

Unit Outline (Higher Education)

Institute / School:	Institute of Health and Wellbeing
Unit Title:	Principles of Research in Exercise Science
Unit ID:	EXSCI1704
Credit Points:	15.00
Prerequisite(s):	Nil
Co-requisite(s):	Nil
Exclusion(s):	Nil
ASCED:	010103

Description of the Unit:

This unit is designed to introduce students to the fundamentals of statistics used within the field of Exercise and Sport Science including coaching, athletic training, rehabilitation and health. It will provide background knowledge in qualitative and quantitative research paradigms, including research design, ethical issues, data analysis techniques, interpretation of findings and research report writing. Students will work on tasks which require them to collect, analyse and report data to assist them in developing research and evaluation competencies, and appreciating the importance and applications of research and statistics in the field of exercise science.

Grade Scheme: Graded (HD, D, C, P, MF, F, XF)

Work Experience:

No work experience

Placement Component: No

Supplementary Assessment: Yes

Where supplementary assessment is available a student must have failed overall in the Unit but gained a final mark of 45 per cent or above, has completed all major assessment tasks (including all sub-components where a task has multiple parts) as specified in the Unit Description and is not eligible for any other form of supplementary assessment.

Course Level:

Level of Unit in Course	AQF Level of Course					
	5	6	7	8	9	10
Introductory	■	■	✓	■	■	■
Intermediate	■	■	■	■	■	■
Advanced	■	■	■	■	■	■

Learning Outcomes:

Knowledge:

- K1.** Describe the types and applications of qualitative and quantitative research study designs in the exercise and sports science domain.
- K2.** Classify types and levels of data obtained through conducting research in exercise science.
- K3.** Distinguish between higher and lower quality information when reading published research.
- K4.** Critique contemporary peer-reviewed exercise science literature, including research methodologies and statistical results and integrate this knowledge into other areas of exercise science.
- K5.** Describe the ethical concepts associated with conducting research.

Skills:

- S1.** Utilise primary research databases to conduct literature searches.
- S2.** Critically analyse and incorporate relevant peer-reviewed research literature to support findings and claims.
- S3.** Calculate, report, and discuss descriptive and inferential statistics.
- S4.** Conduct and analyse qualitative data to determine trends and/or themes.

Application of knowledge and skills:

- A1.** Present findings in a technical report format, displaying appropriate academic writing skills, and incorporating correct APA referencing.
- A2.** Engage collaboratively with peers to research a contemporary sports science issue.

Unit Content:

The following topics will be covered: introduction to research, using the literature, types of research study designs, ethical issues in research and scholarship, becoming acquainted with statistical concepts, quantitative research, qualitative research, mixed-methods research, completing the research process, and ways of reporting research.

Learning Task and Assessment:

Learning Outcomes Assessed	Assessment Tasks	Assessment Type	Weighting
K3, K4, S1, S2	Utilise research databases to conduct and critically review contemporary literature.	Literature review	20-40%
S1, S2, S3, S4, A1, A2	Conduct and analyse a research project and develop and present a report.	Research report	30-50%
K1, K2, K3, K4, K5, A1	Review of research principles presented in the unit.	End of semester test	30-50%

Learning Outcomes Assessed	Assessment Tasks	Assessment Type	Weighting
K1, K2, K3, K4, K5, S1, S2, S3, S4, A1, A2	Attendance of weekly laboratories/tutorials and/or flexible learning blocks (90% attendance requirement)	Attendance	S/U

Adopted Reference Style:

APA ()

Refer to the [library website](#) for more informationFed Cite - [referencing tool](#)