MEDI2300

Nervous System

Session 1, Special circumstances 2021

Medicine, Health and Human Sciences Faculty level units

Contents

Notice

As part of Phase 3 of our return to campus plan, most units will now run tutorials, seminars and other small group activities on campus, and most will keep an online version available to those students unable to return or those who choose to continue their studies online.

To check the availability of face-to-face activities for your unit, please go to timetable viewer. To check detailed information on unit assessments visit your unit's iLearn space or consult your unit convenor.

General Information

Unit convenor and teaching staff
Unit Convener
Cara Hildreth
cara.hildreth@mq.edu.au

Credit points
10

Prerequisites
40cp at 1000 level or above including HLTH108 or ANAT1001

Corequisites

Co-badged status

Unit description
This unit will provide you with an introductory understanding of the nervous system. This unit integrates both anatomy and physiology allowing you to learn about how the nervous system is organised and communicates information with a particular focus on the production of movement, processing of sensory information, regulation of homeostatic function and the basics of learning and memory. You will also be introduced to drug classes that positively and negatively affect the functioning of the nervous system and the clinical consequences that arise from pathological changes to the nervous system. Key learning activities will include lectures, tutorial and practical sessions.

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:

ULO1: Describe the general organisation of the nervous system and how communication occurs within the nervous system.

ULO2: Identify the brain structures critical for movement, sensation, homeostatic function, and learning and memory.

ULO3: Discuss how the nervous system produces movement, processes sensory information, regulates homeostatic function and consolidates learning and memory.

ULO4: Outline the mechanism of action of specifc drug classes that affect the functioning of the nervous system.

ULO5: Identify how common pathological conditions affect neural control of movement, sensation, homeostatic function and/or learning and memory.

General Assessment Information

Grade descriptors and other information concerning grading are contained in Schedule 1 of the Macquarie University Assessment Policy, available at https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policies/assessment.

Further details for each assessment task will be available on iLearn.

All final grades are determined by a grading committee and are not the Unit Convenor's sole responsibility.

Students will be awarded a final grade plus a Standardised Numerical Grade (SNG). The SNG is not necessarily a summation of the individual assessment components. The final grade and SNG that are awarded reflect the corresponding grade descriptor in the Grading Policy.

To pass this unit, students must demonstrate sufficient evidence of achievement of the learning outcomes, meet any ungraded requirements including professionalism, and achieve an SNG of 50 or better.

Assessment Tasks

Name	Weighting	Hurdle	Due
In-Class Quiz	30%	No	Weeks 2-13
Anatomy Test	20%	No	Week 12
Final Exam	50%	No	University Exam Period

In-Class Quiz

Assessment Type [1]: Participatory task
Indicative Time on Task [2]: 12 hours
Due: **Weeks 2-13**
Weighting: **30%**

Short in-class quiz held during each tutorial class and conducted under exam conditions that assess specified lecture and/or practicals, building on learning that has taken place during each tutorial. Top six test results count towards final mark.

On successful completion you will be able to:

- Describe the general organisation of the nervous system and how communication occurs within the nervous system.
- Identify the brain structures critical for movement, sensation, homeostatic function, and learning and memory.
- Discuss how the nervous system produces movement, processes sensory information, regulates homeostatic function and consolidates learning and memory.
- Outline the mechanism of action of specifc drug classes that affect the functioning of the nervous system.
- Identify how common pathological conditions affect neural control of movement, sensation, homeostatic function and/or learning and memory.

Anatomy Test

Assessment Type [1]: Quiz/Test
Indicative Time on Task [2]: 20 hours
Due: **Week 12**
Weighting: **20%**

In-class spot test assessing material covered in and related to anatomy practical sessions.

On successful completion you will be able to:

- Describe the general organisation of the nervous system and how communication occurs within the nervous system.
- Identify the brain structures critical for movement, sensation, homeostatic function, and learning and memory.
- Discuss how the nervous system produces movement, processes sensory information, regulates homeostatic function and consolidates learning and memory.

Final Exam

Assessment Type [1]: Examination
Indicative Time on Task [2]: 20 hours
Due: **University Exam Period**
Weighting: **50%**

On-campus formal exam assessing content delivered across the session taken during the University examination period.

On successful completion you will be able to:

- Describe the general organisation of the nervous system and how communication occurs within the nervous system.

- Identify the brain structures critical for movement, sensation, homeostatic function, and learning and memory.
- Discuss how the nervous system produces movement, processes sensory information, regulates homeostatic function and consolidates learning and memory.
- Outline the mechanism of action of specifc drug classes that affect the functioning of the nervous system.
- Identify how common pathological conditions affect neural control of movement, sensation, homeostatic function and/or learning and memory.

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[1] If you need help with your assignment, please contact:

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
- the Writing Centre for academic skills support.

[2] Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

Delivery and Resources

In MEDI2300, you will engage in a range of online and/or face-to-face learning activities, including lectures, tutorials and practicals. Details can be found on the MEDI2300 iLearn site.

Unit Schedule

Week	Lecture Topic	Scheduled Learning Activity	Assessment Task
1	Introduction	Tutorial	None
2	Organisation of the Nervous System	Online Lecture, Tutorial	In-class Quiz
3	Cells of the Nervous System	Online Lecture, Tutorial	In-class Quiz
4	Membrane Potential	Online Lecture, Tutorial Practical	In-class Quiz
5	Action Potential	Online Lecture, Tutorial	In-class Quiz
6	Neurotransmission	Online Lecture, Tutorial	In-class Quiz
7	Development of the Nervous System	Online Lecture, Tutorial, Practical	In-class Quiz
8	Special Senses I	Online Lecture, Tutorial	In-class Quiz
9	Special Senses II	Online Lecture, Tutorial	In-class Quiz
10	Somatosensation	Online Lecture, Tutorial	In-class Quiz
11	Movement	Online Lecture, Tutorial, Practical	In-class Quiz

Week	Lecture Topic	Scheduled Learning Activity	Assessment Task
12	Homeostasis	Online Lecture, Tutorial	In-class Quiz, Practical Test
13	Learning and Memory	Online Lecture, Tutorial	In-class Quiz

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://policies.mq.edu.au). 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

Students seeking more policy resources can visit Student Policies (https://students.mq.edu.au/support/study/policies). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

To find other policies relating to Teaching and Learning, visit Policy Central (https://policies.mq.edu.au) and use the search tool.

Student Code of Conduct

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

Results

Results published on platform other than eStudent, (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 eStudent. For more information visit ask.mq.edu.au or if you are a Global MBA student contact globalmba.support@mq.edu.au

Student Support

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

Learning Skills

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study

strategies to help you improve your marks and take control of your study.

- Getting help with your assignment
- Workshops
- StudyWise
- Academic Integrity Module

The Library provides online and face to face support to help you find and use relevant information resources.

- Subject and Research Guides
- Ask a Librarian

Student Services and Support

Students with a disability are encouraged to contact the Disability Service 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 http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/.

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