

# **PSYN841**

# Neuropsychopharmacology

S1 Day 2019

Department of Psychology

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#### Disclaimer

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#### **General Information**

Unit convenor and teaching staff

**Unit Convenor** 

Jennifer Cornish

jennifer.cornish@mq.edu.au

Contact via jennifer.cornish@mq.edu.au

Credit points

4

Prerequisites

Admission to MClinNeuro

Corequisites

Co-badged status

The first 5 weeks of this unit is co-badged with PSY961 and PSYC987 (Clinical Psychology)

Unit description

This unit provides an overview of the basic principles of neuropharmacology with particular emphasis on the disorders seen in the clinical practice of neuropsychologists and clinical psychologists. It begins with a review of basic principles and then covers the major neurotransmitter systems and how they are disordered in brain injury and psychological disorders such as depression, schizophrenia and the anxiety disorders.

### Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at https://www.mq.edu.au/study/calendar-of-dates

# **Learning Outcomes**

On successful completion of this unit, you will be able to:

Student's understanding of the neuropharmacology of and pharmacotherapies for common psychological disorders (weeks 1-4) are assessed in an in-class multiple choice test in week 5.

The ability to interpret and analyse research literature and theoretical issues is assessed using a 1500 word essay and a class presentation on topics selected by the student. Different topics should be chosen for each assessment to ensure broad coverage of psychopharmacology.

The ability to communicate using information technology will be assessed by the oral

presentation of a psychopharmacology research article using powerpoint slides.

Communication and information technology skills: using electronic data bases to search for papers in relevant topics to neuropharmacology and psychopharmacology.

Written and oral communication skills: taking part in class discussions, and presenting papers in psychopharmacology

Self-awareness skills: identifying and setting targets, time management for assessment completion and scientific communication

Information skills: formulating arguments, judging the relevance and accuracy of information, comparing different points of view

Problem solving: comparing alternative interpretations of neuroscience data, formulating new explanations

### **Assessment Tasks**

Name	Weighting	Hurdle	Due
Test	30%	No	Week 5
Essay	45%	No	Week 12
Oral Presentation	15%	No	Week 8, 9, 10 or 11
Class Participation	10%	No	Week 8, 9, 10 and 11

#### Test

Due: Week 5 Weighting: 30%

**Multiple choice exam (30%)** – 40 MCQ (5-choice) to assess the material covered in week 1-4 inclusive. The exam will be held in class in week 5 of semester 1.

On successful completion you will be able to:

- Student's understanding of the neuropharmacology of and pharmacotherapies for common psychological disorders (weeks 1-4) are assessed in an in-class multiple choice test in week 5.
- Self-awareness skills: identifying and setting targets, time management for assessment completion and scientific communication
- Information skills: formulating arguments, judging the relevance and accuracy of information, comparing different points of view
- Problem solving: comparing alternative interpretations of neuroscience data, formulating

new explanations

## Essay

Due: Week 12 Weighting: 45%

Essay (45%) due to be emailed to Jen by 5pm Friday May 31st, 2019 (week 12). Topics should be selected by the student following approval from the convener. The report is to be 1500 words in 12- point times new roman, using a margin of 2.5 centimetres. Over page or late will result in loss of 5% per 100 words/day (eg 1 day late = 2.25 marks from 45). This means that you can have 99 words over before penalty. Please submit an electronic WORD version to jennifer.cornish@mq.edu.au by 5pm on the due date. Please also submit to Turnitin on the link provided on ilearn.

On successful completion you will be able to:

- The ability to interpret and analyse research literature and theoretical issues is assessed using a 1500 word essay and a class presentation on topics selected by the student.
   Different topics should be chosen for each assessment to ensure broad coverage of psychopharmacology.
- Communication and information technology skills: using electronic data bases to search for papers in relevant topics to neuropharmacology and psychopharmacology.
- Written and oral communication skills: taking part in class discussions, and presenting papers in psychopharmacology
- Self-awareness skills: identifying and setting targets, time management for assessment completion and scientific communication
- Information skills: formulating arguments, judging the relevance and accuracy of information, comparing different points of view
- Problem solving: comparing alternative interpretations of neuroscience data, formulating new explanations

#### Oral Presentation

Due: Week 8, 9, 10 or 11

Weighting: 15%

**Oral Presentation (15%)** on a journal article of your choice (must involve neuropsychopharmacology) that has been approved by the convener. Students will be allocated to a presentation week at the beginning of semester. Please let the convener know of your paper for presentation by semester break, 2019. Feedback on presentations will be provided by email the week following the final student presentation.

On successful completion you will be able to:

- The ability to interpret and analyse research literature and theoretical issues is assessed using a 1500 word essay and a class presentation on topics selected by the student.
   Different topics should be chosen for each assessment to ensure broad coverage of psychopharmacology.
- The ability to communicate using information technology will be assessed by the oral presentation of a psychopharmacology research article using powerpoint slides.
- Communication and information technology skills: using electronic data bases to search for papers in relevant topics to neuropharmacology and psychopharmacology.
- Written and oral communication skills: taking part in class discussions, and presenting papers in psychopharmacology
- Self-awareness skills: identifying and setting targets, time management for assessment completion and scientific communication
- Information skills: formulating arguments, judging the relevance and accuracy of information, comparing different points of view
- Problem solving: comparing alternative interpretations of neuroscience data, formulating new explanations

### **Class Participation**

Due: Week 8, 9, 10 and 11

Weighting: 10%

**Class Participation (10%).** Students are expected to participate in class discussions, particularly at oral presentation (seminar) sessions to foster understanding and critical evaluation of research papers.

On successful completion you will be able to:

- The ability to interpret and analyse research literature and theoretical issues is assessed using a 1500 word essay and a class presentation on topics selected by the student.
   Different topics should be chosen for each assessment to ensure broad coverage of psychopharmacology.
- Written and oral communication skills: taking part in class discussions, and presenting papers in psychopharmacology
- Information skills: formulating arguments, judging the relevance and accuracy of information, comparing different points of view
- Problem solving: comparing alternative interpretations of neuroscience data, formulating new explanations

# **Delivery and Resources**

**How unit is taught:** Each week the biological bases and pharmacotherapies for neuropsychological disorders will be presented and discussed. Contemporary research literature on a given topic will be presented and discussed.

Unit is taught as 1 x 2 hour lectures/seminars Tuesday 2pm-4pm, 04 Western Road 335 Tutorial Room, Semester 1, 2018

The unit is available on iLearn and iLecture.

### **Unit Schedule**

**How unit is taught:** Each week the biological bases for neuropsychological disorders will be presented and discussed. Contemporary research literature on a given topic will be presented and discussed.

Weekly list of topics to be covered:

Week 1(Feb 26<sup>th</sup>): Review of basic physiological & pharmacology, Drug Abuse

Week 2(March 5<sup>th</sup>): Anxiety Disorders

Week 3(March 12<sup>th</sup>): Depression

Week 4(March 19th): Psychosis

Week 5(March 26<sup>th</sup>): In class examination (on week 1-4 inclusive)

Week 6(April 2<sup>rd</sup>): Neurogenesis & Neuroplasticity

Week 7(April 9<sup>th</sup>): Alzheimer's Disease

**SESSION BREAK** 

Week 8(April 30<sup>th</sup>): Student Presentations

Week 9(May 7<sup>th</sup>): Student Presentations

Week 10(May 14<sup>th</sup>): Student Presentations

Week 11 (May 21st): Student Presentations

Week 12(May 28<sup>th</sup>): Parkinson's Disease (ESSAYS DUE this Friday May 31<sup>st</sup>)

Week 13(June 4th): Reading Week - no class

#### **Policies and Procedures**

Macquarie University policies and procedures are accessible from Policy Central (https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- Academic Appeals Policy
- Academic Integrity Policy
- Academic Progression Policy
- Assessment Policy
- Fitness to Practice Procedure
- Grade Appeal Policy
- Complaint Management Procedure for Students and Members of the Public
- Special Consideration Policy (Note: The Special Consideration Policy is effective from 4

  December 2017 and replaces the Disruption to Studies Policy.)

Undergraduate students seeking more policy resources can visit the <u>Student Policy Gateway</u> (htt <u>ps://students.mq.edu.au/support/study/student-policy-gateway</u>). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

If you would like to see all the policies relevant to Learning and Teaching visit Policy Central (https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central).

#### Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/study/getting-started/student-conduct

#### Results

Results published on platform other than <a href="mailto:eStudent">eStudent</a>, (eg. iLearn, Coursera etc.) or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in <a href="mailto:eStudent">eStudent</a>. For more information visit <a href="mailto:ask.mq.edu.au">ask.mq.edu.au</a> or if you are a Global MBA student contact <a href="mailto:globalmba.support@mq.edu.au">globalmba.support@mq.edu.au</a>

### Student Support

Macquarie University provides a range of support services for students. For details, visit <a href="http://students.mq.edu.au/support/">http://students.mq.edu.au/support/</a>

### **Learning Skills**

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study strategies to improve your marks and take control of your study.

- Workshops
- StudyWise
- · Academic Integrity Module for Students
- Ask a Learning Adviser

### Student Services and Support

Students with a disability are encouraged to contact the <u>Disability Service</u> who can provide appropriate help with any issues that arise during their studies.

### Student Enquiries

For all student enquiries, visit Student Connect at ask.mq.edu.au

If you are a Global MBA student contact globalmba.support@mq.edu.au

# IT Help

For help with University computer systems and technology, visit <a href="http://www.mq.edu.au/about\_us/">http://www.mq.edu.au/about\_us/</a> offices\_and\_units/information\_technology/help/.

When using the University's IT, you must adhere to the <u>Acceptable Use of IT Resources Policy</u>. The policy applies to all who connect to the MQ network including students.

## **Graduate Capabilities**

# PG - Capable of Professional and Personal Judgment and Initiative

Our postgraduates will demonstrate a high standard of discernment and common sense in their professional and personal judgment. They will have the ability to make informed choices and decisions that reflect both the nature of their professional work and their personal perspectives.

This graduate capability is supported by:

#### Learning outcomes

- Communication and information technology skills: using electronic data bases to search for papers in relevant topics to neuropharmacology and psychopharmacology.
- Written and oral communication skills: taking part in class discussions, and presenting papers in psychopharmacology
- Self-awareness skills: identifying and setting targets, time management for assessment completion and scientific communication
- Information skills: formulating arguments, judging the relevance and accuracy of information, comparing different points of view
- Problem solving: comparing alternative interpretations of neuroscience data, formulating new explanations

#### Assessment tasks

- Test
- Essay
- · Oral Presentation
- · Class Participation

## PG - Discipline Knowledge and Skills

Our postgraduates will be able to demonstrate a significantly enhanced depth and breadth of knowledge, scholarly understanding, and specific subject content knowledge in their chosen fields.

This graduate capability is supported by:

### Learning outcomes

- Student's understanding of the neuropharmacology of and pharmacotherapies for common psychological disorders (weeks 1-4) are assessed in an in-class multiple choice test in week 5.
- The ability to interpret and analyse research literature and theoretical issues is assessed using a 1500 word essay and a class presentation on topics selected by the student.
   Different topics should be chosen for each assessment to ensure broad coverage of psychopharmacology.
- The ability to communicate using information technology will be assessed by the oral presentation of a psychopharmacology research article using powerpoint slides.
- Communication and information technology skills: using electronic data bases to search for papers in relevant topics to neuropharmacology and psychopharmacology.

- Written and oral communication skills: taking part in class discussions, and presenting papers in psychopharmacology
- Information skills: formulating arguments, judging the relevance and accuracy of information, comparing different points of view
- Problem solving: comparing alternative interpretations of neuroscience data, formulating new explanations

#### Assessment tasks

- Test
- Essay
- Oral Presentation
- · Class Participation

### PG - Critical, Analytical and Integrative Thinking

Our postgraduates will be capable of utilising and reflecting on prior knowledge and experience, of applying higher level critical thinking skills, and of integrating and synthesising learning and knowledge from a range of sources and environments. A characteristic of this form of thinking is the generation of new, professionally oriented knowledge through personal or group-based critique of practice and theory.

This graduate capability is supported by:

### **Learning outcomes**

- The ability to interpret and analyse research literature and theoretical issues is assessed using a 1500 word essay and a class presentation on topics selected by the student.
   Different topics should be chosen for each assessment to ensure broad coverage of psychopharmacology.
- The ability to communicate using information technology will be assessed by the oral presentation of a psychopharmacology research article using powerpoint slides.
- Written and oral communication skills: taking part in class discussions, and presenting papers in psychopharmacology
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- Problem solving: comparing alternative interpretations of neuroscience data, formulating new explanations

#### **Assessment tasks**

- Test
- Essay

- · Oral Presentation
- · Class Participation

### PG - Research and Problem Solving Capability

Our postgraduates will be capable of systematic enquiry; able to use research skills to create new knowledge that can be applied to real world issues, or contribute to a field of study or practice to enhance society. They will be capable of creative questioning, problem finding and problem solving.

This graduate capability is supported by:

### Learning outcomes

- The ability to interpret and analyse research literature and theoretical issues is assessed using a 1500 word essay and a class presentation on topics selected by the student.
   Different topics should be chosen for each assessment to ensure broad coverage of psychopharmacology.
- Communication and information technology skills: using electronic data bases to search for papers in relevant topics to neuropharmacology and psychopharmacology.
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#### **Assessment tasks**

- Test
- Essay
- Oral Presentation
- Class Participation

### PG - Effective Communication

Our postgraduates will be able to communicate effectively and convey their views to different social, cultural, and professional audiences. They will be able to use a variety of technologically supported media to communicate with empathy using a range of written, spoken or visual formats.

This graduate capability is supported by:

#### Learning outcomes

- The ability to interpret and analyse research literature and theoretical issues is assessed using a 1500 word essay and a class presentation on topics selected by the student.
   Different topics should be chosen for each assessment to ensure broad coverage of psychopharmacology.
- The ability to communicate using information technology will be assessed by the oral presentation of a psychopharmacology research article using powerpoint slides.
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- Essay
- · Oral Presentation
- Class Participation

# PG - Engaged and Responsible, Active and Ethical Citizens

Our postgraduates will be ethically aware and capable of confident transformative action in relation to their professional responsibilities and the wider community. They will have a sense of connectedness with others and country and have a sense of mutual obligation. They will be able to appreciate the impact of their professional roles for social justice and inclusion related to national and global issues

This graduate capability is supported by:

### **Learning outcomes**

- The ability to interpret and analyse research literature and theoretical issues is assessed using a 1500 word essay and a class presentation on topics selected by the student.
   Different topics should be chosen for each assessment to ensure broad coverage of psychopharmacology.
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- Essay
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