# UniSC

## COURSE OUTLINE

## PAR204 Paramedic Primary Healthcare - Respiratory and Immunology

**School:** School of Health - Paramedicine

### 2024 | 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 usc.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, pathophysiology and paramedic management of respiratory and immunological conditions across the lifespan in Australia. You will analyse the factors affecting the prevalence and outcome of disease 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 respiratory disease or immunological conditions

### 1.2. How will this course be delivered?

| ACTIVITY | HOURS | BEGINNING WEEK | FREQUENCY |
|---|---|---|---|
| **BLENDED LEARNING** | | | |
| **Tutorial/Workshop 1** – On campus workshop with group work | 2hrs | Week 1 | 13 times |
| **Laboratory 1** – Laboratory based skill stations and case based simulation | 3hrs | Week 1 | 13 times |

1.3.    Course Topics

Respiratory mechanics, oxygenation and ventilation [Review of: respiratory anatomy, paediatric/adult anatomical differences, physiology (incl. hypoxia, hypercarbia, gas laws, Fick principle, factors that affect oxygen content and transport), emergency airway techniques, plethysmography and capnography theory].

Paediatric disorders of the ear, nose, throat

Upper airway obstruction [Foreign body, airway occlusion, tracheostomy emergencies] and emergency airway skills [laryngoscopy and Magill's Forceps, OPA, NPA, LMA, jet insufflation]

Chronic disorders of the lower airway & differential diagnosis of acute on chronic respiratory distress [asthma, COPD]

Acute lower airway tract disease & airway ventilation emergencies [acute lung injury & acute respiratory distress syndrome] and management of respiratory failure or respiratory arrest

Communicable airways disease & occupational lung disease [common communicable respiratory diseases that result in epidemic / pandemic outbreaks eg SARS-CoV and influenza; contemporary occupational respiratory/lung diseases]

Structural disorders of the respiratory system [Pleural effusion, spontaneous pneumothorax, thoracic bellows dysfunction (Pickwickian Syndrome /obesity hypoventilation syndrome), Guillain-Barre Syndrome, Myasthenia Gravis].

Review of the inflammatory process and acute immunological response [Hypersensitivity reactions]

Primary and secondary immunosuppression [causes of pancytopenia (cancer) and immunodeficiency)

Sepsis and severe sepsis [Pneumonia, UTI & pyelonephritis, severe sepsis, meningococcal septicaemia]

Fluid management in the emergency primary healthcare setting [obstructive shock (severe asthma), absolute hypovolaemia (dehydration), relative hypovolaemia (sepsis)]

Viral arthritis [arbor borne viruses, Epstien Barr Virus, RRF, Dengue fever, Barmah Forest Virus, Malaria, Rubella]

# 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 | GRADUATE QUALITIES MAPPING | PROFESSIONAL STANDARD MAPPING * |
|---|---|---|
| On successful completion of this course, you should be able to... | Completing these tasks successfully will contribute to you becoming... | Paramedicine Board of Australia |
| **1** Provide evidence based primary healthcare through the systematic integration of knowledge, clinical decision making, technical and nontechnical skills for a patient with selected respiratory or inflammatory conditions across the lifespan | 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.c, 3.3.d |
| **2** Demonstrate critical reasoning and an ethical approach to paramedic primary healthcare within a crisis resource management framework | Creative and critical thinker Ethical | 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, 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** Describe the epidemiology of select respiratory or inflammatory conditions across the lifespan, factors that have influenced prevalence of disease and outcomes, and the paramedic's role in primary healthcare in the Australian community. | Knowledgeable | 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** Select, analyse, synthesise and cite the evidence that underpins paramedic clinical practice used to care for patients with respiratory or inflammatory emergencies. | Empowered | 2, 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, 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. |
| 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. |

| CODE | COMPETENCY |
|------|-----------|
| 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. |
| 2 | Domain 2: The communicator and the collaborator |
| 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.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. |
| 3.3.a | Select or modify approaches to meet the needs of patients, their relatives and carers, reflecting culturally safe practice when practicing. |
| 3.4.c | Seek input from others to confirm professional learning and development needs. |
| 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 HLT100 (or both LFS112 and LFS122); and enrolled in Program SC306 or SC395

### 5.2. Co-requisites

PAR200

### 5.3. Anti-requisites

Not applicable

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

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

Formative quizzes and 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 | Report | Individual | 30% | 2000 words | Week 8 | Online Assignment Submission with plagiarism check |
| All | 2 | Practical / Laboratory Skills | Individual | 40% | Scenario based clinical assessment up to 30 minutes. Skills suite up to 30 minutes. | Refer to Format | In Class |
| All | 3 | Quiz/zes | Individual | 30% | 2 hours across the semester | Refer to Format | In Class |

**All - Assessment Task 1:**  Scientific Communication

| GOAL: | To investigate a contemporary topic relating to a condition or disease within the course content and use appropriate evidence to make recommendations regarding paramedic practice. |
|---|---|
| PRODUCT: | Report |
| FORMAT: | Report structure available in Canvas |

| CRITERIA: | No. | | Learning Outcome assessed |
|---|---|---|---|
| | 1 | Selection of high quality evidence to support an argument | ③ ④ |
| | 2 | Analysis of emerging themes | ③ ④ |
| | 3 | Synthesis of evidence to support an argument situated in paramedic practice | ③ ④ |
| | 4 | Correct use of Vancouver referencing style | ④ |
| | 5 | Correct use of grammatical conventions to structure the report | ④ |

| GENERIC SKILLS: | Communication, Problem solving, Information literacy |
|---|---|

**All - Assessment Task 2:**  Clinical Practice Portfolio

| GOAL: | The aim of this task is to enable you to demonstrate key concepts of clinical decision making, communication and core clinical competencies (psychomotor, communication and leadership) skills covered during the semester. |
|---|---|
| PRODUCT: | Practical / Laboratory Skills |
| FORMAT: | This capability-based assessment is a professional requirement where students will demonstrate a defined standard of performance of clinical skills, communication, leadership, and provision of paramedic led healthcare in a simulated environment. The skills suite and simulation-based clinical assessment will be administered over two time points throughout the semester. Scheduled weeks for assessment will be announced on the Canvas course site. |

| CRITERIA: | No. | | Learning Outcome assessed |
|---|---|---|---|
| | 1 | Competence with the implementation of technical skills and non-technical skills and interventions | ① ② |
| | 2 | Critical reasoning and planning the implementation of primary healthcare | ① ② |
| | 3 | Systematic approach to patient assessment and gathering evidence | ② |
| | 4 | Application of crisis resource management | ① ② |

| GENERIC SKILLS: | Problem solving, Applying technologies |
|---|---|

**All - Assessment Task 3:** Knowledge reviews

| | |
|---|---|
| **GOAL:** | To demonstrate the attainment of disciplinary knowledge |
| **PRODUCT:** | Quiz/zes |
| **FORMAT:** | In the tutorial/workshop class student will complete short answer and multiple-choice questions 2 times in the semester. Weeks to be announced on the Canvas site. |

| **CRITERIA:** | **No.** | | **Learning Outcome assessed** |
|---|---|---|---|
| | 1 | Demonstrate understanding of key scientific and clinical principles required to assess and manage respiratory emergencies. | ②③④ |

| **GENERIC SKILLS:** | Problem solving, Information literacy |
|---|---|

## 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

Please note that you need to have regular access to the resource(s) listed below. Resources may be required or recommended.

| REQUIRED? | AUTHOR | YEAR | TITLE | EDITION | PUBLISHER |
|---|---|---|---|---|---|
| Required | Kate Curtis,Clair Ramsden,Margaret Fry,Ramon Z. Shaban,Julie Considine | 2019 | Emergency and Trauma Care for Nurses and Paramedics | 3e | Elsevier |
| Required | Jeremy P. T. Ward,Jane Ward,Richard M. Leach | 2015 | The Respiratory System at a Glance | 4e | 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

## 10.3. Assessment: Submission penalties

Late submission of assessment tasks will 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 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 and supply the required documentation to negotiate an outcome.

## 10.4. SafeUniSC

UniSC is committed to a culture of respect and providing a safe and supportive environment for all members of our community. For immediate assistance on campus contact SafeUniSC by phone: 07 5430 1168 or using the SafeZone app. For general enquires contact the SafeUniSC team by phone 07 5456 3864 or email safe@usc.edu.au.

The SafeUniSC Specialist Service is a Student Wellbeing service that provides free and confidential support to students who may have experienced or observed behaviour that could cause fear, offence or trauma. To contact the service call 07 5430 1226 or email studentwellbeing@usc.edu.au.

## 10.5. Study help

For help with course-specific advice, for example what information to include in your assessment, you should first contact your tutor, then your course coordinator, if needed.

If you require additional assistance, the Learning Advisers are trained professionals who are ready to help you develop a wide range of academic skills. Visit the Learning Advisers web page for more information, or contact Student Central for further assistance: +61 7 5430 2890 or studentcentral@usc.edu.au.

## 10.6. Wellbeing Services

Student Wellbeing provide free and confidential counselling on a wide range of personal, academic, social and psychological matters, to foster positive mental health and wellbeing for your academic success.

To book a confidential appointment go to Student Hub, email studentwellbeing@usc.edu.au or call 07 5430 1226.

## 10.7. AccessAbility Services

Ability Advisers ensure equal access to all aspects of university life. If your studies are affected by a disability, learning disorder mental health issue, injury or illness, or you are a primary carer for someone with a disability or who is considered frail and aged, AccessAbility Services can provide access to appropriate reasonable adjustments and practical advice about the support and facilities available to you throughout the University.

To book a confidential appointment go to Student Hub, email AccessAbility@usc.edu.au or call 07 5430 2890.

## 10.8. 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

## 10.9. 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.

## 10.10. 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