COURSE OUTLINE

BIM263 Introduction to Pharmacology

School: School of Health - Biomedicine

2026 | Trimester 2

UniSC Sunshine Coast
UniSC Moreton Bay

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 will give an overview of Pharmacology, including drugs that affect cholinergic and noradrenergic transmission, enzymes as drug targets and enzyme kinetics, the effects of drugs on organ systems, and drug discovery.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
BLENDED LEARNING			
Learning materials – Learning materials, delivered as pre-recorded narrated powerpoints with embedded quiz questions using the H5P platform.	1.5hrs	Week 1	12 times
Tutorial/Workshop 1 – On campus, in person tutorials.	2hrs	Week 1	6 times
Laboratory 1 – On campus (in person) laboratory class	2hrs	Week 2	6 times

1.3. Course Topics

Introduction to Pharmacology

Cholinergic pharmacology

Adrenergic pharmacology

Drugs affecting the cardiovascular system

Anti-hypertensive drugs

Haemostasis and thrombosis

Anti-inflammatory agents

Drugs affecting the respiratory system

Drugs affecting the reproductive system

Drug discovery

Drugs affecting the gastrointestinal and urinary systems

Drugs affecting the central nervous system

Drug use and abuse

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 Demonstrate and apply knowledge of the basic principles & concepts of pharmacology to clinically relevant situations.	Knowledgeable	3.1.a, 3.2.a, 3.2
2 Solve problems by using evidence-based reasoning, and where appropriate, mathematical calculations.	Creative and critical thinker	3.2.b, 5.3.b, 5.3.c, 5.3.f
3 Communicate scientifically in the form of a problem set and practical report, with reference to the literature	Empowered	3.2.a, 3.2.b, 3.2

* Competencies by Professional Body

CODE	COMPETENCY
PARAMEDICINE BOARD OF AUSTRALIA	
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.
3.2.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.

CODE	COMPETENCY
3.2	Use clinical reasoning and problem-solving skills to determine clinical judgements and appropriate actions
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.f	Understand the clinical sciences underpinning paramedic practice, including physiological, pharmacological, behavioural and functional.

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

LFS201 or LFS203 or (LFS112 and LFS122) or (HLT100 and enrolled in SC395 or SC306)

5.2. Co-requisites

Not applicable

5.3. Anti-requisites

BIM261

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

In week 5 of this course, a Problem Set will be completed and submitted for assessment. This assignment has a 15% weighting. Feedback will be provided within 1 week of submission.

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	Artefact - Technical and Scientific	Individual	30%	1 hour	Refer to Format	In Class
All	2	Oral and Written Piece	Individual	20%	4 Minute MP4 video and 600 word script	Week 11	Online Assignment Submission with plagiarism check
All	3a	Examination - not Centrally Scheduled	Individual	20%	Each cohort of students will be examined over 30 min	Week 10	In Class
All	3b	Examination - Centrally Scheduled	Individual	30%	2 hours (<1500 words) each	Exam Period	Online Assignment Submission with plagiarism check

All - Assessment Task 1: Problem Set 1a and 1b

GOAL:	These two problem sets, Set 1a and 1b, are designed to introduce you to the literature of pharmacology and develop your critical thinking within this field of research. For both problem sets, you will complete a worksheet which contains 10 questions on pharmacology.
PRODUCT:	Artefact - Technical and Scientific
AUTHORSHIP STATEMENT:	
FORMAT:	Short Answers, 10 problems on a worksheet. Problem set 1a = 15% (Week 5). Problem set 1b = 15% (Week 9).
CRITERIA:	**No.** / **Learning Outcome assessed** 1 — 1 Key points identified. 2 Solve problems by using evidence-based reasoning. 3 Mathematical problem solving. 4 Communicate scientifically in the form of a problem set, referring to literature. — 1 2 3
GENERIC SKILLS:	Communication, Problem solving, Information literacy

All - Assessment Task 2: Narrated Powerpoint

GOAL:	This task develops your scientific communication skills. You will be provided with 6-8 topics related to pharmacology. Students will choose one of the topics and prepare a 4 min narrated PowerPoint on the selected topic. The target audience will be a competent scientist who may not be familiar with the discipline of pharmacological science. A script of the dialogue presented in the narrated PowerPoint recording is to be prepared using Word and submitted to SafeAssign. References must be cited within the text of the script, and a full reference list is to be included at the end of the script.
PRODUCT:	Oral and Written Piece
AUTHORSHIP STATEMENT:	
FORMAT:	Individual Four (4) minute MP4 format for the narrated PowerPoint; 600 word script in Word. Elements: 4 minute narrated PowerPoint, saved as an MP.4 file and submitted to Video Vault. The PowerPoint will be a recording that is prepared by students on a topic that is provided by the Course Coordinator. The script of the dialogue, saved in Word, is to be submitted to SafeAssign.
CRITERIA:	**No.** / **Learning Outcome assessed** 1 — 1 Solving problems by using evidence-based reasoning 2 Oral presentation using technology 3 Scientific communication — 1 2 3
GENERIC SKILLS:	Communication, Organisation, Applying technologies, Information literacy

All - Assessment Task 3a: Practical exam Mid-trimester

GOAL:	This exam has been designed to allow you to demonstrate your laboratory skills, including your use of laboratory equipment and understanding of the principles of the laboratory work completed up to and including the Week 8 laboratory session.
PRODUCT:	Examination - not Centrally Scheduled
AUTHORSHIP STATEMENT:	
FORMAT:	Students will complete laboratory tasks and be assessed on knowledge and understanding of pharmacology principles pertaining to the laboratory classes.
CRITERIA:	**No.** / **Learning Outcome assessed** 1 — 1 Application of the basic principles and concepts of pharmacology to clinically relevant situations. 2 Solving problems by using evidence-based reasoning, and where appropriate, 3 Mathematical calculations — 1 2
GENERIC SKILLS:	Communication, Problem solving, Applying technologies, Information literacy

All - Assessment Task 3b: Examination Final

GOAL:	This exam has been designed to allow you to demonstrate and apply knowledge, analyse relationships, and solve problems in pharmacology.
PRODUCT:	Examination - Centrally Scheduled
AUTHORSHIP STATEMENT:	
FORMAT:	2 hours (<1500 words), Multiple choice questions, short answer questions, problem solving, calculations based on material from learning materials, tutorials and laboratory activities.
CRITERIA:	**No.** / **Learning Outcome assessed** 1 — 1. Application of the basic principles and concepts of pharmacology to clinically relevant situations. 2. Solving problems by using evidence-based reasoning, and where appropriate. 3. Mathematical calculations. — 1 2
GENERIC SKILLS:	Communication, Problem solving

6.4. Assessment to competency mapping

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
2021 PROFESSIONAL CAPABILITIES FOR REGISTERED PARAMEDICS				
All delivery modes	Artefact - Technical and Scientific	Problem Set 1a and 1b	3.1.a	Taught, Assessed
			3.2.a	Taught, Practiced, Assessed
			3.2.b	Taught, Practiced, Assessed
	Examination - not Centrally Scheduled	Practical exam Mid-trimester	3.1.a	Taught
			3.2.a	Taught
			3.2.b	Taught
			5.3.b	Taught, Assessed
			5.3.c	Taught, Assessed
			5.3.f	Taught, Assessed
	Examination - Centrally Scheduled	Examination Final	3.1.a	Taught, Assessed
			3.2.a	Taught, Assessed
			3.2.b	Taught, Assessed
			5.3.b	Taught, Assessed
			5.3.c	Taught, Assessed
			5.3.f	Taught, Assessed
	Oral and Written Piece	Narrated Powerpoint	3.1.a	Taught, Assessed
			3.2.a	Taught, Assessed
			3.2.b	Taught, Assessed
			5.3.b	Taught, Assessed
			5.3.c	Taught, Assessed
			5.3.f	Taught, Assessed

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	James M. Ritter, Rod J. Flower, Graeme Henderson, Yoon Kong Loke, David MacEwan, Emma Robinson, James Fullerton	2024	Rang & Dale's Pharmacology	10th Edition	Elsevier
Recommended	Ian Peate	2022	Fundamentals of Pharmacology for Paramedics	1	Wiley-Blackwell

8.2. Specific requirements

Laboratory coat, safety glasses, closed in footwear, Calculator. Gloves will be provided in the laboratory.

9. How are risks managed in this course?

Risk assessments have been performed for all laboratory classes and a moderate level of health and safety risk exists. Moderate risks are those associated with laboratory work such as working with chemicals and hazardous substances. You will be required to undertake laboratory induction training and it is also your responsibility to review course material, search online, discuss with lecturers and peers and understand the health and safety 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:
(a) The final mark is in the percentage range 47% to 49.4%; and
(b) The course is graded using the Standard Grading scale

10.3. Assessment: Submission penalties

Late submissions may be penalised up to and including the following maximum percentage of the assessment task's identified value, with weekdays and weekends included in the calculation of days late:
(a) One day: deduct 5%;
(b) Two days: deduct 10%;
(c) Three days: deduct 20%;
(d) Four days: deduct 40%;
(e) Five days: deduct 60%;
(f) Six days: deduct 80%;
(g) Seven days: A result of zero is awarded for the assessment task.

The following penalties will apply for a late submission for an online examination:
Less than 15 minutes: No penalty
From 15 minutes to 30 minutes: 20% penalty
More than 30 minutes: 100% penalty

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

For course-specific questions, contact your teaching staff or Course Coordinator.

For other enquiries or to access support, please contact Student Central:

- UniSC Student Central
- UniSC Adelaide Student Central