

COURSE OUTLINE

HLT209 Pharmacology for Allied Health

School: School of Health - Physiotherapy

Online

Contine

Trimester 1

You can do this course without coming onto campus, unless your program has specified a mandatory onsite requirement.

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

In this course you will learn be introduced to clinical pharmacology, and the underlying principles of pharmacokinetics, pharmacodynamics, and pharmacogenomics. You will be orientated to the safe and effective use of medicine to treat common disorders affecting the musculoskeletal, neurological, cardiovascular, respiratory, gastrointestinal, urinary, immune, endocrine, and reproductive systems. You will also reflect on ethical and legal aspects of prescription and administration of medicine, and current and emerging roles of different health professions in Australia.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
ONLINE			
Tutorial/Workshop 1 – Online workshop - Orientation, key definitions/principles, assessment support, feedback	2hrs	Week 1	12 times
Online – Online pre-recorded mini lectures (e.g. pathophysiology, pharmacology)	3hrs	Week 1	12 times
Learning materials – Pharmacology workbook activities and required readings	3hrs	Week 1	12 times

1.3. Course Topics

- Pharmacology and the use of medicine to treat common disorders affecting different body systems
- · Principles of pharmacokinetics, pharmacodynamics, and pharmacogenomics and clinical implications
- Ensuring quality of medicine prescription, administration, and monitoring of the outcomes and interactions
- · Ethical and legal aspects of pharmacology in Australia, and current/emerging roles for allied health professions
- Interprofessional communication to ensure the safe and effective use of medicines in clinical practice
- Indications, contraindications, adverse effects, and potential interactions of different classes/types of medicines
- Pathophysiology underlying common disorders, and mechanisms underlying therapeutic effects of medicine
- · Evidence base for use of different medicines considering clinical and research evidence and client values
- Medications used to treat pain, inflammation, infection, cancer, blood and skin disorders
- · Medications used to treat cardiovascular, respiratory, neurological and musculoskeletal disorders
- · Medications used to treat urinary, gastrointestinal, immune-related, endocrine and reproductive system disorders

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?

COL	RSE LEARNING OUTCOMES	GRADUATE QUALITIES MAPPING	PROFESSIONAL STANDARD MAPPING *
	successful completion of this course, you ald be able to	Completing these tasks successfully will contribute to you becoming	Physiotherapy Board of Australia
1	Describe the evidence-based use of medications to treat common medical conditions and the potential impact on client health, functioning and disability	Knowledgeable Creative and critical thinker	1.2, 1.3, 3.1, 3.2, 4.3, 5.2
2	Recognise potential side effects, adverse events or interactions of medications and refer the client to an appropriate health professional for review	Knowledgeable Creative and critical thinker Empowered	1.1, 1.2, 1.3, 3.1, 3.2, 4.4, 5.2, 7.1
3	Define pharmacokinetics, pharmacodynamics, and pharmacogenomics and explain relevance to safe, effective and client- centred prescription of medication	Knowledgeable Creative and critical thinker	1.2, 3.1, 4.4, 5.1, 5.2
4	Apply understanding of pathophysiology and research evidence to explain and justify the use of medication to treat common medical conditions in clinical practice	Creative and critical thinker Empowered	1.2, 3.1, 4.3, 4.4, 6.1
5	Demonstrate understanding of the ethical and legal aspects of prescribing medicine and the current and emerging roles of different health professions in Australia	Knowledgeable Creative and critical thinker Ethical	1.2, 1.3, 2.1, 2.2, 4.4, 4.5, 5.2, 7.1
6	Reflect on the scope and limitations of your profession with regards to giving advice, prescribing and administering medications, and implications for clinical practice	Knowledgeable Creative and critical thinker Empowered	1.2, 2.1, 2.2, 3.1, 3.2, 4.2, 5.2, 7.1

* Competencies by Professional Body

CODE	COMPETENCY	

PHYSIOTHERAPY BOARD OF AUSTRALIA

- 1.1 Plan and implement an efficient, effective, culturally responsive and client-centred physiotherapy assessment
- 1.2 Involve the client and relevant others in the planning and implementation of safe and effective physiotherapy using evidence-based practice to inform decision-making
- 1.3 Review the continuation of physiotherapy and facilitate the client's optimal participation in their everyday life
- 2.1 Comply with legal, professional, ethical and other relevant standards, codes and guidelines

CODE COMPETENCY

- 2.2 Make and act on informed and appropriate decisions about acceptable professional and ethical behaviours
- 3.1 Use clear, accurate, sensitive and effective communication to support the development of trust and rapport in professional relationships with the client and relevant others
- 3.2 Record and effectively communicate physiotherapy assessment findings, outcomes and decisions
- 4.2 Evaluate their learning needs, engage in relevant continuing professional development and recognise when to seek professional support, including peer review
- 4.3 Efficiently consume and effectively apply research and commit to practice informed by best available research evidence and new knowledge
- 4.4 Proactively apply principles of quality improvement and risk management to practice
- 4.5 Recognise situations that are outside their scope of expertise or competence and take appropriate and timely action
- 5.1 Engage in an inclusive, collaborative, consultative, culturally responsive and client-centred model of practice
- 5.2 Engage in safe, effective and collaborative interprofessional practice
- 6.1 Use education to empower themselves and others
- 7.1 Organise and prioritise their workload and resources to provide safe, effective and efficient physiotherapy autonomously and, where relevant, as a team member

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

LFS112 OR (HLT100 and PAR103 and enrolled in Program SC306)

5.2. Co-requisites

Not applicable

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

Students will be provided with immediate formative feedback on their learning with online revision quizzes which are scheduled throughout the semester to provide feedback on learning relating. This will assist preparation for subsequent assessments

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	2	Essay	Individual	25%	1000 Words	Week 6	Online Assignment Submission with plagiarism check
All	3	Oral	Individual	30%	40 minutes (2 X 20-minute oral examinations)	Refer to Format	Online Assignment Submission with plagiarism check
All	4	Examination - Centrally Scheduled	Individual	45%	90 minutes	Exam Period	Online Test (Quiz)

All - Assessment Task 2: Assignment - Ethics, legalities & professional roles

GOAL:	To assess student understanding of ethics, legalities, and professional roles relating to the prescription and administration of medicines in Australia. Students will also need to reflect on current and emerging roles of their profession and implications for training and clinical practice.					
PRODUCT:	Essay					
FORMAT:	A written essay that explains how medicines are currently prescribed and administered within Austra and legalities and the roles of different health professions. Students also should reflect on the current their allied health profession related to prescribing medicine, give examples with research evidence training and clinical practice. References should be provided in APA (7th edition). The assignment is in week 6 (see CANVAS for details and marking schema)	t and emerging role of , and implications for				
CRITERIA:	No.	Learning Outcome assessed				
	1 Students will be assessed according to the marking schema provided on CANVAS.	56				
	2 Marking criteria will include: Demonstrate understanding of the ethical and legal aspects of prescribing medicine and the current and emerging roles of different health professions in Australia	6				
	3 Marking criteria will include: Reflect on the scope and limitations of your profession with regards to giving advice, prescribing and administering medications, and implications for clinical practice	6				
GENERIC SKILLS:	Communication, Problem solving, Organisation, Applying technologies, Information literacy					

All - Assessment Task 3: Oral Viva

- A330331	ment rask 3: Oral viva	
GOAL:	To assess student understanding of pathophysiology, pharmaceutical interventions, and safe and clients in relation to different clinical scenarios.	evidence-based care of
PRODUCT:	Oral	
FORMAT:	Students will undertake 2 X 20-minute oral exams over the course of the semester (in week 8 and contributes 15% towards course grade. Feedback from the first oral viva will assist preparation for written exam. The viva examinations will be conducted via online video conferencing software and For each viva, students will be given 3 case studies to review and prepare to discuss with the exams.	or the second viva and I will be recorded.
	able to refer to notes that they have made on Cadmus. Students will randomly be asked to answer of the case studies. The topics for discussion will be uploaded along with case studies on CANVA	
CRITERIA:	No.	Learning Outcome assessed
	Apply understanding of pathophysiology and pharmaceutical interventions to discuss clinical care of clients, and recognise potential benefits, risks, and side effects of medications	1234
	Demonstrate skills in communication, clinical reasoning, and understanding of health professional roles in managing and monitoring clients undergoing pharmaceutical treatment	2 5
GENERIC SKILLS:	Communication, Problem solving, Organisation, Applying technologies	
All - Assessi	ment Task 4: Written Examination	
GOAL:	To assess student understanding of pharmacology and implications for clinical practice as an evidenth professional. This includes understanding pathophysiology of underlying common medical indications, contraindications, and potential side effects, adverse events, and interactions with different professional profess	conditions, and
PRODUCT:	Examination - Centrally Scheduled	
FORMAT:	Online written examination will be scheduled within the examination period. Questions will include answer, and extended answer questions which relate to different clinical scenarios. Briefing and e provided on CANVAS.	•
CRITERIA:	No.	Learning Outcome assessed
	1 Provides the correct answer to examination questions, and where indicated provides accurate rationale, evidence, and detailed response	12346
GENERIC SKILLS:	Communication, Problem solving, Organisation, Applying technologies, Information literacy	

6.4. Assessment to competency mapping

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
PHYSIOTHERAPY PRACTIC	CE THRESHOLDS IN AUSTRALIA	AND AOTEAROA NEW ZEALAND		
			1.2	Taught, Practiced, Assessed
			1.4	Practiced, Assessed
			2.1	Practiced, Assessed
			2.2	Practiced, Assessed
				Practiced,

PROGRAMME DELIVERY	ACCECCMENT TOP	TITLE	COMPETENCY	TEACHING METHODO
MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
		Assignment - Ethics, legalities &	3.1	Practiced, Assessed
	Essay	professional roles	3.2	Practiced,
			3.2	Assessed
			4.3	Taught, Practiced, Assessed
			4.4	Taught, Practiced, Assessed
			4.5	Taught, Practiced, Assessed
			5.1	Taught, Practiced, Assessed
			5.2	Taught, Practiced, Assessed
			6.1	Taught, Practiced, Assessed
			1.1	Practiced
			1.2	Taught, Practiced, Assessed
			1.3	Practiced
			1.4	Taught, Practiced, Assessed
	Examination - Centrally Scheduled		2.1	Practiced, Assessed
		Written Examination	2.2	Practiced, Assessed
			3.1	Practiced, Assessed
			3.2	Practiced, Assessed
All delivery modes			4.3	Practiced, Assessed
			4.4	Practiced, Assessed
			4.5	Taught, Practiced, Assessed
			5.1	Taught, Practiced, Assessed
			5.2	Taught, Practiced, Assessed
			6.1	Practiced, Assessed
			1.1	Taught, Practiced, Assessed
			1.2	Taught, Practiced, Assessed
			1.3	Taught, Practiced, Assessed
			1.4	Taught, Practiced, Assessed
			2.1	Taught, Practiced, Assessed
			2.2	Taught, Practiced, Assessed
			3.1	Practiced, Assessed
	Oral	Oral Viva	3.2	Practiced, Assessed

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
			4.3	Practiced, Assessed
			4.4	Practiced, Assessed
			4.5	Taught, Practiced, Assessed
			5.1	Taught, Practiced, Assessed
			5.2	Taught, Practiced, Assessed
			6.1	Practiced, 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.

7.1. Schedule

PERIOD AND TOPIC	ACTIVITIES
Module 1: Foundational Principles Underlying Pharmacology	Topics * Overview of pharmacology and drug absorption, distribution, metabolism and excretion * Principles of pharmacokinetics, pharmacodynamics, and pharmacogenomics * Drug use, misuse, abuse, toxicity, polypharmacy and consequences Online workshops, learning activities and practical application/discussion tutorials
Module 2: Ethics, Legalities and Health Professional Roles	Topics * Ethical and legal aspects of pharmacology, and quality use of medicines * Prescription, over the counter, complementary/alternate medicine, vitamins, supplements * Current and emerging roles for different health professionals in relation to pharmacology * Interprofessional collaboration and communication requirements in clinical practice Online workshops, learning activities and practical application/discussion tutorials
Module 3: Infectious Diseases, Immunological Disorders and Cancer	Topics * Common clinical diagnoses, underlying pathophysiology, pharmacological interventions * Clinical indications, contraindications, side effects, adverse effects, interactions of drugs Online workshops, learning activities and case study tutorials
Module 4: Pain, Inflammation and Musculoskeletal Disorders	Topics * Common clinical diagnoses, underlying pathophysiology, pharmacological interventions * Clinical indications, contraindications, side effects, adverse effects, interactions of drugs
	Online workshops, learning activities and case study tutorials

PERIOD AND TOPIC	ACTIVITIES
Module 5: Neurological and Psychological Disorders	Topics * Common clinical diagnoses, underlying pathophysiology, pharmacological interventions * Clinical indications, contraindications, side effects, adverse effects, interactions of drugs Online workshops, learning activities and case study tutorials
Module 6: Cardiovascular and Respiratory disorders	Topics * Common clinical diagnoses, underlying pathophysiology, pharmacological interventions * Clinical indications, contraindications, side effects, adverse effects, interactions of drugs Online workshops, learning activities and case study tutorials
Module 7: Gastrointestinal and Urinary Disorders	Topics * Common clinical diagnoses, underlying pathophysiology, pharmacological interventions * Clinical indications, contraindications, side effects, adverse effects, interactions of drugs Online workshops, learning activities and case study tutorials
Module 8: Endocrine and Reproductive System Disorders	Topics * Common clinical diagnoses, underlying pathophysiology, pharmacological interventions * Clinical indications, contraindications, side effects, adverse effects, interactions of drugs
	Online workshops, learning activities and case study tutorials

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	Kathleen Knights,Andrew Rowland,Andrew Rowland, PhD, BSc (Hons),Shaunagh Darroch,Mary Bushell	0	Pharmacology for Health Professionals, 6e	n/a	n/a
Recommended	Jacqueline E. Reznik,Jackie Reznik,Ofer Keren,Iftah Biran,Joanne Morris	2016	Pharmacology Handbook for Physiotherapists	n/a	Elsevier

8.2. Specific requirements

This course will be delivered on online and therefore requires access to a computer and secure internet connection. Please note there will be scheduled classes scheduled at specific times that you will need to attend. Please see your timetable and CANVAS for more information and expectations.

9. How are risks managed in this course?

Health and safety risks for this course have been assessed as low. It is 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. 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: <u>0754301168</u> or using the <u>SafeZone</u> app. For general enquires contact the SafeUniSC team by phone <u>0754563864</u> or email <u>safe@usc.edu.au</u>.

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 <u>07 5430 1226</u> or email <u>studentwellbeing@usc.edu.au</u>.

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 <u>Learning Advisers</u> web page for more information, or contact Student Central for further assistance: +61 7 5430 2890 or <u>studentcentral@usc.edu.au</u>.

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 <u>Student Charter</u> 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