



PMSC12004 Advanced Electrophysiology and Coronary Care

Term 1 - 2018

Profile information current as at 30/04/2024 06:03 am

All details in this unit profile for PMSC12004 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

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 1 - 2018

- Cairns
- Distance
- Rockhampton
- 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. **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 Student evaluations

Feedback

Quality of some of the exemplar ECG's used were not of a high quality

Recommendation

The quality of the exemplar ECG's used in this unit were superior to those that would be experienced on road. An ongoing process of continued review will be implemented in relation to all exemplar material.

Feedback from Self reflection & Student Feedback

Feedback

Peerwise assessment task

Recommendation

Assessment tasks will be reviewed and consideration will be given to using Peerwise as a formative assessment next year.

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

 N/A Level Introductory Level Intermediate Level Graduate Level Professional Level Advanced Level

Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes		
	1	2	3
1 - Written Assessment - 50%	•		
2 - Practical Assessment - 0%		•	•
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 Mar 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 Mar 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 Mar 2018

Module/Topic	Chapter	Events and Submissions/Topic
Sinus & Atrial Rhythms	Prescribed text - Chapter 5, 6 & 11	Clinical Discussion Topic One Due 23rd March

Week 4 - 26 Mar 2018

Module/Topic	Chapter	Events and Submissions/Topic
Junctional & Ventricular Rhythms	Prescribed text - Chapter 7, 8 & 11	

Week 5 - 02 Apr 2018

Module/Topic	Chapter	Events and Submissions/Topic
Atrioventricular Blocks & Bundle Branch Blocks	Prescribed text - Chapter 9, 11 & 13	Clinical Discussion Topic Two Due 6th April

Vacation Week - 09 Apr 2018

Module/Topic	Chapter	Events and Submissions/Topic
Break Week		

Week 6 - 16 Apr 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	Clinical Discussion Topic Three Due 20th April

Week 7 - 23 Apr 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 5, 6, & 7	

Week 8 - 30 Apr 2018

Module/Topic	Chapter	Events and Submissions/Topic
Other ECG findings	Prescribed text - Chapter 14	Clinical Discussion Topic Four Due 4th May

Week 9 - 07 May 2018

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

Week 10 - 14 May 2018

Module/Topic	Chapter	Events and Submissions/Topic
Self orientated unit revision Residential School Prep	Prescribed text - Appendix B & C	Cairns Residential School Starts 20th May Clinical Discussion Topic Five Due 18th May

Week 11 - 21 May 2018

Module/Topic	Chapter	Events and Submissions/Topic
Self-orientated unit revision Residential School Prep	Prescribed text - Appendix B & C	Rockhampton Residential School One Starts 21st May Rockhampton Residential School Two Starts 25th May

Week 12 - 28 May 2018

Module/Topic	Chapter	Events and Submissions/Topic
Exam revision Residential School Prep		Townsville Residential School Starts 29th May Internal Student Practical Assessments

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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Assessment Tasks

1 Clinical Practice Discussion

Assessment Type

Written Assessment

Task Description

Throughout the term, you are required to participate in five different Clinical Practice Discussion (CPD) forums which correspond to selected topics that are relevant to this unit. A variety of discussion topics will be presented every two weeks and will close two weeks later. You are required to choose one topic of the topics that are available and actively contribute to that discussion.

The CPD forums will utilise the 'Verso' education software platform. Teaching staff will act as moderators for the CPD forums, however the emphasis of these forums centres around student engagement and interaction as well as student-led constructive and contemporary contribution.

Each student must contribute to all selected discussions and their initial forum post must be a minimum of 400 words (+/-10%), however, if you are answering or posing a question after your initial post the word count just needs to be appropriate to the question or statement.

Assessment Due Date

Two weeks after Clinical Practice Discussion topics are released. Topic One due date 23rd March 2018. Topic Two due date 6th April 2018. Topic Three due date 20th April. Topic Four due date 4th May 2018. Topic Five due date 18th May

Return Date to Students

Two weeks after topic has closed

Weighting

50%

Minimum mark or grade

50

Assessment Criteria

Engagement in the Clinical Practice Discussion Forums is compulsory, failure to engage in all 5 of the forums will result in a failing grade. In the absence of an approved extension, there will be no late submissions allowed for this assessment item.

Each CPD will be worth 10% each and will be based on the following criteria:

Interactivity and Professionalism

Demonstrated prompt and appropriate interaction with the posed question. Demonstrated proficiency and professionalism in the ability to address questions or challenges posed by other participants in the forum. Utilised language and dialogue that is expected and appropriate for the health profession.

Engagement and Contribution to Dialogue

Demonstrated engagement with the forum and positively contributed to the discussions by addressing or posing questions, challenging ideas, stimulated ongoing relevant conversation and added real value to the discussions. Actively improved the learning outcomes for other students as a result of the contributions.

Quality of Information

Demonstrated appropriate language, descriptions, structure, references and referencing for the forum posts. Utilise contemporary evidence or teachings in the responses with clear links to clinical or practical implementation. Identified gaps in the evidence to support current clinical practice and/or discuss novel approaches and ideas based on contemporary evidence or clinical practice

All discussion posts must be referenced appropriately.

Referencing Style

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

Submission

No submission method provided.

Submission Instructions

Submission via the Verso software platform

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 weekly internal classes (for internal students) or a compulsory residential school (for external students). This assessment task will consist of Objective Structured Clinical Examination (OSCE's) which will take place during the internal session or the residential school. The format of the OSCE's will be CME (Case Management Exercise), Viva Voce or a Clinical Skill Station which relates to the learning outcomes of this unit. There will be a total of three (3) assessment tasks each designed to assess knowledge and practical skills acquired during this unit.

There will be two (2) long case CME's where students will be allocated 20 minutes to complete each assessment.

Each 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 one (1) short case OSCE which will be either a Viva Voce or a Clinical Skill Station, and students will be allocated 10 minutes to complete this assessment task.

Assessment Due Date

During residential school or final internal class

Return Date to Students

2 weeks after conclusion of residential school

Weighting

Pass/Fail

Minimum mark or grade

50

Assessment Criteria

Each long case OSCE will be worth 20% of the overall mark for this assessment and the short case OSCE will be worth 10% of the overall mark for this assessment.

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.

Students must achieve an overall pass mark of 50% for all three (3) OSCE.

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 that causes immediate harm to yourself, partner, patient or bystanders or any procedure that is performed outside the 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 OSCE:

- Unsafe defibrillation
- Incorrect joule delivered to the patient
- Defibrillation of an unshockable rhythm
- Failure to recognise a cardiac arrest
- Failure to recognise a shockable rhythm
- 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 PMSC12001 or PMSC12004

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).
No calculators permitted

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