

COURSE OUTLINE

SPX410 Exercise Management in Chronic Disease

School: School of Health - Sport and Exercise Science

2026 Session 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 is required for final year students in the Bachelor of Clinical Exercise Physiology program to prepare for exercise physiology practice. You will study chronic conditions and illnesses for which exercise is medicine. You will learn skills in clinical assessment, case management, exercise prescription and functional conditioning. You will read and apply research on chronic disease management to your clinical decision making, further developing skills in evidence-based practice.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
BLENDED LEARNING			
Tutorial/Workshop 1 – This is a combination of face-to-face (in class or via Zoom) instruction and recorded lecture modules and learning resources that are accessed through Canvas	3hrs	Week 6	10 times
Laboratory 1 – Laboratory activities include instruction and practice in practical skills and clinical decision-making. This will be delivered face-to-face (in class or via Zoom) with supplementary learning resources available through Canvas	4hrs	Week 6	10 times
Seminar – This is a hybrid/online seminar, delivered to assist you in understanding the requirements of this course, and online content/ learning materials.	1hr	Week 2	Once Only

1.3. Course Topics

- Clinical reasoning, history taking, record keeping
- Physical examination of people with chronic diseases and complex health conditions
- · Evidence-based clinical practice
- · Therapist development
- Therapeutic relationships
- · Self-management for clients with chronic diseases
- Physiological response and exercise in chronic diseases
- · Risks (including contraindications) and benefits of exercise for individuals with chronic disease
- · Physiological adaptation to exercise in individuals with chronic disease and complex conditions
- Pre-testing procedures in accordance with specific guidelines and supervision needs
- Planning, and prescribing exercise for rehabilitation and secondary prevention
- · Conduct of sub-maximal and maximal exercise testing in individuals with chronic disease
- · Medication, chronic disease and exercise.

Key health issues and diseases will be studied in order to learn and apply the course concepts. Examples of chronic diseases and complex health conditions may include: obesity, metabolic syndrome, Type II diabetes, gestational diabetes, polycystic ovary syndrome, cardiac failure, kidney disease, chronic heart, lung, or vascular disease, cancer.

NB: Chronic and complex diseases typically involve co-morbidities. Diseases will not be studied as discrete entities, but in the
case studies of whole people who may have multiple clinical conditions.

2. What level is this course?

400 Level (Graduate)

Demonstrating coherence and breadth or depth of knowledge and skills. Independent application of knowledge and skills in unfamiliar contexts. Meeting professional requirements and AQF descriptors for the degree. May require pre-requisites where discipline specific introductory or developing knowledge or skills is necessary. Normally undertaken in the third or fourth full-time study year of an undergraduate program.

3. What is the unit value of this course?

12 units

4. How does this course contribute to my learning?

COU	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	Exercise and Sports Science Australia
1	Evaluate the role, skills, and scope of practice of an exercise physiologist in chronic disease management and rehabilitation, multidisciplinary care, discharge, referrals and working with other healthcare professionals within the Australian health system.	Empowered	1.2.1, 1.2.6, 2.2.7
2	Apply and validate knowledge of medical, surgical, and allied health management of chronic diseases within the scope of practice of an exercise physiologist.	Knowledgeable	2.2.1, 2.2.4, 2.2.6, 3.2.7, 4.2.1
3	Apply and justify clinical decision making to the recognition of signs and symptoms of chronic diseases and complex health conditions in clinical assessment, before, during, and after exercise.	Empowered	3.2.1, 3.2.2, 3.2.3, 3.2.4, 4.2.1, 4.2.2
4	Identify relative and absolute contraindications to exercise for chronic disease rehabilitation and apply this knowledge by taking appropriate action including referral to other health care professionals when required, and modifying exercise assessment and programming when clients are at risk or symptoms are exacerbated.	Empowered	2.2.1, 2.2.4, 2.2.6, 3.2.4, 3.2.7, 4.2.3
5	Critically evaluate and apply scientific evidence to inform and design service delivery of tailored exercise programs to clients with complex presentation and multiple comorbidities.	Empowered	2.2.5, 2.2.6, 4.2.1, 4.2.2, 4.2.6

* Competencies by Professional Body

CODE COMPETENCY

EXERCISE AND SPORTS SCIENCE AUSTRALIA

- 1.2.1 Practise with integrity within the scope of practice for an AEP, the ESSA Code of Professional Conduct and Ethical Practice, and jurisdictional Codes of Conduct.
- 1.2.6 Practise collaboratively and effectively with other professionals, including seeking feedback and input to inform decision-making, delegating tasks, and referring to other professionals and services where appropriate.
- 2.2.7 Explain national, state, and compensable scheme frameworks across the health care, aged care, and disability sectors, and the requirements for AEPs working in these settings.
- 2.2.1 Integrate knowledge of anatomy, physiology, pathophysiology, and other determinants of health and function and apply these to inform safe and effective movement, physical activity, and exercise-based interventions for individuals and population groups throughout all stages of their life.
- 2.2.4 Evaluate the effect of commonly prescribed medications, diagnostic procedures, medical, surgical, and other interventions on both resting and exercise-related physiological responses across the full health spectrum.
- 2.2.6 Apply clinical, ethical, and evidence-based decision-making to formulate appropriate interventions and recommendations and communicate the expected outcomes.

CODE COMPETENCY

- 2.2.5 Evaluate research findings and apply exercise prescription principles to develop recommendations and interventions, including targeted exercise prescription for the purposes of optimising health status, function, recovery, independence, and participation.
- 3.2.7 Distinguish when client needs are outside of scope or competence and take appropriate, timely actions including engaging effectively with other professionals.
- 3.2.1 Formulate appropriate screening processes to evaluate and stratify risk for participation in assessments and interventions, including consideration of appropriate service modalities for clients.
- 3.2.2 Formulate safe, effective, and culturally sensitive assessments to collect relevant information, social and cultural determinants of health, client history, and client needs, preferences, barriers, facilitators, and goals.
- 3.2.3 Formulate appropriate assessments and outcome measures relevant to treatment and client goals, and evaluate health status, function, capacity, and progress, to inform clinical reasoning and to monitor the delivery and outcomes of interventions.
- 3.2.4 Distinguish, record, report, and appropriately action changing risk factors and adverse signs and symptoms that may arise before, during, and after assessments and interventions.
- 4.2.1 Formulate evidence-based exercise prescription, interventions, and recommendations that address health and treatment related client needs, preferences, goals, and abilities, assessment findings, and social and cultural determinants of health.
- 4.2.2 Design, prescribe, deliver, and monitor safe and effective movement, physical activity, and exercise-based interventions for clients with complex presentations, including those with acute and chronic health conditions and multiple comorbidities.
- 4.2.3 Formulate and apply strategies to manage risks, evaluate progress, and adapt recommendations and interventions in partnership with clients based on needs and measured outcomes.
- 4.2.6 Formulate strategies during treatment to empower clients to undertake safe and effective self-management during and following discharge from interventions.

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

SPX231 and SPX300 and SPX301 and SPX302 and SPX322 and SPX331 and SPX306 and enrolled in Program SC346 or SC304

5.2. Co-requisites

Not applicable

5.3. Anti-requisites

Not applicable

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

It is assumed that you will build upon your knowledge of cardiorespiratory and metabolic conditions, your clinical assessment skills developed in 3rd year courses, and your skills in clinical history taking, record keeping, and evidence-based clinical decision making gained in 3rd year practicum

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

Prior to course commencement, an early check in formative task will be provided. However, this course is delivered intensively over 2 weeks from week 6 of session 1.

The first assessment task is scheduled for Friday of the first week. You will receive verbal feedback immediately, followed by written feedback and your grade by Monday, the start of week 2 of the course.

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	Practical / Laboratory Skills	Individual	50%	20 minutes	Week 6	In Class
All	2	Examination - not Centrally Scheduled	Individual	50%	120 minutes / estimate 3000 words	Week 7	In Class

All - Assessment Task 1: Practical examination

GOAL:	To demonstrate selected skills in clinical history taking, physical examination, clinical assessment, chronic disease sign and symptom identification.		
PRODUCT:	Practical / Laboratory Skills		
FORMAT:	You will perform the role of the "exercise physiologist". You will select a case study and you will to plan and make notes prior to your practical examination. You may use these notes during this throughout your examination.		
CRITERIA:	No.	Learning Outcome assessed	
	1 Applies clinical decision making to scenario	2345	
	2 Applies recognised procedures to physical assessment practices	3 4 5	
	3 Applies knowledge to identify signs & symptoms	3 4 5	
	4 Applies knowledge to identify contraindications to exercise for rehabilitation	2 5	
	5 Demonstrates understanding of scope of practice	13	
	6 Represents and explains key discipline concepts to assessment	2	
GENERIC SKILLS:	Communication, Problem solving, Organisation, Information literacy		

All - Assessment Task 2: Written examination

GOAL:	To demonstrate critical knowledge of chronic diseases, signs, symptoms, treatments, and contraindications to exercise treatment.		
PRODUCT:	Examination - not Centrally Scheduled		
FORMAT:	Individual written examination, comprising multiple choice and short answer questions.		
CRITERIA:		Learning Outcome assessed	
	1 Knowledge of chronic diseases.	234	
	2 Knowledge of medical, surgical, and allied health treatments for a range of complex and chronic disease conditions	24	
	Application of knowledge to identify signs and symptoms of chronic diseases reported before, during, and after exercise.	3 4	
	4 Apply knowledge to identify contraindications to exercise for chronic disease rehabilitation and select appropriate actions.	1 5	
GENERIC SKILLS:	Communication, Problem solving, Organisation, Information literacy		

6.4. Assessment to competency mapping

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
ESSA ACCREDITED EXERCISE	PHYSIOLOGIST PROFESSIONAL STANDAR	DS 2021		
			1.2.1	Taught, Practiced, Assessed
			1.2.6	Taught, Practiced, Assessed
			2.2.1	Taught, Practiced, Assessed
			2.2.4	Taught, Practiced, Assessed
			2.2.5	Taught, Practiced, Assessed
			2.2.6	Taught, Practiced, Assessed
			2.2.7	Taught, Practiced, Assessed
	Examination - not Centrally	Written examination	3.2.1	Taught, Practiced, Assessed
	Scheduled		3.2.2	Taught, Practiced, Assessed
			3.2.3	Taught, Practiced, Assessed
			3.2.4	Taught, Practiced, Assessed
			3.2.7	Taught, Practiced, Assessed
			4.2.1	Taught, Practiced, Assessed
			4.2.2	Taught, Practiced, Assessed Taught, Practiced,
			4.2.3	Assessed Taught, Practiced,
			4.2.6	Assessed Taught, Practiced,
All delivery modes			1.2.1	Assessed Taught, Practiced,
			1.2.6	Assessed Taught, Practiced,
			2.2.1	Assessed Taught, Practiced,
			2.2.4	Assessed Taught, Practiced,
			2.2.5	Assessed Taught, Practiced,
			2.2.6	Assessed Taught, Practiced,
			3.2.1	Assessed Taught, Practiced,
	Practical / Laboratory Skills	Practical	3.2.2	Assessed Taught, Practiced,
		examination	3.2.3	Assessed Taught, Practiced,
			3.2.4	Assessed Taught, Practiced,
			3.2.7	Assessed Taught, Practiced,
			3.2.1	Assessed

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
			4.2.1	Taught, Practiced, Assessed
		4.2.2	Taught, Practiced, Assessed	
			4.2.3	Taught, Practiced, Assessed
			4.2.6	Taught, 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
This course is delivered intensively over two weeks: Mon to Thurs there are workshops 9am - noon and labs 1 - 5pm; Fridays are reserved for assessment	n/a

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

There are no required/recommended resources for this course.

8.2. Specific requirements

You may wish to purchase a personal set of clinical tools, comprising: sphygmomanometer, stethoscope, tailor's tape measure (150cm, flexible). It is expected that you would retain and use these tools in your clinical practice.

This course includes an assessment of a professional competency task deemed necessary to meet the Exercise and Sports Science Australia (ESSA) Professional Standards. Therefore, your attendance and participation in practicals and tutorials is expected. Feedback will be provided to you during each of your classes and will provide you with support and guidance to become competent in the ESSA Professional Standards addressed in this course. For any work that is missed you will need to demonstrate to your course provider that you have covered the required material. This will usually take the form of a detailed summary and reflection of the directed study activities and practical skills for the missed class or placement.

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 <u>online induction training for students</u>, 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

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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 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: 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 <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:

- o **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
- o UniSC SouthBank Student Central, Building A4 (SW1), 52 Merivale Street, South Brisbane
- o UniSC Gympie Student Central, 71 Cartwright Road, Gympie
- o 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