

EXERSCI105: Exercise Prescription

Science
(15 points)

Course Prescription

An introduction to the risks and benefits of exercise, exercise policy and safety, physical fitness testing, guidelines for exercise test administration, principles of exercise prescription, cardiorespiratory and neuromuscular training.

Course Overview

What should my heart rate be when exercising? How do you measure someone's fitness? How can exercise improve fitness? If you are asking yourself these types of questions then you will benefit from this course. This course is designed for anyone with an interest in learning how to prescribe exercise and physical activity for healthy people. In this course, you will learn how to implement pre-exercise evaluation and screening processes, exercise assessment, and exercise prescription principles for the purposes of measuring a healthy person's exercise ability.

EXERSCI 105 is an compulsory course in the Exercise Sciences undergraduate major.

Course Requirements

Restriction: SPORTSCI 105, 205

Capabilities Developed in this Course

- Capability 1: People and Place
- Capability 3: Knowledge and Practice
- Capability 4: Critical Thinking
- Capability 5: Solution Seeking
- Capability 6: Communication
- Capability 7: Collaboration
- Capability 8: Ethics and Professionalism

Learning Outcomes

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

1. Screen apparently healthy individuals to determine readiness for exercise. (Capability 3, 4, 5, 6 and 8)
2. Describe guidelines for pre-exercise screening, exercise assessment and exercise prescription in apparently healthy adults. (Capability 1, 3, 4 and 5)
3. Discuss methods for the assessment of body composition, cardiorespiratory and muscular fitness in apparently healthy adults. (Capability 1, 3, 4 and 5)
4. Use current evidence based guidelines to prescribe appropriate exercise interventions for apparently healthy adults. (Capability 1, 3, 4, 5, 6, 7 and 8)
5. Distinguish roles of exercise and health professionals within exercise science settings and judge when to refer. (Capability 3, 4, 5, 6 and 8)

Assessments

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

Assessment Type	Learning Outcome Addressed				
	1	2	3	4	5
Final Exam		✓	✓	✓	✓
Test	✓	✓	✓		✓
Lab Assessments	✓	✓	✓		

Tuākana

Tuākana Science is a multi-faceted programme for Māori and Pacific students providing topic specific tutorials, one-on-one sessions, test and exam preparation and more. Explore your options at

<https://www.auckland.ac.nz/en/science/study-with-us/pacific-in-our-faculty.html>

<https://www.auckland.ac.nz/en/science/study-with-us/maori-in-our-faculty.html>

Exercise Sciences has a dedicated Tuākana space at the City Campus (301-183). Exercise Sciences Tuākana space consists of a few personal computers, a collection of prescribed textbooks of Exercise Sciences courses, personal study and relaxing areas with access to shared kitchen facilities. Tuākana students enrolled in any

Exercise Sciences course are most welcome to make use of these facilities not only to support their learning but also to build whanaungatanga. Feel free to contact Waruna, the Exercise Sciences Tuākana coordinator, on w.weerasekera@auckland.ac.nz for any questions.

Key Topics

This course is divided into three modules: screening and supervision, exercise assessment, and exercise prescription.

Special Requirements

The lab component of the course involves taking measurements of individuals participating in exercise. Students have the choice, in each lab, to act as either the participant or researcher. All students are encouraged to act as participants at some point during the course.

At times, laboratory work for this course may be held in the Health and Rehabilitation Clinic (HRC). The HRC is a clinical training facility and patients may be using the equipment during lab times. Students must behave in a way that will not offend or interfere with these activities. Proper exercise attire must be worn during labs.

Workload Expectations

This course is a standard 15 point course. In Summer School, students are expected to spend 20 hours per week involved in each 15 point course that they are enrolled in.

For this course, each week you can expect 4 hours of lectures, a 3 hour lab, 6 hours of reading and thinking about the content, and 6 hours of work on assignments and/or test preparation.

If your ability to participate in coursework is affected by illness or other personal circumstances, contact the teaching staff as soon as possible.

Delivery Mode

Campus Experience

Attendance is expected at scheduled activities including labs to receive credit for components of the course. Lectures will be available as recordings. Other learning activities including labs will not be available as recordings.

The course will include live online events including group discussions.

Attendance on campus is required for the test/exam.

The activities for the course are scheduled as a standard weekly timetable.

Learning 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.

Canvas

This course is primarily lecture-based, however, recordings of the lectures and lecture slides will be posted to the Canvas page regularly. All labs require pre-lab reading which can be found on Canvas. You are expected to check Canvas regularly (multiple times per week) to check for messages and new material. Please also ensure that all your personal details (phone numbers, email addresses, and street address) are correct and kept up-to-date on Canvas and Student Services Online.

At times a 'flipped' teaching and learning style will be used. It is expected that you work through material BEFORE coming to the relevant class. The in-class content will hopefully develop understanding. Students will be advised when a 'flipped' class will be held to allow them to prepare beforehand.

Textbook and Readings

This course emphasizes the use of evidence-based practice and therefore students are encouraged to read widely on the topics covered. Several textbooks (available in the library) are recommended but not compulsory.

Highly Recommended

ACSM's Guidelines for Exercise Testing and Prescription

Recommended

ACSM's Resources for the Personal Trainer

Advanced Fitness Assessment and Exercise Prescription

Essentials of Strength Training and Conditioning

Health & Safety

Laboratory experience in this course may require participation in physical activity/exercise that has risks of potential adverse events. Students will be advised on the specific risks of participating in lab activities and will be directed on appropriate risk mitigation strategies. Students will be required to complete pre-screening before participating in physical activity to the satisfaction of the lab supervisor.

Students will be required to wear appropriate exercise clothing (if participating) and closed toed shoes (all students in the lab).

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.

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 for potential plagiarism or other forms of academic misconduct, using computerised detection mechanisms.

Class Representatives

Class representatives are students tasked with representing student issues to departments, faculties, and the wider university. If you have a complaint about this course, please contact your class rep who will know how to raise it in the right channels. See your departmental noticeboard for contact details for your class reps.

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) <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 [aegrotat or compassionate consideration page](https://www.auckland.ac.nz/en/students/academic-information/exams-and-final-results/during-exams/aegrotat-and-compassionate-consideration.html) <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 course assessment continues to meet the principles of the University's assessment policy. Some adjustments may need to be made in emergencies. You will be kept fully informed by your course co-ordinator/director, and if disruption occurs you should refer to the university website for information about how to proceed.

The delivery mode may change depending on COVID restrictions. Any changes will be communicated through Canvas.

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) <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 students may be asked to submit 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. In exceptional circumstances changes to elements of this course may be necessary at short notice. Students enrolled in this course will be informed of any such changes and the reasons for them, as soon as possible, through Canvas.