

513-497 Movement Science: Advanced Coursework

Credit Points	25
Semester	Year
Prerequisites	Bachelor of Science (BSc) normally with an H2B average in relevant 300-level subjects or equivalent qualification recognised by the Faculty of Science, University of Melbourne
Coordinator	Associate Professor Kim Bennell
Mode of Delivery	On Campus
Contact	Approximately 3 hours per week
Non Contact	Students will be expected to undertake a number of hours of self directed learning in this subject. Approximately 9 hours per week is suggested.

Description Structured and independent learning aiming to extend student's education in the fields of health, exercise, sports medicine, neuroscience or rehabilitation research and to enhance critical analysis skills. This subject will cover basic concepts of research methodology, design, and statistical analysis used in research. It will also comprise advanced learning in relation to specific relevant topics. Students will be required to locate and utilise information available in the scientific and medical literature. As part of this subject, students will attend (i) a 10-15 hour SPSS module to develop skills in using a statistical analysis computer package, (ii) an endnote workshop, (iii) weekly journal club and research seminars (iv) a tutorial program (approximately 10 x 1 hr sessions).

Assessment Hurdle requirement - Attendance at 90% of student subject program. One 30 minute oral presentation (20%) held mid semester 1, one written assignment of 2000 words (40%) due at the end of semester 1 and one 2 hour written examination (40%) held mid semester 2.

Prescribed Texts Nil

Subject Objectives

On completion of this subject, students will have had the opportunity to develop:

- An understanding of the aims and methods of quantitative research.
- An ability to critically analyse and synthesise biomedical and scientific research literature.
- An ability to use a statistical computer package to analyse research data.
- A capacity to undertake searching of computerised medical literature databases and to organise retrieved literature.

Generic Skills

On completion of this subject, students will be expected to be able to demonstrate the following generic skills:

- A capacity for self-directed learning and the motivation for life-long independent learning.
- Problem-solving abilities with flexibility of approach.
- A capacity for effective oral and written communication.
- A capacity to manage competing demands on time.
- An appreciation of the team approach to learning in complex areas.

Specific Skills

On completion of this subject, students will be expected to be able to demonstrate the following specific skills:

- The knowledge of the basic concepts of quantitative research methodology.
- Ability to locate, access and analyse information available in the scientific and medical literature.
- The ability to use statistical analysis and endnote computer packages.
- The capacity to disseminate and present biomedical or scientific information by oral and written communication.