

NATS 2002 ADVANCED SCIENCE PROJECT B

Credit Points 10

Legacy Code 300938

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

Description This subject continues the students' training in thinking as a research scientist whilst developing analytical and critiquing skills in a range of science disciplines. Students will form hypothetical companies and develop a portfolio of scientific products that they will have to present as prospectus and in oral presentations. The students will have to assess the constraints of research having to address the WHS, gene technology, ethics and other legislative issues impacting their projects. Students will also have to manage budgets, market analyses and intellectual property issues.

School Science

Discipline Natural and Physical Sciences, Not Elsewhere Classified.

Student Contribution Band HECS Band 2 10cp

Check your fees via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 2 subject

Pre-requisite(s) NATS 2001

Equivalent Subjects LGYA 6166 - Advanced Science Project B

Restrictions

Students must be enrolled in 3562 Bachelor of Science (Advanced Science) or 3682 Bachelor of Medical Science (Advanced Science) or 3683 Bachelor of Natural Science (Advanced Science) and have successfully completed 60 credit points.

Learning Outcomes

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

1. Solve problems from a multi disciplinary science approach accessing knowledge previously acquired in the course.
2. Acquire and use knowledge of the constraints of research and make project based decisions.
3. Research a problem, critique information and cite the appropriate scientific literature.
4. Develop a prospectus with self reflection and application of feedback from peer assessment.
5. Communicate ideas for a business/venture capital pitch.
6. Work effectively in a team.
7. Engage with researchers in different fields to gain knowledge of the broader research environment.

Subject Content

1. The scientific process in a multi disciplinary setting to identify and address problems
2. Science funding sources, milestones, timelines and budgets
3. Safety protocols and procedures and accurate record keeping in a laboratory environment

4. Design of experimental procedures and methods in a variety of science disciplines
5. Development of a prospectus with proposal and reflection
6. Oral presentations and communication skills development

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
Applied Project	2 laboratory rotations (10-30 hours) and methods analysis of up to 1000 words	30	N	Group/ Individual
Professional Task	reflection and proposal up to a maximum total of 1000 words	30	N	Individual
Presentation	2 x 15 minutes	40	N	Individual

Prescribed Texts

- NULL
- There are no textbooks for this subject; students will use a variety of books and journals based on the topic chosen

Teaching Periods

Spring (2023)

Campbelltown

On-site

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View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=NATS2002_23-SPR_CA_1#subjects)

Hawkesbury

On-site

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Parramatta - Victoria Rd

On-site

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Spring (2024)

Campbelltown

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