weeks</td>
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<tr>
<td>Commencement Date</td>
<td>Week 1: Tuesday, 16th February, 2021</td>
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Summary of Course Structure (for details see 'Course Schedule')

<table>
<thead>
<tr>
<th>Component</th>
<th>HPW</th>
<th>Time</th>
<th>Day</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seminars</td>
<td>2</td>
<td>10 am - 12 pm</td>
<td>Tuesday</td>
<td>MAT 310</td>
</tr>
</tbody>
</table>

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 but are not examinable. Seminars will not be recorded.

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**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**  Week 4: Group Presentations 1  
Dr Kelly Clemens/Dr Belinda Liddell

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

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

**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**  Final Exam
6. Assessment Tasks

**Assessment**
Your mark for the course is derived from:

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

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

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

**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’ 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