COURSE OUTLINE

PAR211 Cardiac and Respiratory Emergencies

School: School of Health - Paramedicine

2027 | Semester 1

UniSC Sunshine Coast | BLENDED LEARNING | Most of your course is on campus but you may be able to do some components of this course online.

Please go to unisc.edu.au for up to date information on the teaching sessions and campuses where this course is usually offered.

1. What is this course about?

1.1. Description

This course examines the epidemiology of cardiovascular and respiratory conditions across the lifespan in Australia. You will analyse the factors affecting the prevalence and outcome of these diseases and investigate the role of paramedics in these changing trends. This course will develop the knowledge, critical thinking and technical skills required to initiate primary emergency healthcare. You will develop an understanding of primary health care and broader health systems that optimise patient outcomes in cases of cardiovascular and respiratory disease.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
BLENDED LEARNING			
Tutorial/Workshop 1 – On campus face to face	2hrs	Week 1	13 times
Laboratory 1 – On campus face to face	3hrs	Week 1	13 times

1.3. Course Topics

Introduction to case based, problem centred learning

Cardiovascular & respiratory conditions & emergencies:

- Review of cardiovascular and respiratory anatomy (incl. histology and embryology) & physiology (incl. electrophysiology)
- Cardiovascular and respiratory pharmacology
- Epidemiology of coronary heart disease (CHD) and respiratory disorders
- Differential diagnosis of chest pain
- CHD, Angina, Unstable Angina, AMI – STEMI / NSTEMI
- Perfusion, syncope, blood pressure & hypertension
- Heart failure, cardiogenic shock, congenital heart disease
- Cardiac arrhythmias, ECG rhythm recognition & 12 lead ECG interpretation
- Epidemiology of sudden cardiac arrest (SCA)
- Cardiac arrest management: adult and paediatric
- Post resuscitative care
- Congenital heart disease
- Defining hypoxia, hypercarbia, oxygenation & ventilation concepts
- Differential diagnosis of respiratory distress
- Asthma, COPD, pneumonia, chest infection, plural effusion & pneumothorax
- Pulmonary embolus
- Airway ventilation emergencies
- Communicable airways disease & occupational lung disease
- Introduction to advanced airway & ventilation management

1.4. Mature Content

Nudity, Adult themes

2. What level is this course?

200 Level (Developing)

Building on and expanding the scope of introductory knowledge and skills, developing breadth or depth and applying knowledge and skills in a new context. May require pre-requisites where discipline specific introductory knowledge or skills is necessary. Normally, undertaken in the second or third full-time year of an undergraduate programs.

3. What is the unit value of this course?

12 units

4. How does this course contribute to my learning?

COURSE LEARNING OUTCOMES On successful completion of this course, you should be able to...	GRADUATE QUALITIES MAPPING Completing these tasks successfully will contribute to you becoming...	PROFESSIONAL STANDARD MAPPING * Paramedicine Board of Australia
1 Apply evidence-based paramedic primary healthcare to cardiovascular and respiratory presentations across the lifespan in a culturally safe manner.	Knowledgeable Empowered	1, 1.1.e, 1.1.k, 3, 3.1.a, 3.1.b, 3.2.a, 3.2.b, 3.2.c, 3.2.d, 3.2.e, 3.2.f, 3.3.a, 3.3.c, 3.3.d
2 Demonstrate critical reasoning and an ethical approach to paramedic primary healthcare within a crisis resource management framework.	Knowledgeable Creative and critical thinker	1, 1.1.f, 1.1.g, 1.1.h, 1.2.b, 1.2.d, 1.2.e, 1.3.a, 1.3.b, 1.4.a, 1.1, 2.1.a, 2.1.b, 2.1.c, 2.1.d, 3, 3.1.a, 3.1.b, 3.2.a, 3.2.b, 3.2.c, 3.2.d, 3.2.e, 3.2.f, 3.3.a, 3.3.c
3 Evaluate the epidemiology of cardiovascular and respiratory conditions across the lifespan, and factors that influence health outcomes.	Knowledgeable Creative and critical thinker Empowered	3, 3.1.a, 3.1.b, 3.2.a, 3.2.c, 3.2.d, 3.2.e, 3.3.c, 3.3.d, 5, 5.2.a, 5.3.a, 5.3.b, 5.3.c, 5.3.d, 5.3.f, 5.4.c, 5.4.e, 5.6.c
4 Critically analyse the evidence using a prescribed style that underpins paramedic primary healthcare.	Knowledgeable	2.1.c, 3, 3.1.b, 3.2.a, 3.2.b, 3.2.c, 3.2.d, 3.2.e, 3.3.c, 3.3.d, 3.4.c, 3.2, 3.3, 5, 5.3.a, 5.3.b, 5.3.c, 5.3.d, 5.3.f, 5.6.c

* Competencies by Professional Body

CODE	COMPETENCY
PARAMEDICINE BOARD OF AUSTRALIA	
1	Domain 1: The professional and ethical practitioner
1.1.e	Provide relevant information to a patient and demonstrate appropriate methods to obtain informed consent.
1.1.k	Practise in accordance with the applicable legislation governing the safe use of scheduled medicines by paramedics in the jurisdiction of practice.
1.1.f	Demonstrate knowledge of Australia's healthcare systems, their standards and requirements.
1.1.g	Demonstrate understanding of the basic principles underpinning bio- ethics in paramedicine practice.
1.1.h	Demonstrate culturally safe practice when providing healthcare services for Aboriginal and Torres Strait Islander Peoples.
1.2.b	Display appropriate professional behaviour in patient interactions.
1.2.d	Identify and respect appropriate boundaries between patients and health professionals.
1.2.e	Assess each situation, determine the nature and severity of the problem and apply the required knowledge and experience to provide a response that is in the best interest of the patient/s.
1.3.a	Recognise and respond appropriately to unsafe or unprofessional practice.
1.3.b	Integrate organisational directives, policies, procedures and guidelines with Professional standards.
1.4.a	Demonstrate understanding of the principles of patient advocacy and their application to paramedicine practice.
1.1	Practise ethically and professionally, consistent with relevant legislation and regulatory requirements
2.1.a	Establish a rapport with the patient to gain understanding of their issues and perspectives, and to encourage their active participation and partnership in care and/or treatment.
2.1.b	Communicate with the patient and/or other relevant people to collect and convey information and reach an agreement about the purpose of any care and treatment.
2.1.c	Convey knowledge and procedural information in ways that engender trust and confidence, and respects patient confidentiality, privacy and dignity.
2.1.d	Respond appropriately to patient queries or issues.
3	Domain 3: The evidence-based practitioner
3.1.a	Operate within a framework of making informed, evidence-based, reasonable and professional judgements about their practice, with acting in the best interests of their patients as their primary concern.
3.1.b	Make sensible, practical, and culturally safe decisions about their practice, taking account of all relevant information and the best interests of the people who use, or are affected by, the service being provided.
3.2.a	Apply evidence-based practice principles along with critical and reflective thinking to resolve clinical challenges.
3.2.b	Demonstrate a logical and systematic approach to problem-solving and situation analysis.
3.2.c	Analyse and critically evaluate the information collected to make clinical judgments.
3.2.d	Recognise that clinical judgements involve consideration of conflicting information and evidence.
3.2.e	Formulate a diagnosis informed by the patient assessment and analysis of context and situation.
3.2.f	Identify the time criticality of treatment, referral, handover and where appropriate, transport.
3.3.a	Select or modify approaches to meet the needs of patients, their relatives and carers, reflecting culturally safe practice when practicing.
3.3.c	Using appropriate resources to support professional decision-making.
3.3.d	Demonstrate a level of skill in the use of information technology appropriate to their practice.

CODE	COMPETENCY
3.4.c	Seek input from others to confirm professional learning and development needs.
3.2	Use clinical reasoning and problem-solving skills to determine clinical judgements and appropriate actions
3.3	Draw on appropriate knowledge, resources and skills in order to make professional judgements
5	Domain 5: The paramedicine practitioner
5.2.a	Identify factors or conditions that may affect the patient behaviour and/or capacity to undergo the procedure.
5.3.a	Understand the structure, function and pathophysiology of the human body, relevant to their practice, together with knowledge of health, human growth and development, disease, disorder and dysfunction.
5.3.b	Understand the principles and applications of scientific enquiry, including the evaluation of treatment efficacy and the research process.
5.3.c	Understand the theoretical basis of and the variety of approaches to assessment and intervention.
5.3.d	Demonstrate an applied knowledge of human anatomy and physiology sufficient to understand the nature and effects of injury or illness and to conduct assessment and observation in order to establish patient management strategies.
5.3.f	Understand the clinical sciences underpinning paramedic practice, including physiological, pharmacological, behavioural and functional.
5.4.c	Arrive at a reasonable working diagnosis.
5.4.e	Demonstrate an applied knowledge of the indications and contra-indications of using specific paramedic interventions including their modifications.
5.6.c	Utilise knowledge, reasoning and problem-solving skills to determine appropriate judgements and actions.

5. Am I eligible to enrol in this course?

Refer to the UniSC Glossary of terms for definitions of “pre-requisites, co-requisites and anti-requisites”.

5.1. Pre-requisites

PAR103 and LFS112 and LFS122 and enrolled in Program SC395

5.2. Co-requisites

Not applicable

5.3. Anti-requisites

Not applicable

5.4. Specific assumed prior knowledge and skills (where applicable)

Not applicable

5.5. Microcredential Information

Not applicable

6. How am I going to be assessed?

6.1. Grading Scale

Standard Grading (GRD)

High Distinction (HD), Distinction (DN), Credit (CR), Pass (PS), Fail (FL).

6.2. Details of early feedback on progress

An online quiz in week three and formative feedback during tutorials provides students with early feedback on progress.

6.3. Assessment tasks

DELIVERY MODE	TASK NO.	ASSESSMENT PRODUCT	INDIVIDUAL OR GROUP	WEIGHTING %	WHAT IS THE DURATION / LENGTH?	WHEN SHOULD I SUBMIT?	WHERE SHOULD I SUBMIT IT?
All	1	Quiz/zes	Individual	0%	20 questions	Throughout teaching period (refer to Format)	Online Submission
All	2	Report	Individual	20%	2000 words	Week 9	Online Assignment Submission with plagiarism check
All	3	Portfolio	Individual	40%	Clinical skill stations & Scenario based clinical examination	Refer to Format	In Class
All	4	Examination - Centrally Scheduled	Individual	40%	2 hours	Exam Period	Exam Venue

All - Assessment Task 1: Online Quiz

GOAL:	This formative task assesses concepts covered during the first three, six, nine and twelve weeks of the course. The format is multiple choice questions. This is an open-book test that is completed online via Canvas.
PRODUCT:	Quiz/zes
FORMAT:	SUBMIT: End of weeks 3, 6, 9, and 12 Multiple choice test - 20 questions
CRITERIA:	**No.** — **Learning Outcome assessed** 1 — You will be assessed on core course concepts. — 1 3
GENERIC SKILLS:	

All - Assessment Task 2: Written Report

GOAL:	To investigate a contemporary topic relating to cardio-respiratory disease and use appropriate evidence to make recommendations regarding paramedic practice.
PRODUCT:	Report
FORMAT:	Standard report format Analysing the paramedic management of cardio-respiratory emergencies 2000 word report Report structure available in Canvas

CRITERIA:

No.		Learning Outcome assessed
1	Integration of knowledge to a clinical setting	1 3 4
2	Analysis of emerging themes	1 3
3	Synthesis of evidence to support an argument situated in paramedic practice;	4
4	Use of Vancouver referencing style	4
5	Report structure and grammar	4

GENERIC SKILLS:	Communication, Problem solving, Information literacy

All - Assessment Task 3: Clinical Practice Portfolio

GOAL:	The aim of this task is to enable you to demonstrate key concepts of clinical decision making, communication and psychomotor skills covered during the semester.
PRODUCT:	Portfolio
FORMAT:	SUBMIT: Skill stations during semester / Scenario based clinical exam Week 13 Demonstration of a defined standard of performance of clinical skills stations and patient care in a simulated environment.as referenced in 6.2. Portfolio includes a simulation based assessment in week 13 and clinical skill stations conducted throughout the semester.

CRITERIA:

No.		Learning Outcome assessed
1	Competence with the implementation of clinical skills and interventions	2
2	Practical demonstration of the integration of knowledge to a clinical setting	1 2
3	Patient assessment and gathering evidence	1 2
4	Implementation of interventions and drug administration	2
5	Crisis resource management	1 2

GENERIC SKILLS:	Problem solving, Organisation

All - Assessment Task 4: Final written examination

GOAL:	The aim of this task is to enable you to demonstrate understanding of key disciplinary knowledge, scientific principles and clinical thinking required to assess and manage cardiac and respiratory emergencies.
PRODUCT:	Examination - Centrally Scheduled
FORMAT:	Short answer and multiple choice questions
CRITERIA:	**No.** / **Learning Outcome assessed** 1 Demonstrate understanding of key scientific and clinical principles required to assess and manage cardiac and respiratory emergencies. — 1 2 3
GENERIC SKILLS:	Problem solving

7. Directed study hours

A 12-unit course will have total of 150 learning hours which will include directed study hours (including online if required), self-directed learning and completion of assessable tasks. Student workload is calculated at 12.5 learning hours per one unit.

8. What resources do I need to undertake this course?

Please note: Course information, including specific information of recommended readings, learning activities, resources, weekly readings, etc. are available on the course Canvas site– Please log in as soon as possible.

8.1. Prescribed text(s) or course reader

You need regular access to the resource(s) below. Many texts are available as ebooks through the Library at no additional cost.

REQUIRED?	AUTHOR	YEAR	TITLE	EDITION	PUBLISHER
Required	Keith Wesley	2016	Huszar's ECG and 12-Lead Interpretation	n/a	Elsevier
Required	Kate Curtis,Clair Ramsden	2015	Emergency and Trauma Care for Nurses and Paramedics	n/a	Mosby Elsevier Health Science
Required	Jeremy P. T. Ward,Jane Ward,Richard M. Leach	2015	The Respiratory System at a Glance	n/a	John Wiley & Sons
Required	Philip I. Aaronson,Jeremy P. T. Ward,Michelle J. Connolly	2012	The Cardiovascular System at a Glance	n/a	John Wiley & Sons

8.2. Specific requirements

Not applicable

9. How are risks managed in this course?

Risk assessments have been performed for all studio and laboratory classes and a low level of health and safety risk exists. Some risk concerns may include equipment, instruments, and tools; as well as manual handling items within the laboratory. It is your responsibility to review course material, search online, discuss with lecturers and peers and understand the risks associated with your specific course of study and to familiarise yourself with the University's general health and safety principles by reviewing the online induction training for students, and following the instructions of the University staff.

10. What administrative information is relevant to this course?

10.1. Assessment: Academic Integrity

Academic integrity is the ethical standard of university participation. It ensures that students graduate as a result of proving they are competent in their discipline. This is integral in maintaining the value of academic qualifications. Each industry has expectations and standards of the skills and knowledge within that discipline and these are reflected in assessment.

Academic integrity means that you do not engage in any activity that is considered to be academic fraud; including plagiarism, collusion or outsourcing any part of any assessment item to any other person. You are expected to be honest and ethical by completing all work yourself and indicating in your work which ideas and information were developed by you and which were taken from others. You cannot provide your assessment work to others. You are also expected to provide evidence of wide and critical reading, usually by using appropriate academic references.

In order to minimise incidents of academic fraud, this course may require that some of its assessment tasks, when submitted to Canvas, are electronically checked through Turnitin. This software allows for text comparisons to be made between your submitted assessment item and all other work to which Turnitin has access.

10.2. Assessment: Additional Requirements

Eligibility for Supplementary Assessment Your eligibility for supplementary assessment in a course is dependent of the following conditions applying: The final mark is in the percentage range 47% to 49.4% The course is graded using the Standard Grading scale You have not failed an assessment task in the course due to academic misconduct

10.3. Assessment: Submission penalties

Late submission of assessment tasks may be penalised at the following maximum rate: - 5% (of the assessment task's identified value) per day for the first two days from the date identified as the due date for the assessment task. - 10% (of the assessment task's identified value) for the third day - 20% (of the assessment task's identified value) for the fourth day and subsequent days up to and including seven days from the date identified as the due date for the assessment task. - A result of zero is awarded for an assessment task submitted after seven days from the date identified as the due date for the assessment task. Weekdays and weekends are included in the calculation of days late. To request an extension you must contact your course coordinator to negotiate an outcome.

10.4. Links to relevant University policy and procedures

For more information on Academic Learning & Teaching categories including:

- Assessment: Courses and Coursework Programs
- Review of Assessment and Final Grades
- Supplementary Assessment
- Central Examinations
- Deferred Examinations
- Student Conduct
- Students with a Disability

For more information, visit https://www.usc.edu.au/explore/policies-and-procedures#academic-learning-and-teaching

10.5. Student Charter

UniSC is committed to excellence in teaching, research and engagement in an environment that is inclusive, inspiring, safe and respectful. The Student Charter sets out what students can expect from the University, and what in turn is expected of students, to achieve these outcomes.

10.6. General Enquiries

In person:

- **UniSC Sunshine Coast** - Student Central, Ground Floor, Building C, 90 Sippy Downs Drive, Sippy Downs
- **UniSC Moreton Bay** - Service Centre, Ground Floor, Foundation Building, Gympie Road, Petrie
- **UniSC SouthBank** - Student Central, Building A4 (SW1), 52 Merivale Street, South Brisbane
- **UniSC Gympie** - Student Central, 71 Cartwright Road, Gympie
- **UniSC Fraser Coast** - Student Central, Student Central, Building A, 161 Old Maryborough Rd, Hervey Bay
- **UniSC Caboolture** - Student Central, Level 1 Building J, Cnr Manley and Tallon Street, Caboolture

Tel: +61 7 5430 2890

Email: studentcentral@usc.edu.au