

EXERSCI 100G: Exercise and Fitness: Myths and Reality

Science

(15 POINTS)

Course Prescription

An introduction to the principles of physical exercise, with a focus on understanding how the body moves and responds to exercise, how performance can be measured, and how fitness can be developed and maintained to optimise health. Particular emphasis will be placed on the debunking of common myths about exercise, and offering evidence-based advice on the benefits of appropriate physical activity.

Course Overview

The course begins with the introduction of three pioneering exercise/sport studies which demonstrate the strong association between regular physical activity and health. Anatomy and physiology of the human body are explored at various stages of the course and more exercise and 'sporty' topics developed at a level suited to a 'Gen Ed' audience. You don't need to have done any science to do well in the course! Cardio-respiratory fitness, ECGs, weight-training, challenges during scuba diving and mountaineering, involvement of the brain in initiating and controlling physical movement, genetic influences on human fitness and performance, ways of improving one's fitness level, psychology of pain and rehabilitation, nutrition and metabolic balance, impact of ageing on human performance are some of the very interesting topics that are discussed in the course.

Blended learning activities like online practice quizzes (with feedback), online discussion forums along with lecture recordings will be extensively used to facilitate online learning.

Course Requirements

Restriction: BIOSCI 107, EXERSCI 101, 105, SPORTSCI 100G, 101, 105, MEDSCI 142

Capability 1: Disciplinary Knowledge and Practice

Capability 2: Critical Thinking
Capability 3: Solution Seeking

Capability 4: Communication and Engagement

Capability 5: Independence and Integrity

Capability 6: Social and Environmental Responsibilities

Learning Outcomes

By the end of this course, students will be able to:

- 1. Recognise the importance of physical activity, exercise and sport on one's health and wellness by evaluating evidence-based practice developed through historical and current research. (Capability 1, 2, 3 and 6)
- 2. Explain the metabolic, biomechanical, neural and psychological factors required for human movement. (Capability 1, 2 and 3)
- 3. Differentiate among multiple methods of evaluating and improving physical fitness. (Capability 1, 2 and 3)
- 4. Discuss the impact of genes and environmental challenges on human fitness and performance. (Capability 1, 2 and 3)
- 5. Explain the psychological principles involved in pain management, rehabilitation and acquisition of motor skills. (Capability 1, 2 and 3)
- 6. Discuss the impact of ageing on human health and physical/mental performance. (Capability 1, 2 and 3)
- 7. Apply exercise principles by analysing training, benefits and risks associated with a selection of sports and communicate the analyses effectively. (Capability 2, 3, 4 and 5)

Assessments

Assessment Type	Percentage	Classification
Essay	30%	Individual Coursework
Test	20%	Individual Test
Final Exam	50%	Individual Examination
3 types	100%	

Assessment Type	Learning Outcome Addressed							
	1	2	3	4	5	6	7	
Essay	✓	~	~				~	
Test	~	~	~	✓				

Final Exam

Tuākana

Tuākana tutorials are carried out by the course coordinator as and when required.

Key Topics

The course is divided into the following six modules (better known as "myths" in the course); each one taking a week to complete during Summer School.

- 1. I am healthy, so I must be fit.
- 2. It's all in your mind.
- 3. It's all in your genes.
- 4. No pain, no gain.
- 5. Use it or lose it.
- 6. You are too old!

Special Requirements

The final examination is the only 'must complete' assessment.

Workload Expectations

For this course in Summer School, you can expect **four hours** of lectures per week, **two one-hour** tutorials per week. This should be supplemented with at least **fifteen hours** per week of personal study time. Personal study involves time required for you to read, think and make notes about the content you've learnt in the week, attempt tutorial questions prior to class, test your understanding and application of knowledge by attempting the practice quizzes and preparation for the midterm test and final exam.

Delivery Mode

Campus Experience

Attendance is expected at scheduled activities including lectures and tutorials to complete components of the course. Lectures will be available as recordings. Tutorials will NOT be available as recordings.

Attendance on campus is required for the test and exam. The activities for the course are scheduled as a standard weekly timetable.

Learning Resources

You are not required to purchase a text book or a course book. All material required for successful completion of the course will be provided to you on Canvas.

Student Feedback

During the course Class Representatives in each class can take feedback to the staff responsible for the course and staff-student consultative committees.

At the end of the course students will be invited to give feedback on the course and teaching through a tool called SET or Qualtrics. The lecturers and course co-ordinators will consider all feedback.

Your feedback helps to improve the course and its delivery for all students.

Digital Resources

Course materials are made available in a learning and collaboration tool called Canvas which also includes reading lists and lecture recordings (where available).

Please remember that the recording of any class on a personal device requires the permission of the instructor.

Academic Integrity

The University of Auckland will not tolerate cheating, or assisting others to cheat, and views cheating in coursework as a serious academic offence. The work that a student submits for grading must be the student's own work, reflecting their learning. Where work from other sources is used, it must be properly acknowledged and referenced. This requirement also applies to sources on the internet. A student's assessed work may be reviewed against online source material using computerised detection mechanisms.

Copyright

The content and delivery of content in this course are protected by copyright. Material belonging to others may have been used in this course and copied by and solely for the educational purposes of the University under license.

You may copy the course content for the purposes of private study or research, but you may not upload onto any third party site, make a further copy or sell, alter or further reproduce or distribute any part of the course content to another person.

Inclusive Learning

All students are asked to discuss any impairment related requirements privately, face to face and/or in written form with the course coordinator, lecturer or tutor.

Student Disability Services also provides support for students with a wide range of impairments, both visible and invisible, to succeed and excel at the University. For more information and contact details, please visit the Student Disability Services website http://disability.auckland.ac.nz

Special Circumstances

If your ability to complete assessed coursework is affected by illness or other personal circumstances outside of your control, contact a member of teaching staff as soon as possible before the assessment is due.

If your personal circumstances significantly affect your performance, or preparation, for an exam or eligible written test, refer to the University's <u>aegrotat or compassionate consideration page</u> https://www.auckland.ac.nz/en/students/academic-information/exams-and-final-results/during-exams/aegrotat-and-compassionate-consideration.html.

This should be done as soon as possible and no later than seven days after the affected test or exam date.

Learning Continuity

In the event of an unexpected disruption we undertake to maintain the continuity and standard of teaching and learning in all your courses throughout the year. If there are unexpected disruptions the University has contingency plans to ensure that access to your course continues and your assessment is fair, and not compromised. Some adjustments may need to be made in emergencies. You will be kept fully informed by your course co-ordinator, and if disruption occurs you should refer to the University Website for information about how to proceed.

Student Charter and Responsibilities

The Student Charter assumes and acknowledges that students are active participants in the learning process and that they have responsibilities to the institution and the international community of scholars. The University expects that students will act at all times in a way that demonstrates respect for the rights of other students and staff so that the learning environment is both safe and productive. For further information visit Student Charter https://www.auckland.ac.nz/en/students/forms-policies-and-guidelines/student-policies-and-guidelines/student-charter.html.

Disclaimer

Elements of this outline may be subject to change. The latest information about the course will be available for enrolled students in Canvas.

In this course you may be asked to submit your coursework assessments digitally. The University reserves the right to conduct scheduled tests and examinations for this course online or through the use of computers or other electronic devices. Where tests or examinations are conducted online remote invigilation arrangements

may be used. The final decision on the completion mode for a test or examination, and remote invigilation arrangements where applicable, will be advised to students at least 10 days prior to the scheduled date of the assessment, or in the case of an examination when the examination timetable is published.