

# NATS 7012 EXPERIMENTAL DESIGN AND ANALYSIS PG B

**Credit Points** 20

**Legacy Code** 401267

**Coordinator** Nicholas Tothill ([https://directory.westernsydney.edu.au/search/name/Nicholas Tothill/](https://directory.westernsydney.edu.au/search/name/Nicholas%20Tothill/))

**Description** Experimental Design and Analysis can be taken independently or in combination in Autumn (Experimental Design and Analysis PG A) and/or Spring (Experimental Design and Analysis PG B) semesters. Working closely with their assigned supervisor(s), students in the health, medical, biomedical and natural sciences will enhance their expertise in experimental methodologies and knowledge of advanced discipline-specific concepts in the first year of the Masters of Research. Completion of one these two units will allow students to demonstrate theoretical and practical skills directly relevant to their proposed research project. Completion of both units will allow students to build upon initial results, and to gain experience in additional methodologies and experimental techniques. These units will also complement the Master of Research core units Research Design 1 and 2, providing a foundation for students to formulate their research question and thesis proposal.

**School** Science

**Discipline** Natural and Physical Sciences, Not Elsewhere Classified.

**Student Contribution Band** HECS Band 2 20cp

Check your fees via the Fees ([https://www.westernsydney.edu.au/currentstudents/current\\_students/fees/](https://www.westernsydney.edu.au/currentstudents/current_students/fees/)) page.

**Level** Postgraduate Coursework Level 7 subject

**Incompatible Subjects** NATS 7010 - Experimental Design and Analysis PG NOTE Co-Requisite units removed from Spring 2021

## Learning Outcomes

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

1. Report the outcome(s) of an experimental and/or research project through the production of data that meets accepted standards in that field of research
2. Describe and report on the integration of experimental and theoretical knowledge at an advanced level through the writing of a research report
3. Communicate research findings to an informed but non-specialist audience
4. Apply the outcomes of the research project to the development of a research question and/or thesis proposal in Year 1 of the Master of Research

## Subject Content

1. Research training (advanced skills training appropriate to the field of research)
2. Experimental/research design: planning a research project
3. Interpretation of results
4. Reporting research results

## Special Requirements Legislative Prerequisites

Students involved in research work with human subjects will need to consult with supervisors regarding any compulsory training or background checks that might be required.

Note: Corequisite subjects removed from Spring 2021.

## 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.

Type	Length	Percent	Threshold	Individual/ Group Task	Mandatory
Report	4,000 words	40	Y	Individual	Y
Poster	Students will present posters together via a online platform	30	Y	Individual	Y
Learning Contract	Form-based submission (assessment will be based on feasibility of the project)	10	Y	Individual	Y
Report	Form-based submission	20	Y	Individual	Y

Teaching Periods

## Spring (2025)

### Campbelltown

#### On-site

**Subject Contact** Nicholas Tothill ([https://directory.westernsydney.edu.au/search/name/Nicholas Tothill/](https://directory.westernsydney.edu.au/search/name/Nicholas%20Tothill/))

View timetable ([https://classregistration.westernsydney.edu.au/odd/timetable/?subject\\_code=NATS7012\\_25-SPR\\_CA\\_1#subjects](https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=NATS7012_25-SPR_CA_1#subjects))

### Hawkesbury

#### On-site

**Subject Contact** Nicholas Tothill ([https://directory.westernsydney.edu.au/search/name/Nicholas Tothill/](https://directory.westernsydney.edu.au/search/name/Nicholas%20Tothill/))

View timetable ([https://classregistration.westernsydney.edu.au/odd/timetable/?subject\\_code=NATS7012\\_25-SPR\\_HW\\_1#subjects](https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=NATS7012_25-SPR_HW_1#subjects))

### Penrith (Kingswood)

#### On-site

**Subject Contact** Nicholas Tothill ([https://directory.westernsydney.edu.au/search/name/Nicholas Tothill/](https://directory.westernsydney.edu.au/search/name/Nicholas%20Tothill/))

View timetable ([https://classregistration.westernsydney.edu.au/odd/timetable/?subject\\_code=NATS7012\\_25-SPR\\_KW\\_1#subjects](https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=NATS7012_25-SPR_KW_1#subjects))

## **Parramatta - Victoria Rd**

### **On-site**

**Subject Contact** Nicholas Tothill ([https://directory.westernsydney.edu.au/search/name/Nicholas Tothill/](https://directory.westernsydney.edu.au/search/name/Nicholas%20Tothill/))

View timetable ([https://classregistration.westernsydney.edu.au/odd/timetable/?subject\\_code=NATS7012\\_25-SPR\\_PS\\_1#subjects](https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=NATS7012_25-SPR_PS_1#subjects))