Unit Outline (Higher Education)

Institute / School:	Institute of Health and Wellbeing
Unit Title:	APPLIED EXERCISE SCIENCE
Unit ID:	EXSCI3177
Credit Points:	15.00
Prerequisite(s):	(At least 240 credit points from ANY subject-area at any level)
Co-requisite(s):	Nil
Exclusion(s):	(EXSCI3174)
ASCED:	069903

Description of the Unit:

The unit is designed for students enrolled in the exercise science program, to extend individual and independent learning skills. Students will undertake a supervised research project or literature review involving research of a publishable standard, which forms the basis of a final report presented at the end of the unit. The unit will explore current scientific problems in relevant fields of research. As part of the unit, students are trained to develop a project or literature review with defined objectives, collate, evaluate, critically interpret experimental data using statistical analysis and communicate their results scientifically.

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

Work Experience:

No work experience: Student is not undertaking work experience in industry.

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:

On successful completion of the unit the students are expected to be able to:

Knowledge:

K1. Critically appraise and demonstrate an in-depth knowledge of an appropriate topic area within the field of Exercise and Sport Science in the form of a literature review

K2. Describe and appraise appropriate methods for data collection and analysis within the field of Exercise and Sport Science

K3. Discuss potential ethical issues associated with scientific research

Skills:

S1. Demonstrate problem solving skills through devising appropriate methodological approaches to address the research question

S2. Collect, collate, analyse and interpret field and/or laboratory data

S3. Communicate results in oral and written form.

S4. Demonstrate ability to participate in individual or group research projects (as required).

S5. Operate with a significant degree of independence whilst maintaining efficient and meaningful dialogue with a project supervisor.

Application of knowledge and skills:

A1. Collect and scrutinise scientific research literature and develop an independent interpretation in order to establish the approaches and scope of the research project.

A2. Decide on methodological approaches to obtain and collect data in an appropriate manner, and analyse this data to help understand scientific problems.

A3. Evaluate and communicate research results in oral and written form, requiring critical analysis, synthesis and organisation of knowledge and construction of a rational and lucid scientific argument.

A4. Apply problem solving and knowledge of statistical methods to critically analyse data and communicate results using both written and oral approaches.

Unit Content:

Topic may include:

- Identifying the research question
- Developing aims and objectives
- Conducting a literature review
- Writing a research proposal
- Qualitative, quantitative or mixed methods design approach
- Applying for ethics
- Collecting and analysing data
- Reporting findings – written and oral approaches

Learning Task and Assessment:

Learning Outcomes Assessed	Assessment Tasks	Assessment Type	Weighting
K1 – K3, S1, S3 - S5, A1 – A4	Demonstrate an in-depth knowledge of an exercise science related topic through a written proposal for a scientific study that includes a review of the relevant literature.	Project proposal	20 – 30%
K1 – K3, S1 – S5, A1 – A4	Describe, appraise and develop an appropriate methodology for data collection and analysis in Exercise Science.	Final Report	40 – 60%
K1 - K3, S1 – S5, A1 – A4	Discuss potential ethical issues associated with research. Interpret and describe project outcomes.	Oral Presentation	20 – 30%

Alignment to the Minimum Co-Operative Standards (MiCS)

The Minimum Co-Operative Standards (MiCS) are an integral part of the Co-Operative University Model. Seven criteria inform the MiCS alignment at a Course level. Although Units must undertake MiCS mapping, there is NO expectation that Units will meet all seven criteria. The criteria are as follows:

1. Co-design with industry and students
2. Co-develop with industry and students
3. Co-deliver with industry
4. FedTASK alignment
5. Workplace learning and career preparation
6. Authentic assessment
7. Industry-link/Industry facing experience

MiCS Course level reporting highlights how each Course embraces the principles and practices associated with the Co-Operative Model. Evidence of Course alignment with the MiCS, can be captured in the Course Modification Form.

MICS Mapping has been undertaken for this Unit No

Date:

Adopted Reference Style:

APA

Refer to the library website for more information

Fed Cite - referencing tool