



# BMSC12009 *Sleep Physiology and Measurement*

## Term 2 - 2017

Profile information current as at 29/04/2024 02:05 am

All details in this unit profile for BMSC12009 have been officially approved by CQU University 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

This unit enables students to relate diagnostic monitoring of sleep behaviour across the lifespan via polysomnography to sleep physiology and specific sleep disorder groups. Common causes and treatments for sleep disordered breathing, insomnia, hypersomnia and sleep related movement disorders will be investigated.

### 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

BMSC12007 Neurological Physiology and Measurement

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 2 - 2017

- Distance
- Rockhampton

### 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).

### 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. **Written Assessment**

Weighting: 20%

#### 2. **Group Discussion**

Weighting: 40%

#### 3. **Examination**

Weighting: 40%

### 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 Students

##### Feedback

Weekly study tools and discussions enhanced the learning outcomes

##### Recommendation

Continue the use of weekly study tools

## Unit Learning Outcomes

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

1. Describe normal sleep physiology with reference to gender and age specific differences.
2. Define circadian rhythms and factors that influence them.
3. Analyse the diagnosis and consequences of sleep deprivation.
4. Describe the measurement and function of polysomnographic recording of sleep behaviour.
5. Interpret the analysis process for sleep staging of polysomnographic recordings.
6. Explore causes, clinical features and treatment of sleep disordered breathing.
7. Discuss the prevalence, types and treatments for insomnia.
8. Describe symptoms, monitoring and evaluation techniques for hypersomnia.
9. Discuss and differentiate sleep related movement disorders.
10. Evaluate the use of polysomnography in investigating sleep disordered breathing in children.

## Alignment of Learning Outcomes, Assessment and Graduate Attributes



### Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes									
	1	2	3	4	5	6	7	8	9	10
1 - Written Assessment - 20%	•	•		•	•					
2 - Group Discussion - 40%			•			•	•	•	•	•
3 - Examination - 40%	•	•	•	•	•	•	•	•	•	•

### Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes									
	1	2	3	4	5	6	7	8	9	10
1 - Communication	•	•		•			•	•	•	
2 - Problem Solving			•		•					

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

## Alignment of Assessment Tasks to Graduate Attributes

Assessment Tasks	Graduate Attributes									
	1	2	3	4	5	6	7	8	9	10
<b>1 - Written Assessment - 20%</b>	•			•						
<b>2 - Group Discussion - 40%</b>	•			•	•	•				
<b>3 - Examination - 40%</b>	•	•		•						

## Textbooks and Resources

### Textbooks

BMSC12009

#### Prescribed

#### Fundamentals of Sleep Medicine

(2012)

Authors: Richard B. Berry, MD

Elsevier Saunders

Philadelphia , PA , USA

ISBN: 9781437703269

Binding: Hardcover

[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

**Romeo Batacan** Unit Coordinator  
[r.j.batacan@cqu.edu.au](mailto:r.j.batacan@cqu.edu.au)

## Schedule

### Week 1 - 10 Jul 2017

Module/Topic	Chapter	Events and Submissions/Topic
Normal Sleep Physiology	6, 7	

### Week 2 - 17 Jul 2017

Module/Topic	Chapter	Events and Submissions/Topic
Circadian Rhythms	26	

### Week 3 - 24 Jul 2017

Module/Topic	Chapter	Events and Submissions/Topic
Polysomnography 1: Basic Sleep Monitoring. Types of monitoring devices.	1, 2, 13	

### Week 4 - 31 Jul 2017

Module/Topic	Chapter	Events and Submissions/Topic
Polysomnographic analysis of Sleep	3, 4	

### Week 5 - 07 Aug 2017

Module/Topic	Chapter	Events and Submissions/Topic
Polysomnography 2: Monitoring Respiration. Monitoring Limb movements	8, 9, 12	

### Vacation Week - 14 Aug 2017

Module/Topic	Chapter	Events and Submissions/Topic
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### Week 6 - 21 Aug 2017

Module/Topic	Chapter	Events and Submissions/Topic
Sleep deprivation and its consequences	6	<b>Written Assessment</b> Due: Week 6 Monday (21 Aug 2017) 9:00 am AEST

### Week 7 - 28 Aug 2017

Module/Topic	Chapter	Events and Submissions/Topic
Sleep Disordered Breathing - Obstructive Sleep Apnea	15 - 20	

### Week 8 - 04 Sep 2017

Module/Topic	Chapter	Events and Submissions/Topic
Sleep Disordered Breathing - Central Sleep Apnea	21	

### Week 9 - 11 Sep 2017

Module/Topic	Chapter	Events and Submissions/Topic
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Insomnia 25

#### Week 10 - 18 Sep 2017

Module/Topic	Chapter	Events and Submissions/Topic
Hypersomnia	24, 14	<b>Group Discussion</b> Due: Week 10 Friday (22 Sept 2017) 11:45 pm AEST

#### Week 11 - 25 Sep 2017

Module/Topic	Chapter	Events and Submissions/Topic
Sleep-related Movement Disorders	23	

#### Week 12 - 02 Oct 2017

Module/Topic	Chapter	Events and Submissions/Topic
Review		

#### Review/Exam Week - 09 Oct 2017

Module/Topic	Chapter	Events and Submissions/Topic
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#### Exam Week - 16 Oct 2017

Module/Topic	Chapter	Events and Submissions/Topic
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## Assessment Tasks

### 1 Written Assessment

#### Assessment Type

Written Assessment

#### Task Description

Summative written assessment will assess your knowledge of topics covered in weeks 1-5. You will be required to answer a set of questions covering the fundamental aspects of the unit regarding normal sleep physiology, circadian rhythms and polysomnography. The questions will be uploaded on Moodle.

#### Assessment Due Date

Week 6 Monday (21 Aug 2017) 9:00 am AEST

#### Return Date to Students

Week 9 Friday (15 Sept 2017)

#### Weighting

20%

#### Minimum mark or grade

You will be required to achieve a minimum of 50% of the marks available, to pass the unit.

#### Assessment Criteria

Performance in this task will be marked based on the accuracy of content and use of technical terms.

#### Referencing Style

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

#### Submission

Online

#### Submission Instructions

Submit as a word document.

#### Learning Outcomes Assessed

- Describe normal sleep physiology with reference to gender and age specific differences.
- Define circadian rhythms and factors that influence them.
- Describe the measurement and function of polysomnographic recording of sleep behaviour.
- Interpret the analysis process for sleep staging of polysomnographic recordings.

## Graduate Attributes

- Communication
- Information Literacy

## 2 Group Discussion

### Assessment Type

Group Discussion

### Task Description

Working in small groups, students will be required to complete a group activity using Google docs. The activity will be based on various sleep disorders discussed in the latter half of the term. All sources of information must be cited and referenced. Detailed information will be available on Moodle.

### Assessment Due Date

Week 10 Friday (22 Sept 2017) 11:45 pm AEST

### Return Date to Students

Week 12 Friday (6 Oct 2017)

### Weighting

40%

### Minimum mark or grade

Students must obtain at least 50% of the individual marks available for this group task to pass this unit.

### Assessment Criteria

This assessment is designed to strengthen the student's understanding of sleep disorders. The task will help in basic understanding, acquisition of knowledge, and application of clinical concepts. In addition, this group task will require the student to gather information, communicate the knowledge and work in a team. Assessment criteria will be based on the accuracy of content, feedback and support provided to other group members. Further details will be posted on Moodle.

### Referencing Style

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

### Submission

Online Group

### Learning Outcomes Assessed

- Analyse the diagnosis and consequences of sleep deprivation.
- Explore causes, clinical features and treatment of sleep disordered breathing.
- Discuss the prevalence, types and treatments for insomnia.
- Describe symptoms, monitoring and evaluation techniques for hypersomnia.
- Discuss and differentiate sleep related movement disorders.
- Evaluate the use of polysomnography in investigating sleep disordered breathing in children.

## Graduate Attributes

- Communication
- Information Literacy
- Team Work
- Information Technology Competence

## Examination

### Outline

Complete an invigilated examination.

### Date

During the examination period at a CQUniversity examination centre.

### Weighting

40%

### Length

180 minutes

### Minimum mark or grade

45

**Exam Conditions**

Closed Book.

**Materials**

No calculators permitted

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