



PMSC12004 Advanced Electrophysiology and Coronary Care

Term 3 - 2018

Profile information current as at 11/05/2024 08:14 pm

All details in this unit profile for PMSC12004 have been officially approved by CQUUniversity 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 will enable you to complete detailed clinical assessments and examination of cardiac patients, focusing on the use of 12-lead electrocardiograms as a diagnostic tool in emergency care. You will study the pathophysiology, diagnosis, and treatment of a range of cardiac and cardiorespiratory conditions, including acute coronary syndromes, cardiac failure, and cardiac arrest. Practical coronary care skills such as defibrillation and 12 lead ECG acquisition will be taught in this unit. Problem-based case management and clinical interventions are practised in the high-fidelity simulation environment during the residential school, allowing you to contextualise your knowledge of coronary care in preparation for decision-supported thrombolysis in paramedic practice.

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 - PMSC11002 and BMSC11002 Co-requisite - PMSC12001

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 3 - 2018

- Mixed Mode

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. **Written Assessment**

Weighting: 50%

2. **Practical Assessment**

Weighting: Pass/Fail

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 Have your say & Self Review

Feedback

A number of students enjoyed the Clinical Practice Discussion forums and felt that they were very beneficial and relevant, however, they commented that there were too many of them and they felt like the marking rubric was not clear.

Recommendation

The clinical practice discussion forums will be kept in the next offering, however, some refinements will be made to the number of forums and a new marking rubric will be developed.

Feedback from Have your say

Feedback

The residential schools were highlighted as enjoyable and the students like putting into practice everything they had learnt but they felt like there were inconsistencies in teachings by casual staff and that the residential school needs to be longer.

Recommendation

Will explore the possibility of increasing residential school length, however, this will incur an increase in costs for students. All casual staff were provided with a document outlining requirements of residential school and were briefed daily on the importance of consistency. This will continue to be monitored at each offering. A group discussion was held at the end of each day with all students to clear up any inconsistencies in teaching or to clarify any points, this will continue in the next offering.

Unit Learning Outcomes

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

1. Apply evidence-based knowledge of pathophysiology to differentiate between a broad range of cardiorespiratory conditions
2. Accurately interpret ECGs to diagnose coronary conditions including dysrhythmias and acute coronary syndromes
3. Integrate comprehensive knowledge of current evidence-based practice to articulate and/or undertake clinical assessment, skills and interventions in the management of cardiorespiratory conditions.

Justification for this unit is strongly influenced by industry feedback on first CQUniversity graduate paramedics. By increasing the paramedic-specific focus of this unit the graduates will be better prepared for independent on-road practice without additional educational support from the ambulance services.

Alignment of Learning Outcomes, Assessment and Graduate Attributes



Alignment of Assessment Tasks to Learning Outcomes

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

Assessment Tasks	Learning Outcomes		
	1	2	3
3 - Examination - 50%	•	•	•

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes		
	1	2	3
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 - Written Assessment - 50%			•	•		•				
2 - Practical Assessment - 0%	•	•	•	•	•			•		
3 - Examination - 50%		•	•	•						

Textbooks and Resources

Textbooks

PMSC12004

Prescribed

Huszar's ECG and 12-Lead Interpretation

5th Edition (2017)

Authors: Keith Wesley

Elsevier

St Louis , Missouri , USA

ISBN: 978-0-323-35575-9

Binding: Paperback

PMSC12004

Supplementary

The 12-Lead ECG in Acute Coronary Syndromes

3rd Edition (2012)

Authors: Tim Phelan; Barbara Aehlert

Elsevier

Maryland Heights , Missouri , USA

ISBN: 978-9-323-08063-7

Binding: Paperback

[View textbooks at the CQUniversity Bookshop](#)

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Access to University Library System
- Access to Zoom

Referencing Style

All submissions for this unit must use the referencing style: [American Psychological Association 6th Edition \(APA 6th edition\)](#)

For further information, see the Assessment Tasks.

Teaching Contacts

Laura Triffett Unit Coordinator

l.triffett@cqu.edu.au

Schedule

Week 1 - 05 Nov 2018

Module/Topic	Chapter	Events and Submissions/Topic
Anatomy & Physiology review, ECG basics, Resuscitation and Defibrillation review.	Prescribed Text - Chapter 1-4 Supplementary Text - Chapter 1	

Week 2 - 12 Nov 2018

Module/Topic	Chapter	Events and Submissions/Topic
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12 Lead ECG Introduction

Prescribed Text - Chapter 12
Supplementary Text Chapter 2 & 3

Week 3 - 19 Nov 2018

Module/Topic	Chapter	Events and Submissions/Topic
Sinus & Atrial Rhythms	Prescribed text - Chapter 5, 6 & 11	

Week 4 - 26 Nov 2018

Module/Topic	Chapter	Events and Submissions/Topic
Junctional & Ventricular Rhythms	Prescribed text - Chapter 7, 8 & 11	Written assignment proposal due Friday 5 pm

Vacation Week - 03 Dec 2018

Module/Topic	Chapter	Events and Submissions/Topic
Break Week		

Week 5 - 10 Dec 2018

Module/Topic	Chapter	Events and Submissions/Topic
Atrioventricular Blocks & Bundle Branch Blocks	Prescribed text - Chapter 9, 11 & 13	

Week 6 - 17 Dec 2018

Module/Topic	Chapter	Events and Submissions/Topic
Coronary Heart Disease & Acute Coronary Syndrome Part 1	Prescribed text - Chapter 15,16 & 17 Supplementary Text Chapter 4	Assignment Reply due Friday 5 pm

Week 7 - 02 Jan 2019

Module/Topic	Chapter	Events and Submissions/Topic
Coronary Heart Disease & Acute Coronary Syndrome Part 1	Prescribed text - Chapter 15,16 & 17 Supplementary Text Chapter 5, 6, & 7	

Week 8 - 07 Jan 2019

Module/Topic	Chapter	Events and Submissions/Topic
Other ECG findings	Prescribed text - Chapter 14	Written assignment due Friday 5 pm

Week 9 - 14 Jan 2019

Module/Topic	Chapter	Events and Submissions/Topic
Congenital Heart Defects	Nil reading from prescribed text this week.	

Week 10 - 21 Jan 2019

Module/Topic	Chapter	Events and Submissions/Topic
Self orientated unit revision Residential School Prep	Prescribed text - Appendix B & C	

Week 11 - 28 Jan 2019

Module/Topic	Chapter	Events and Submissions/Topic
Self-orientated unit revision Residential School Prep	Prescribed text - Appendix B & C	Residential School in Rockhampton

Week 12 - 04 Feb 2019

Module/Topic	Chapter	Events and Submissions/Topic
Exam revision Residential School Prep		Objective Structured Clinical Examination (OSCE) Due: Week 12 Monday (4 Feb 2019) 11:45 pm AEST

Exam Week - 11 Feb 2019

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

There is a compulsory residential school in Rockhampton for all students enrolled in this unit.

Assessment Tasks

1 Written Assessment

Assessment Type

Written Assessment

Task Description

There are three (3) separate parts to this assessment task.

Part A- Assignment Proposal

You are required to choose one of the topics provided on the Moodle page and you are required to post a proposal (250 words +/- 10%) for your assignment topic on the assessment forum by the end of week four. This should be a brief description of your topic, how you will source your literature, and any other relevant comments. The latter may include potential problems with sourcing relevant literature, relevance to paramedic practice etc.

Part A is due Friday at 5 pm in week four of the term. All posts to the assessment forum will be anonymous and students will not be able to see other student's posts until they have made an initial post on the assessment forum.

Part B- Proposal Reply

You are required to respond to at least one other student's proposal. You may comment on their topic, suggest databases, journals or articles which may be relevant, additional search strategy potential difficulties you can see with their proposal etc. Replies should be a minimum of 150 words. Your comments should be professional and of a standard consistent with the profession and year two undergraduate education. References are not required, but please ensure your academic writing is of a high standard. You are encouraged to reply to more than one proposal.

Response to other students posts is due Friday at 5 pm in week 6.

Part C- Assignment

You are required to expand on your initial proposal and write a 1500 word clinical essay/review of current research for your chosen topic. You must research and use evidence-based data to discuss your chosen topic. Topics will be available on the Moodle page at the start of term. You may tailor the assignment slightly, however, you must ensure I have approved the proposal you posted to the forum before you proceed.

Assessment Due Date

Part A is due 5-pm Friday of Week 4, Part B is due 5-pm Friday of Week 6, Part C is due 5-pm Friday of week 8.

Return Date to Students

Week 10 Friday (25 Jan 2019)

Weighting

50%

Minimum mark or grade

50

Assessment Criteria

PART A & B - Assignment Proposal & Reply

Part A & B are worth 10 marks in total. There will be no part marks awarded (there will be a penalty of 5% each day late submissions). If you post an appropriate proposal and reply as per the guidelines above, you will receive the full 10 marks. If you fail to post a proposal or reply, you will receive 0 marks for part A & B. You still need to post a proposal, however, to get approval for your topic.

PART C- Assignment

Part C is worth 40 marks in total. The assignment should be of a high academic standard in line with the professional standards and in line with a higher education submission. The emphasis should be on the use of credible, recent and scholarly journal articles. Papers will be marked in line with the rubric which will be posted on the Moodle page at the start of term.

All assignments must be put through Turnitin. The word count for the assignment is 1500 words (+ / - 10%) excluding references.

This is due by 5 pm, Friday, week eight. A marking rubric will be provided on the Moodle page at the start of term.

Please note that you should select and use at least SIX (6) recent peer-reviewed scientific journal articles on your topic. These articles should be dated after 2010. You may also use expert textbooks and websites, however, please note that you are not to use your prescribed textbook or lectures from this unit and references from the website

http://www.wikipedia.org will not be accepted. In this assessment, you are required to demonstrate and develop your research skills.

Your assignment MUST be in your own words. It is expected that you to include AT LEAST 10 references in total.

Referencing Style

- [American Psychological Association 6th Edition \(APA 6th edition\)](#)

Submission

Online

Learning Outcomes Assessed

- Apply evidence-based knowledge of pathophysiology to differentiate between a broad range of cardiorespiratory conditions

Graduate Attributes

- Critical Thinking
- Information Literacy
- Information Technology Competence

2 Objective Structured Clinical Examination (OSCE)

Assessment Type

Practical Assessment

Task Description

For this assessment, students will be required to attend a compulsory residential school. This assessment task will consist of Objective Structured Clinical Examination (OSCE's) which will take place during the residential school. The format of the OSCE's will be CME (Case Management Exercise), Viva Voce or a Clinical Skill assessment which relates to the learning outcomes of this unit.

There will be a total of three (3) assessment tasks each designed to assess the knowledge and practical skills acquired during this unit.

There will be one (1) long case CME's where students will be allocated 30 minutes to complete this part of the assessment.

This long case CME will be in the format of a structured scenario looking at the following areas :

Patient assessment and history taking

Evidence gathering and patient treatment

Implementation of interventions, procedures and skills

Overall patient and scene management

There will also be two (2) short case assessments where students will be allocated 15 minutes to complete each of these assessments.

These short case OSCE's will be in the format of either a viva voce or a clinical skill assessment.

Assessment Due Date

Week 12 Monday (4 Feb 2019) 11:45 pm AEST

Assessments will take place during residential school

Return Date to Students

Exam Week Monday (11 Feb 2019)

2 weeks after conclusion of residential school

Weighting

Pass/Fail

Minimum mark or grade

50

Assessment Criteria

This practical assessment is a pass/fail assessment. Students must achieve a cumulative pass mark of greater than 50% for the three (3) OSCE assessments in order to pass this assessment.

Each long case OSCE will be worth 50% of the overall mark and each short case will be worth 25% of the overall mark for this assessment piece.

There will be varied scoring tools used based on the type of OSCE assessment. The scoring tools for each station are validated and reliable and will be available to students via the Moodle page at the commencement of term.

During these assessments, if there are any errors performed which would cause immediate harm to yourself, partner, patient or bystanders this will result in a critical error being recorded.

Critical errors in this unit will be classed as anything, by act or omission, that causes immediate harm or has the

potential to cause harm, to yourself, partner, patient or bystanders or any procedure that is performed outside your scope of practice. During any form of assessment, if any of the following are witnessed the assessment will immediately cease, and no marks will be given for that assessment. Furthermore, any critical error discovered on review or moderation will also result in no marks being given for that particular assessment.

- Unsafe defibrillation
- Incorrect joule delivered during defibrillation
- Defibrillation of a non-shockable rhythm
- Failure to recognise a cardiac arrest within 1 minute
- Failure to defibrillate a shockable rhythm within 2 minutes
- Failure to perform a complete drug check
- Incorrect sharps disposal or unsafe practice with a sharp
- Performing a skill or procedure outside the scope of practice taught to you in PMSC11002, PMSC12001 or PMSC12004
- Administering pharmacology that is outside your scope of practice, or administering an incorrect drug or drug dose.
- Any grossly unsafe practice, as determined by the assessing academic

If you do not understand any of the above, please do not hesitate to clarify with your unit coordinator.

Referencing Style

- [American Psychological Association 6th Edition \(APA 6th edition\)](#)

Submission

No submission method provided.

Learning Outcomes Assessed

- Accurately interpret ECGs to diagnose coronary conditions including dysrhythmias and acute coronary syndromes
- Integrate comprehensive knowledge of current evidence-based practice to articulate and/or undertake clinical assessment, skills and interventions in the management of cardiorespiratory conditions.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Team Work
- 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

50

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