



BMSC12007 *Neurological Physiology & Measurement*

Term 1 - 2018

Profile information current as at 28/04/2024 02:06 am

All details in this unit profile for BMSC12007 have been officially approved by CQUniversity and represent a learning partnership between the University and you (our student). The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

General Information

Overview

Accurate assessment and management of neurological conditions requires comprehensive knowledge of neuroanatomy and neurophysiology. You will study the anatomy and physiology of the nervous system, the pathophysiology of neurological conditions and diagnostic tests related to neurological function. This unit prepares you for entry into the clinical environment by discussing the foundational knowledge of neurophysiology and application of key clinical concepts that will be required to provide health care to patients within your chosen health profession. Attendance at practical activities is a requirement of this unit.

Details

Career Level: *Undergraduate*

Unit Level: *Level 2*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

Pre-requisite: BMSC11001 Human Body Systems 1 or ALLH11004 Anatomy and Physiology for Health Professionals.

Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the [Assessment Policy and Procedure \(Higher Education Coursework\)](#).

Offerings For Term 1 - 2018

- Brisbane
- Bundaberg
- Cairns
- Mackay
- Melbourne
- Mixed Mode
- Rockhampton
- Sydney
- Townsville

Attendance Requirements

All on-campus students are expected to attend scheduled classes – in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

Residential Schools

This unit has a Compulsory Residential School for distance mode students and the details are:

Click here to see your [Residential School Timetable](#).

Website

[This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.](#)

Class and Assessment Overview

Recommended Student Time Commitment

Each 6-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

Class Timetable

[Regional Campuses](#)

Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

[Metropolitan Campuses](#)

Adelaide, Brisbane, Melbourne, Perth, Sydney

Assessment Overview

1. **Practical Assessment**

Weighting: Pass/Fail

2. **Written Assessment**

Weighting: 50%

3. **Examination**

Weighting: 50%

Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the [University's Grades and Results Policy](#) for more details of interim results and final grades.

CQUniversity Policies

All University policies are available on the [CQUniversity Policy site](#).

You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure – Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure – International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback – Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the [CQUniversity Policy site](#).

Previous Student Feedback

Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

Feedback from Unit evaluation feedback, self reflection

Feedback

Residential school activities supplemented learning for all cohorts of students and have received positive feedback. Presently there are 8 offerings of residential schools across the country. Availability of online practicals have been suggested to cater for the large number of students enrolled via mixed mode.

Recommendation

Options of online practicals, virtual experiments are being considered for future offerings.

Feedback from Unit evaluation feedback

Feedback

The structure of the unit and the provision of weekly study tools and case studies to support student learning was much appreciated.

Recommendation

Continue provision of weekly study tools and case studies.

Unit Learning Outcomes

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

1. Explain the detailed structure and function of the central and peripheral nervous system
2. Discuss neurological function of peripheral motor and sensory nerves
3. Apply knowledge of neuroanatomy and neurophysiology to interpret key clinical concepts
4. Identify the pharmacological basis of drugs that affect the nervous system
5. Perform relevant tests to assess neurological function.

Alignment of Learning Outcomes, Assessment and Graduate Attributes



Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes				
	1	2	3	4	5
1 - Practical Assessment - 0%		•			•
2 - Written Assessment - 50%	•		•	•	
3 - Examination - 50%	•	•	•	•	

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes				
	1	2	3	4	5
1 - Communication	•	•	•	•	•
2 - Problem Solving	•	•	•	•	•
3 - Critical Thinking	•	•	•	•	
4 - Information Literacy	•	•	•	•	•
5 - Team Work		•			•
6 - Information Technology Competence	•	•	•	•	•
7 - Cross Cultural Competence			•		•
8 - Ethical practice					•
9 - Social Innovation					
10 - Aboriginal and Torres Strait Islander Cultures					

Alignment of Assessment Tasks to Graduate Attributes

Assessment Tasks	Graduate Attributes									
	1	2	3	4	5	6	7	8	9	10
1 - Practical Assessment - 0%	•	•		•	•	•	•	•		
2 - Written Assessment - 50%	•	•	•	•		•	•	•		
3 - Examination - 50%	•	•	•	•		•				

Textbooks and Resources

Textbooks

BMSC12007

Prescribed

Neuroanatomy through Clinical Cases

Second Edition (2017)

Authors: Hal Blumenfeld

Oxford University Press Australia and New Zealand

ISBN: 9780878936137

Binding: Paperback

Additional Textbook Information

Note that this book comes packaged with a subscription access code for the Interactive e-book.

[View textbooks at the CQUniversity Bookshop](#)

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)

Referencing Style

All submissions for this unit must use the referencing style: [Harvard \(author-date\)](#)

For further information, see the Assessment Tasks.

Teaching Contacts

Sonia Saluja Unit Coordinator

s.saluja@cqu.edu.au

Schedule

Week 1 - 05 Mar 2018

Module/Topic	Chapter	Events and Submissions/Topic
Neuroanatomy overview and basic definitions	2	

Week 2 - 12 Mar 2018

Module/Topic	Chapter	Events and Submissions/Topic
Brain and Environs: Cranium, Ventricles and Meninges	5	

Week 3 - 19 Mar 2018

Module/Topic	Chapter	Events and Submissions/Topic
Corticospinal Tract and other motor pathways	6	

Week 4 - 26 Mar 2018

Module/Topic	Chapter	Events and Submissions/Topic
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Somatosensory pathways
 Spinal nerve roots 7, 8, 9
 Major plexuses and peripheral nerves

Week 5 - 02 Apr 2018

Module/Topic	Chapter	Events and Submissions/Topic
Cerebral Hemispheres and vascular supply	10	

Vacation Week - 09 Apr 2018

Module/Topic	Chapter	Events and Submissions/Topic
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Week 6 - 16 Apr 2018

Module/Topic	Chapter	Events and Submissions/Topic
Brainstem and cranial nerves EEG, epilepsy and seizures	12 Moodle resource	

Week 7 - 23 Apr 2018

Module/Topic	Chapter	Events and Submissions/Topic
Cerebellum and Basal Ganglia	15, 16	

Week 8 - 30 Apr 2018

Module/Topic	Chapter	Events and Submissions/Topic
Limbic System and higher order cerebral function	18,19	

Week 9 - 07 May 2018

Module/Topic	Chapter	Events and Submissions/Topic
ANS, neuropharmacology	Moodle resource	Written Assessment Due: Week 9 Friday (11 May 2018) 11:45 pm AEST

Week 10 - 14 May 2018

Module/Topic	Chapter	Events and Submissions/Topic
Revision		

Week 11 - 21 May 2018

Module/Topic	Chapter	Events and Submissions/Topic
Revision		

Week 12 - 28 May 2018

Module/Topic	Chapter	Events and Submissions/Topic
Revision		

Review/Exam Week - 04 Jun 2018

Module/Topic	Chapter	Events and Submissions/Topic
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Exam Week - 11 Jun 2018

Module/Topic	Chapter	Events and Submissions/Topic
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Term Specific Information

There is a compulsory residential school for all students enrolled in this unit. The residential school sessions for this unit will run as follows:

Session 1: MEL campus. Week 6: April 17 and 18, 2018 (CB77 students and mixed mode students only)

Session 2: SYD campus. Week 6: April 20 and 21, 2018 (CB77 students and mixed mode students only)

Session 3: BNE campus. Week 7: April 23 and 24, 2018 (CB77 students and mixed mode students only)

Session 4: BNE campus. Week 7: April 26 and 27, 2018 (CB77 students and mixed mode students only)

Session 5: MKY campus. Week 8: May 1 and 2, 2018 (CB77 students and mixed mode students only)

Session 6: ROK campus. Week 10: May 14 and 15, 2018 (CB84, CC30, CG85, CG93 and CG95 students and mixed mode students only)

Session 7: ROK campus. Week 10: May 18 and 19, 2018 (CB84, CC30, CG85, CG93 and CG95 students and mixed mode students only)

Session 8: TVL campus. Week 11: May 22 and 23, 2018 (CG95, CC30 students only)

Session 9: CNS campus. Week 11: May 25 and 26, 2018 (CG95, CC30 students only)

Note: You are required to sign up for one session only.

You must attend the residential school session at the campus where you are enrolled to complete your course of study. Please nominate your campus for the residential school session via student allocator before making arrangements for travel and accommodation. For work and health safety reasons, it is essential that you nominate your residential school session in order to secure a place. To ensure you can secure your preferred attendance dates it is recommended that you nominate your residential school session at the start of term. More information about enrolling into residential school will be available on Moodle.

Please note: The practical sessions for this unit are run as a 2 day block. For on-campus students this is referred to as a practical session and for mixed mode students it is referred to as a residential school.

In effect, for this unit the practical sessions and residential school are the same thing, occur on the same dates and provide an opportunity for on campus and mixed mode students to meet each other.

Assessment Tasks

1 Practical Assessment

Assessment Type

Practical Assessment

Task Description

During the residential school session, you will complete a series of practical tasks to set up, use and interpret data generated from neurophysiological measurement equipment. Practical tasks will include brain dissection; brain structure and reflexes; EEG; sensory and motor experiments. and an OSCE. Neurological assessments for your OSCE will be specific to your course of study. A laboratory workbook associated with the practical tasks and OSCE must be completed and submitted at the end of each residential school. The lab workbook will have a set of tasks which are graded as pass/fail.

Assessment Due Date

Practical assessment or OSCE will be conducted at each residential school session.

Return Date to Students

Week 12 Friday (1 June 2018)

Due to the multiple number of residential school sessions running until week 11, the practical assessment results will be available to students in week 12.

Weighting

Pass/Fail

Assessment Criteria

A pass/fail grade will be awarded for tasks completed in the lab workbook including the OSCE. Failure to attend the residential school will result in a fail grade.

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Offline

Submission Instructions

The laboratory workbook is to be submitted at the end of your residential school, on campus.

Learning Outcomes Assessed

- Discuss neurological function of peripheral motor and sensory nerves
- Perform relevant tests to assess neurological function.

Graduate Attributes

- Communication
- Problem Solving
- Information Literacy
- Team Work
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

2 Written Assessment

Assessment Type

Written Assessment

Task Description

In your role as a health professional you will be required to provide health care to patients with all kinds of neurological conditions. This assessment task is designed to present a real world presentation of a neurological condition similar to what you may come across in the clinical environment. You will be presented with a clinical case scenario along with information regarding the physical and neurological condition of a patient. You will be required to answer a set of questions based on this clinical case scenario. This assessment item is designed to assess your understanding of nervous system anatomy and physiology, pathophysiology of neurological conditions and application of key clinical concepts.

Assessment Due Date

Week 9 Friday (11 May 2018) 11:45 pm AEST

Return Date to Students

Week 12 Friday (1 June 2018)

Weighting

50%

Minimum mark or grade

To pass this unit, you are required to attain a minimum of 50% of the marks available for this assessment.

Assessment Criteria

Assessment criteria will be based on knowledge of theory, rationalisation, presentation of information and referencing. If your assessment is submitted after the due date/time without an approved extension it will be penalised 5% per 24 hour period that it is late.

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online

Submission Instructions

To be submitted as a Word document

Learning Outcomes Assessed

- Explain the detailed structure and function of the central and peripheral nervous system
- Apply knowledge of neuroanatomy and neurophysiology to interpret key clinical concepts
- Identify the pharmacological basis of drugs that affect the nervous system

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking

- Information Literacy
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

Examination

Outline

Complete an invigilated examination.

Date

During the examination period at a CQUniversity examination centre.

Weighting

50%

Length

180 minutes

Minimum mark or grade

To pass this unit, you are required to attain a minimum of 50% of the marks available for the exam.

Exam Conditions

Closed Book.

Materials

Dictionary - non-electronic, concise, direct translation only (dictionary must not contain any notes or comments).

Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the [Student Academic Integrity Policy and Procedure](#). This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

What is a breach of academic integrity?

A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

Why is academic integrity important?

A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

Where can I get assistance?

For academic advice and guidance, the [Academic Learning Centre \(ALC\)](#) can support you in becoming confident in completing assessments with integrity and of high standard.

What can you do to act with integrity?



Be Honest

If your assessment task is done by someone else, it would be dishonest of you to claim it as your own



Seek Help

If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)



Produce Original Work

Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem