

NATS 7033 MSC RESEARCH PROJECT

Credit Points 20

Legacy Code 401156

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

Description Science Research Project is a capstone unit that gives students the opportunity to conduct scientific research, while extending their knowledge and practical skills. Each student undertakes a research project supervised by an academic staff member which has as its central focus the scientific analysis and resolution of a complex problem. The research project is conducted in an area of relevance to professional discipline, and students can choose from a range of approved research designs. Students must undertake a review of the relevant literature, formulation of a research question, design of an appropriate method, collection and analysis of data, interpretation of findings, the production of a research report and presentation of these findings.

School Science

Discipline Natural and Physical Sciences, Not Elsewhere Classified.

Student Contribution Band HECS Band 2 20cp

Level Postgraduate Coursework Level 7 subject

Restrictions

Student must be enrolled in postgraduate program, have completed 60 credit points at Level 7, and have a GPA of 5.0 or above.

Learning Outcomes

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

1. Propose and investigate a topic area relevant to a scientific discipline
2. Critique peer-reviewed literature pertinent to the proposed topic and identify gaps in knowledge
3. Develop research aims and design and conduct experiments within a project framework to test these aims
4. Analyse the data from these experiments and formulate conclusions
5. Justify the results and conclusions of the project by oral and written communication
6. Devise possible areas of inquiry for future research or development

Subject Content

Project-based learning relevant to individual professional goals and available expertise within industry, academia or other relevant body
 Critical literature appraisal on topics relevant to the student's project
 Experimental design and Project management skills
 Analysis of data, using appropriate statistical methods where required
 Report writing in the scientific format of a thesis
 Critical evaluation of data to judge its significance and develop conclusions from these results
 Development of poster for presentation of results and conclusions of research project

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.

Item	Length	Percent	Threshold	Individual/Group Task
Professional Task	WSU formatted document	S/U	Y	Individual
Proposal	500 words	10	N	Individual
Report	6000 Words	50	N	Individual
Poster	1,000 words or equivalent	20	N	Individual
Practical	100 hours	20	N	Individual

Teaching Periods

Autumn

Parramatta - Victoria Rd

Day

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View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=NATS7033_22-AUT_PS_D#subjects)

Spring

Parramatta - Victoria Rd

Day

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