ESSC12001 *Exercise and Sport Physiology*
Term 1 - 2017

Profile information current as at 12/10/2024 02:23 pm

All details in this unit profile for ESSC12001 have been officially approved by CQUniversity and represent a learning partnership between the University and you (our student).The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

General Information

Overview
This unit is designed to provide you with a comprehensive overview of physiological mechanisms responsible for the body's responses to exercise in physical activity, sport and the workplace. You will be introduced to standard physiological laboratory and field measures to identify body adaptations to exercise.

Details
Career Level: *Undergraduate*
Unit Level: *Level 2*
Credit Points: *6*
Student Contribution Band: *8*
Fraction of Full-Time Student Load: *0.125*

Pre-requisites or Co-requisites
Pre-requisites For CG85 Bachelor of Exercise and Sport Sciences students: BMSC11001 Human Body Systems 1 AND BMSC11002 Human Body Systems 2 AND ESSC11001 Physical Activity, Fitness and Health For CG93 Bachelor of Medical Science students: BMSC11001 Human Body Systems 1 AND BMSC11002 Human Body Systems 2 For CK22 Bachelor of Physiotherapy students: ALLH11005 Anatomy and Physiology for Health Professionals 1 AND ALLH11004 Anatomy and Physiology for Health Professionals 2 For CC13 Bachelor of Education (Secondary) students: ESSC11001 Physical Activity, Fitness and Health AND ESSC11003 Skill Acquisition and Movement
Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the Assessment Policy and Procedure (Higher Education Coursework).

Offerings For Term 1 - 2017

- Distance
- Mackay
- Rockhampton

Attendance Requirements
All on-campus students are expected to attend scheduled classes – in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

Website
This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.

Class and Assessment Overview

Recommended Student Time Commitment

Each 6-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

Class Timetable

Regional Campuses
Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

Metropolitan Campuses
Adelaide, Brisbane, Melbourne, Perth, Sydney

Assessment Overview

1. **Online Test**
Weighting: 20%
2. **Practical Assessment**
Weighting: 40%
3. **On-campus Activity**
Weighting: Pass/Fail
4. **Examination**
Weighting: 40%

Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the University's Grades and Results Policy for more details of interim results and final grades.

CQUniversity Policies

All University policies are available on the CQUniversity Policy site.
You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure – Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure – International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback – Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the CQUniversity Policy site.

Previous Student Feedback

Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

Feedback from Course evaluation responses.

Feedback

For physiotherapy students, possibly ISL delivery of lectures to Bundaberg and semi-weekly delivery of laboratory sessions in Rockhampton.

Recommendation

The feasibility and logistics of delivering lectures via ISL to Bundaberg and semi-weekly labs in Rockhampton for physiotherapy students will be explored.

Action

Delivery of lectures to Bundaberg via ISL were not able to be implemented when pursued. Further, coordination and running of multiple on-campus lab sessions each week were not feasible.

Feedback from Course evaluation responses.

Feedback

The volume of content is difficult to grasp in some topics.

Recommendation

Course lectures will be reviewed, particularly the "heavy" course topics, with unneeded detail eliminated.

Action

Some lectures were more streamlined where possible to ensure necessary concepts were better grasped by students.

Feedback from Course evaluation responses.

Feedback

Residential school was close to the end of term, leaving less time to complete associated assessment.

Recommendation

The feasibility and logistics of alternative residential school dates earlier in term will be examined.

Action

The residential schools were conducted earlier in term, which seemed to allow sufficient time for students completing assessment tasks and preparing for the exam.

Unit Learning Outcomes

On successful completion of this unit, you will be able to:

1. Understand the physiological mechanisms responsible for the body's responses to exercise in physical activity, sport and the workplace.
2. Interpret measurement data and review current literature in the area of exercise physiology.
3. Plan and perform laboratory and field physiological measurements safely and ethically, and examine responses during a variety of exercise situations.

Alignment of Learning Outcomes, Assessment and Graduate Attributes

N/A Level | Introductory Level | Intermediate Level | Graduate Level | Professional Level | Advanced Level

Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes				
		1		2	3
1 - Communication		Introductory	Intermediate		
2 - Problem Solving	Intermediate	Intermediate	Intermediate		
3 - Critical Thinking	Intermediate	Intermediate	Intermediate		
4 - Information Literacy	Intermediate	Intermediate			
5 - Team Work		Intermediate	Intermediate		
6 - Information Technology Competence	Intermediate	Intermediate	Intermediate		
7 - Cross Cultural Competence					
8 - Ethical practice		Intermediate	Intermediate		
9 - Social Innovation					
10 - Aboriginal and Torres Strait Islander Cultures					

Alignment of Assessment Tasks to Graduate Attributes

Assessment Tasks	Graduate Attributes									
	1	2	3	4	5	6	7	8	9	10
1 - Online Test - 20%		Intermediate	Intermediate			Intermediate				
2 - Practical Assessment - 40%	Intermediate	Intermediate	Intermediate			Intermediate		Intermediate		
3 - Examination - 40%	Intermediate	Intermediate	Intermediate	Intermediate				Intermediate		
4 - On-campus Activity - 0%	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate		Intermediate		

Textbooks and Resources

Textbooks

ESSC12001

Prescribed

Exercise physiology: nutrition, energy and human performance
Edition: 8 (2015)
Authors: McArdle, WD, Katch, FL, Katch, VL
Lippincott Williams & Wilkins
New York , NY , USA
ISBN: 9781451191554
Binding: Hardcover

View textbooks at the CQUniversity Bookshop

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)

Referencing Style

All submissions for this unit must use the referencing style: American Psychological Association 6th Edition (APA 6th edition)
For further information, see the Assessment Tasks.

Teaching Contacts

Aaron Scanlan Unit Coordinator
a.scanlan@cqu.edu.au

Schedule

Week 1 - 06 Mar 2017

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to exercise and sport physiology		

Week 2 - 13 Mar 2017

Module/Topic	Chapter	Events and Submissions/Topic
Exercise metabolism: Energy transfer during exercise		

Week 3 - 20 Mar 2017

Module/Topic	Chapter	Events and Submissions/Topic
Exercise metabolism: Energy expenditure during exercise		

Week 4 - 27 Mar 2017

Module/Topic	Chapter	Events and Submissions/Topic
Responses to exercise: Pulmonary system		

Week 5 - 03 Apr 2017

Module/Topic	Chapter	Events and Submissions/Topic
Responses to exercise: Cardiovascular system		

Vacation Week - 10 Apr 2017

Module/Topic	Chapter	Events and Submissions/Topic
		Online test 1 will be made available from 9:00 am on Monday, April 10 until 5:00 pm on Tuesday, April 18

Week 6 - 17 Apr 2017

Module/Topic	Chapter	Events and Submissions/Topic
Responses to exercise: Endocrine system		

Week 7 - 24 Apr 2017

Module/Topic	Chapter	Events and Submissions/Topic
Exercise performance: Training principles and exercise prescription		

Week 8 - 01 May 2017

Module/Topic	Chapter	Events and Submissions/Topic
Exercise performance: Fatigue and ergogenic aids		

Week 9 - 08 May 2017

Module/Topic	Chapter	Events and Submissions/Topic
Exercise performance: Altered environments		

Week 10 - 15 May 2017

Module/Topic	Chapter	Events and Submissions/Topic
Aging and disease prevention: Clinical exercise physiology		

Week 11 - 22 May 2017

Module/Topic	Chapter	Events and Submissions/Topic
Exam preparation: Term review and practice questions		Online test 2 will be made available from 9:00 am on Monday, May 22 until 5:00 pm on Tuesday, May 30

Week 12 - 29 May 2017

Module/Topic	Chapter	Events and Submissions/Topic
Exam preparation: No lecture		

Review/Exam Week - 05 Jun 2017

Module/Topic	Chapter	Events and Submissions/Topic
		Exam to be scheduled during exam block **Practical Assessment** Due: Review/Exam Week Monday (5 June 2017) 11:45 pm AEST

Exam Week - 12 Jun 2017

Module/Topic	Chapter	Events and Submissions/Topic

Assessment Tasks

1 Online Tests

Assessment Type
Online Test

Task Description
You will be required to complete two online tests across term. Each test will contain multiple-choice questions based on unit content from lectures and course readings. Test 1 will cover material from lectures 1-5, while Test 2 will cover material from lectures 6-10.

Assessment Due Date

Online test 1 will be made available from 9:00 am on Monday, April 10 AEST until 5:00 pm on Tuesday, April 18 AEST.
Online test 2 will be made available from 9:00 am on Monday, May 22 AEST until 5:00 pm on Tuesday, May 30 AEST.

Return Date to Students

Test results will be made available in Moodle upon completion with a full test review available in Moodle upon test closure.

Weighting
20%

Assessment Criteria
A selection of 40 randomly-generated questions equally distributed across lectures (8 questions from each lecture) will be provided in each test. Each test will be graded using the overall test score (out of 40 marks).

Referencing Style

- American Psychological Association 6th Edition (APA 6th edition)

Submission
Online

Submission Instructions
Tests will be accessed and completed via the unit Moodle site.

assessmentOutcome

- Understand the physiological mechanisms responsible for the body's responses to exercise in physical activity, sport and the workplace.
- Interpret measurement data and review current literature in the area of exercise physiology.

assessmentGradAttribute

- Problem Solving
- Critical Thinking
- Information Technology Competence

2 Practical Assessment

Assessment Type
Practical Assessment

Task Description
Attendance at laboratory sessions will involve completion of different learning components, including equipment use, skill demonstration, data acquisition, interpretation of results, and theoretical reasoning. You will be required to complete a laboratory workbook for all laboratory sessions to demonstrate knowledge and skills related to each laboratory component.

Assessment Due Date
Review/Exam Week Monday (5 June 2017) 11:45 pm AEST

Return Date to Students

The results for the laboratory workbook will be made available within 2 weeks of the due date.

Weighting
40%

Assessment Criteria
Grades for this assessment will be based on marks attained in each of the laboratory sessions. Specifically, the following laboratory sessions will be graded:
1. Screening for health and anthropometrical measurement
2. Determining exercise intensity, efficiency, and substrate utilisation using Douglas Bags
3. Examining physiological responses during exercise using spirometry and electrocardiography
4. Testing for anaerobic threshold, maximum oxygen uptake, and high-intensity exercise capacity
5. Assessing thermal and hydration responses during exercise

Referencing Style

- American Psychological Association 6th Edition (APA 6th edition)

Submission
Online

Submission Instructions
The completed laboratory workbook must be submitted via the unit Moodle site.

assessmentOutcome

- Understand the physiological mechanisms responsible for the body's responses to exercise in physical activity, sport and the workplace.
- Interpret measurement data and review current literature in the area of exercise physiology.
- Plan and perform laboratory and field physiological measurements safely and ethically, and examine responses during a variety of exercise situations.

assessmentGradAttribute

- Communication
- Problem Solving
- Critical Thinking
- Information Technology Competence
- Ethical practice

3 On-campus Activity

Assessment Type
On-campus Activity

Task Description
You must attend and participate in all laboratory sessions in this unit. On-campus laboratory sessions and residential schools will be held during specified weeks across term to deliver laboratory content.

Assessment Due Date

Attendance at laboratory sessions will be completed across specified weeks of term.

Return Date to Students

Inadequate attendance and/or participation will be made available during and following each laboratory session.

Weighting
Pass/Fail

Minimum mark or grade
Pass

Assessment Criteria
Attendance at all laboratory sessions with sufficient participation will result in a passing grade for this assessment.

Referencing Style

- American Psychological Association 6th Edition (APA 6th edition)

Submission
Offline

assessmentOutcome

- Interpret measurement data and review current literature in the area of exercise physiology.
- Plan and perform laboratory and field physiological measurements safely and ethically, and examine responses during a variety of exercise situations.

assessmentGradAttribute

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Team Work
- Information Technology Competence
- Ethical practice

Examination

Outline
Complete an invigilated examination.

Date
During the examination period at a CQUniversity examination centre.

Weighting
40%

Length
180 minutes

Exam Conditions
Closed Book.

Materials
Calculator - non-programmable, no text retrieval, silent only
Dictionary - non-electronic, concise, direct translation only (dictionary must not contain any notes or comments).

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assessmentOutcome

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assessmentGradAttribute

Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the **Student Academic Integrity Policy and Procedure**. This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

What is a breach of academic integrity?
A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

Why is academic integrity important?
A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

Where can I get assistance?
For academic advice and guidance, the Academic Learning Centre (ALC) can support you in becoming confident in completing assessments with integrity and of high standard.

What can you do to act with integrity?

Be Honest
If your assessment task is done by someone else, it would be dishonest of you to claim it as your own

Seek Help
If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)

Produce Original Work
Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem