



Course Outline (Higher Education)

School:	School of Science, Psychology and Sport
Course Title:	RESEARCH PROJECT
Course ID:	SCCOR3001
Credit Points:	15.00
Prerequisite(s):	(Successful completion of two years full time equivalent of a science degree)
Co-requisite(s):	Nil
Exclusion(s):	(SCENV3903 and SCIGC3990)
ASCED:	019999

Description of the Course:

This course is designed for students enrolled in science programmes to extend individual and independent learning skills. Students will undertake a supervised research project involving research of a publishable standard which forms the basis of a final report presented at the end of the course. The course will explore current scientific problems in relevant fields of research. As part of the course, students are trained to develop a project 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

Program Level:

Level of course in Program	AQF Level of Program					
	5	6	7	8	9	10
Introductory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intermediate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advanced	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Learning Outcomes:

Students undertaking this course are expected to be able to demonstrate the following knowledge and skills

Knowledge:

- K1.** Demonstrate an in-depth knowledge of an appropriate subject and describe appropriate methods for data collection and analysis within this field
- K2.** Discuss potential ethical issues associated with scientific research

Skills:

- S1.** Examine and critique literature relevant to the needs and scope of the research project
- S2.** Develop problem solving skills through devising appropriate methodological approaches to address the research question
- S3.** Collect, collate, analyse and interpret field and/or laboratory data
- S4.** Communicate results in oral and written form
- S5.** Demonstrate ability to participate in individual or group research projects (as required)
- S6.** 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 organization 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

Course Content:

The syllabus will cover the following topics

Topics may include:

- The research project will involve an in-depth study in an area of interest, and will require the student to carry out an extensive literature review in the area related to the project
- Formulate a specific research problem with well-defined objectives
- Carry out experimental work consistent with the defined objectives of the study
- Collate, evaluate and interpret experimental results
- Present a final report in an appropriate format summarising the aims, objectives, results, conclusions and recommendations of the project
- Oral presentation to a scientifically-literate audience of peers and staff summarising the main features of the project

Values:

- V1.** Experience the excitement of discovery in scientific research
- V2.** Appreciate the need for scientific communication in various formats
- V3.** Appreciate the need for individual and team-based work and its application in the workplace
- V4.** Understand the importance of being scrupulous in acknowledging the contribution of others to one`s work
- V5.** Recognise the importance of project planning

V6. Adoption of a respectful and courteous manner to colleagues

V7. Further development of autonomous learning habits

Graduate Attributes

The Federation University Federation graduate attributes (GA) are entrenched in the [Higher Education Graduate Attributes Policy](#) (LT1228). FedUni graduates develop these graduate attributes through their engagement in explicit learning and teaching and assessment tasks that are embedded in all FedUni programs. Graduate attribute attainment typically follows an incremental development process mapped through program progression. **One or more graduate attributes must be evident in the specified learning outcomes and assessment for each FedUni course, and all attributes must be directly assessed in each program**

Graduate attribute and descriptor		Development and acquisition of GAs in the course	
		Learning Outcomes (KSA)	Assessment task (AT#)
GA 1 Thinkers	Our graduates are curious, reflective and critical. Able to analyse the world in a way that generates valued insights, they are change makers seeking and creating new solutions.	S1, S2, S3; A1, A2	AT1, AT2, AT3
GA 2 Innovators	Our graduates have ideas and are able to realise their dreams. They think and act creatively to achieve and inspire positive change.	K2, S1, A1	AT1, AT2
GA 3 Citizens	Our graduates engage in socially and culturally appropriate ways to advance individual, community and global well-being. They are socially and environmentally aware, acting ethically, equitably and compassionately.	K2; S5, S6	AT1, AT2; AT4
GA 4 Communicators	Our graduates create, exchange, impart and convey information, ideas, and concepts effectively. They are respectful, inclusive and empathetic towards their audience, and express thoughts, feelings and information in ways that help others to understand.	K2; S4; A3, A4	AT1, AT2, AT3
GA 5 Leaders	Our graduates display and promote positive behaviours, and aspire to make a difference. They act with integrity, are receptive to alternatives and foster sustainable and resilient practices.	K2; S3	AT1, AT2; AT3

Learning Task and Assessment:

Learning Outcomes Assessed	Learning Tasks	Assessment Type	Weighting
K1, K2,	Completion of Federation University Research Integrity Training	Online quiz	satisfactory / unsatisfactory
K1, S1, S2, S4, S6, A1-4	Project Proposal and Literature Review	Written document	15-20%
K1-K2, S1-6, A1-4	Presentation of research findings to a scientifically literate audience	Oral Presentation	15-20%
K1, K2, S1-6, A1-4	Completion of a scientific/ technical project report	Written Research Report	50-60%
S2, S3, S5, S6, A1-4	Supervisor's assessment: level of engagement with research project and demonstration of appropriate laboratory/field skills	Continuous assessment throughout semester	5-10%

Adopted Reference Style:

Australian Harvard

Refer to the [library website](#) for more information

Fed Cite - [referencing tool](#)