



COURSE OUTLINE

SPX211 Exercise Physiology I

Course Coordinator: Colin Solomon (csolomon@usc.edu.au) **School:** School of Health and Behavioural Sciences

2021 | Semester 2

USC Sunshine Coast

ON CAMPUS

Most of your course is on campus but you may be able to do some components of this course online.

Please go to the USC website 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 designed to provide you with an understanding of the physiology of human physical exercise. The course content includes the theoretical and practical components of the acute and adaptive responses of the energy transfer, respiratory, cardiovascular, muscle, nervous and endocrine systems during exercise and the integration of these systems.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
ON CAMPUS			
Laboratory 1	2hrs	Week 1	13 times
Lecture	2hrs	Week 1	13 times

1.3. Course Topics

- Introduction to exercise physiology
- Energy transfer and exercise
- Measurement of energy transfer
- Individual differences and exercise
- Pulmonary components and exercise
- Gas exchange and transport and exercise
- Respiratory system regulation and integration and exercise
- Heart and blood pressure and exercise
- Cardiovascular system regulation and integration and exercise
- Cardiac output and blood distribution and exercise
- Muscular system and exercise
- Nervous system and exercise
- Endocrine system and exercise

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
On successful completion of this course, you should be able to...		Completing these tasks successfully will contribute to you becoming...
1	Demonstrate an understanding of the function, regulation and integration of the energy transfer, respiratory, cardiovascular, muscular, neural and endocrine systems during exercise	Knowledgeable
2	Use literature, information, and learning resources from multiple sources	Creative and critical thinker
3	Understand the scientific method, and assess and discuss the research literature on exercise physiology	Creative and critical thinker
4	Demonstrate an understanding of how to conduct tests and measurements of physiological function during exercise, which are valid, accurate, and reliable	Knowledgeable
5	Compare and discuss results from laboratory experiments	Engaged

5. Am I eligible to enrol in this course?

Refer to the [USC Glossary of terms](#) for definitions of “pre-requisites, co-requisites and anti-requisites”.

5.1. Pre-requisites

LFS112 or SPX103

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

The results of the Laboratory and Research Quizzes in Week 2 and Week 4 will provide 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	30%	30 min per quiz	Refer to Format	Online Assignment Submission
All	2	Examination	Individual	35%	2 hr	Week 7	Online Test (Quiz)
All	3	Examination - Centrally Scheduled	Individual	35%	2 hr	Exam Period	Online Test (Quiz)

All - Assessment Task 1: Laboratory and Research Quizzes

GOAL:	The laboratory and research quizzes are designed to assess your understanding of the theory and practical components from the laboratory classes, and associated required reading		
PRODUCT:	Quiz/zes		
FORMAT:	Submit: Weeks 2, 4, 6, 8, 10, 12. Each quiz will consist of 10-20 multiple choice and or other format questions that pertain to the 1-2 previous laboratory classes, and associated required reading. 30 minutes duration		
CRITERIA:	No.		Learning Outcome assessed
	1	Correct and complete answers to questions	1 2 3 4 5

All - Assessment Task 2: Mid-Semester Exam

GOAL:	The mid-semester exam is designed to assess your understanding of the theory components of the course from the lectures, and required reading from Week 1 – Week 6 inclusive		
PRODUCT:	Examination		
FORMAT:	Multiple choice questions.2 hours duration		
CRITERIA:	No.		Learning Outcome assessed
	1	Correct and complete answers to questions	1 2 3 4 5

All - Assessment Task 3: Final Exam

GOAL:	The final exam is designed to assess your understanding of the theory components of the course from the lectures, and required reading, from Week 8 – Week 13 inclusive		
PRODUCT:	Examination - Centrally Scheduled		
FORMAT:	Multiple choice questions.2 hours duration		
CRITERIA:	No.		Learning Outcome assessed
	1	Correct and complete answers to questions	1 2 3 4 5

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. Directed study hours may vary by location. 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 Blackboard 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	PUBLISHER
Required	McArdle W., Katch F., Katch V.	2014	Exercise Physiology Energy, Nutrition and Human Performance	Lippincott Williams & Wilkins

8.2. Specific requirements

According to the Health and Safety policies and procedures applicable within campus areas

9. How are risks managed in this course?

Risk assessments have been performed for all 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 Blackboard, are electronically checked through SafeAssign. This software allows for text comparisons to be made between your submitted assessment item and all other work that SafeAssign has access to.

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. 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.

10.5. 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.

10.6. 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.

10.7. 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
- Administration of Central Examinations
- Deferred Examinations
- Student Academic Misconduct
- Students with a Disability

Visit the USC website: <http://www.usc.edu.au/explore/policies-and-procedures#academic-learning-and-teaching>

10.8. General Enquiries

In person:

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

Tel: +61 7 5430 2890

Email: studentcentral@usc.edu.au