

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 subject 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. Social determinants of health and physiological adaptation to exercise training will be covered, alongside contraindicated exercises and common injuries/conditions that are present at different stages across the lifespan.

School Health Sciences

Discipline Human Movement

Student Contribution Band HECS Band 4 10cp

Check your fees 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.
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 sex differences and ageing influence movement and functional capability.
6. Illustrate the social determinants of health that affect growth and development.
7. 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. Chronological and biological age

4. Structural, physiological and motor development changes throughout the lifespan
5. Common injuries and contraindicated exercises for various stages of growth and development
6. Genetics, training and adaptability of exercise tolerance and physiology at different ages
7. Social determinants of health that affect growth and development
8. Integrated problems.

Special Requirements

Legislative pre-requisites

All students must have:

1. Working with Children Check Student Declaration
2. National Police Check
3. Student Undertaking Form
4. First Aid Certificate

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.

Type	Length	Percent	Threshold	Individual/ Group Task	Mandatory
Literature Review	1,500 words	30	N	Individual	N
Annotated Bibliography	1,000 words	20	N	Individual	N
Final Exam	2 hours	50	N	Individual	N

Teaching Periods

Autumn (2025)

Campbelltown

On-site

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/odd/timetable/?subject_code=SPRT3008_25-AUT_CA_1#subjects)