

SPRT 3008 EXERCISE PHYSIOLOGY ACROSS THE LIFESPAN

Credit Points 10

Legacy Code 401149

Coordinator Chloe Taylor ([https://directory.westernsydney.edu.au/search/name/Chloe Taylor/](https://directory.westernsydney.edu.au/search/name/Chloe%20Taylor/))

Description This unit is focused on physiological changes across the human lifespan and their effects on exercise tolerance. There is a particular focus on structural, physiological and motor development changes across the lifespan with emphasis on the control of neuromuscular, cardiovascular, respiratory and thermoregulatory function. Exercise and physiological adaptation to exercise training at different ages will be covered, alongside contraindicated exercises and common injuries/conditions that are present during certain stages of growth and development.

School Health Sciences

Student Contribution Band HECS Band 4 10cp

Check your HECS Band contribution amount via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 3 subject

Pre-requisite(s) BIOS 2012

Restrictions Students must be enrolled in 4658 Bachelor of Health Science (Sport and Exercise Science).

Learning Outcomes

On successful completion of this subject, students should be able to:

1. Distinguish the stages of growth and development across the lifespan, from conception through to death (including pregnancy in women).
2. Justify why certain exercises are contraindicated for particular stages of growth and development across the lifespan, and why certain injuries and conditions are commonly present during certain stages of growth and development. Describe the structural, physiological and motor development changes across the lifespan and the effect of exercise on such changes.
3. Articulate the structural, physiological and motor development changes across the lifespan and the effect of exercise on such changes.
4. Analyse and evaluate the literature and guidelines on growth and development as they relate to exercise.
5. Use an integrated understanding of physiology to explain how gender and ageing influence movement and functional capability.
6. Accurately contrast and interpret physiological data collected from individuals who differ in age, size and gender.
7. Accurately distinguish between normal and abnormal levels of exercise tolerance for children, adults and the elderly.
8. Integrate knowledge of and skills in growth and development with other areas of exercise science.

Subject Content

1. Problems of normality, scale, and gender.

2. Theories of growth and development
3. Structural, physiological and motor development changes throughout the lifespan
4. Common injuries and contraindicated exercises for various stages of growth and development
5. Genetics, training and adaptability of exercise tolerance and physiology at different ages
6. Integrated problems.

Special Requirements

Legislative pre-requisites

Prior to enrolling in this subject, students must have submitted a Student Undertaking Form and have a National Police Check, which is required to be submitted before placement. Students must also have submitted a Working with Children Check Student Declaration. Students must hold a valid and current First Aid Certificate from a Registered Training Organisation. Refer to the Special Requirements website for more information.

Special requirements (https://www.westernsydney.edu.au/currentstudents/current_students/enrolment/special_requirements/)

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Item	Length	Percent	Threshold	Individual/ Group Task
On-Line Quizzes x4 - Short answers and MCQ	40 minutes each	20	N	Individual
Case Study Report	1,500 words	20	N	Individual
Participation in class activities	Weeks 1-14	10	N	Individual
Final examination	2 hours	50	N	Individual

Teaching Periods

2022 Semester 1

Campbelltown

Day

Subject Contact Chloe Taylor ([https://directory.westernsydney.edu.au/search/name/Chloe Taylor/](https://directory.westernsydney.edu.au/search/name/Chloe%20Taylor/))

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=SPRT3008_22-AUT_CA_D#subjects)