

SPRT 1001 FUNDAMENTALS OF EXERCISE SCIENCE

Credit Points 10

Legacy Code 400880

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

Description This subject is designed to provide fundamental basic science and sport and exercise science content, with the intent to prepare the students for the more advanced scientific applications to the study and research of the sport and exercise sciences. Students will be exposed to computer software applications to aid data processing used in the sport and exercise sciences, with special applications to fields such as biomechanics, exercise physiology, motor learning, skill acquisition and sport psychology.

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 1 subject

Equivalent Subjects SPRT 1007 - Professional Practice of Sport Exercise Science SPRT 1002 - Fundamentals of Exercise Science (WSTC)

Restrictions

Students must be enrolled in 4658 Bachelor of Health Science (Sport and Exercise Science) or 4659 Bachelor of Health Science (Personal Development, Health and Physical Education) or 4741 Bachelor of Sport Development or 4742 Bachelor of Health Science (Health and Physical Education)-Pathway to Teaching (Secondary) or 4747 Bachelor of Health Science (Health and Physical Education) or 4791 Bachelor of Health and Physical Education (Pathway to Teaching Secondary) or 4792 Bachelor of Health and Physical Education or 3769 Bachelor of Data Science or 4656 Bachelor of Health Science, 6000 Diploma in Health Science/Bachelor of Health Science or 6001 Diploma in Health Science/Bachelor of Health Science (Health and Physical Education).

Learning Outcomes

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

1. Identify the scientific background of the sport and exercise sciences and outline career opportunities within this discipline
2. Define and describe each of the main disciplines of the sport and exercise sciences: biomechanics; exercise physiology; motor learning & skill acquisition; and sports & health psychology.
3. Recall and illustrate knowledge of introductory principles within the main disciplines of the sport and exercise sciences.
4. Evaluate measurement techniques and procedures typically undertaken in the sport & exercise sciences.
5. Employ equipment and software applications to either: collect, process and/or present data common to the sport and exercise sciences.
6. Recall knowledge of and execute all practical skills and activities safely in compliance with discipline specific OH&S procedures and

systems, and UWS standard operating procedures and laboratory rules.

7. Demonstrate communication, numeracy and social interaction skills, together with information and technology literacy.

Subject Content

1. Overview of the Sport and Exercise Sciences
2. Measurement in Sport and Exercise Science
3. Introduction to Biomechanics
4. Introduction to Exercise Physiology
5. Introduction to Physical Activity
6. Introduction to Motor Learning and Skill Acquisition
7. Introduction to Sport and Exercise Psychology

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
Quiz	Up to 30 mins	20	N	Individual	N
Presentatio	15-20 mins	30	N	Individual	Y
Presentatio	5 mins	10	N	Individual	Y
End-of-session Exam	2 hours	40	Y	Individual	Y

Prescribed Texts

- Housh, T. J., Housh, D. J., & Johnson, G. O. (Eds.). (2018). Introduction to exercise science (5th ed.). New York : Routledge, Taylor & Francis Group

Teaching Periods

Autumn (2025)

Campbelltown

On-site

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

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=SPRT1001_25-AUT_CA_1#subjects)

Penrith (Kingswood)

On-site

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

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=SPRT1001_25-AUT_KW_1#subjects)