



*University Foundation Studies*

**NATS0003**

**ACADEMIC SKILLS  
FOR SCIENCE**

**2022**

**SUBJECT OUTLINE**

Last amended:	February 2022
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<b>Subject name</b>	Academic Skills for Science
<b>Subject number</b>	NATS0003
<b>Coordinator</b>	Phillip Newman
<b>Session</b>	2022.1
<b>Handbook summary</b>	This subject is designed to assist students to become successful, independent and reflective learners. It introduces students to a range of theories and concepts to facilitate the development of practical skills and personal attitudes necessary for success in tertiary study. Emphasis is placed on developing the key competencies of scientific enquiry — collecting, analysing, organising and communicating information as well as solving problems, particularly when related to using mathematical ideas and techniques.
<b>Credit point value</b>	10
<b>Prerequisite/s</b>	
<b>Corequisite/s</b>	
<b>Subject incompatible with and not to be counted for credit with</b>	
<b>Assumed knowledge</b>	
<b>Subject level</b>	Level Z — Non-award preparatory subject
<b>Attendance requirements</b>	Students are expected to attend at least 80% of classes. Educational research consistently demonstrates that this attendance level is associated with a high likelihood of achieving a passing grade.
<b>Enrolment restrictions</b>	Only students of The College can enrol in this subject.
<b>Learning outcomes</b>	On successful completion of this subject, students should be able to: <ol style="list-style-type: none"><li>1. use both independent and collaborative learning strategies to advance the knowledge of the individual and that of their peers</li><li>2. communicate effectively through the development of critical reading, listening, speaking and writing skills in context</li><li>3. locate and use information technology systems and educational technologies to support learning and assessment</li><li>4. apply critical thinking and use problem-solving skills and research skills to make informed decisions</li><li>5. apply the process of reflection to learning experiences in order to assess their own learning styles and “learn how to learn”, and</li></ol>

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6. describe criteria for successful posters and oral presentations and write and evaluate a scientific report.
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**Subject content**

In this subject students will learn about:

- introduction to tertiary study
- blended learning
- advanced tertiary skills
- information skills
- research methods, including
  - introduction to scientific methods
  - scientific report writing
  - data handling
  - critical reading
  - research and referencing (journal articles), and

writing a research project report.

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**Mode of delivery**

This subject will consist of a two-hour tutorial session and a one-hour computer lab workshop per week, plus online activities via the subject's vUWS site.

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**Online learning requirements**

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**Essential requirements**

**Essential text**

The College *Academic skills for science student workbook*, Western Sydney University The College, Sydney.

**Further resources**

To be supplied in class.

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**ASSESSMENT ITEMS AND WEIGHTING**

Assessment for this subject will be based on the following components:

<b>Task</b>	<b>Weighting</b>	<b>Learning outcomes assessed</b>	<b>Mandatory task</b>
1. Reflective learning journal – three journal entries, (800–1200 words; approximately 400 words for each journal entry) – 10% each	30%	1, 2, 3, 4, 5 and 6	Yes
2. Oral presentation — 5 minutes	10%	2, 3 and 6	Yes
3. Research project report (1000–1200 words): <ul style="list-style-type: none"> <li>• Part A — Background research related to assigned data (10%)</li> <li>• Part B — Draft hypothesis, aim and proposed methodology (10%)</li> <li>• Part C — Final report (40%)</li> </ul>	60%	1, 2, 3, 4, 5 and 6	Yes
<b>TOTAL</b>	<b>100%</b>		

For details of assessment due dates, please refer to the learning guide for this subject.

All marks will be determined in accordance with The College [Assessment Policy](#).

All assessment tasks are mandatory unless otherwise specified. Should a student fail to attempt/submit the first formal assessment task in a subject, they will be deemed to be at risk and will need to follow an intervention plan in order not to receive a Fail Non-Submission (FNS) grade. However, failure to attempt/submit all other mandatory assessment tasks will result in an immediate FNS grade for the subject.

Students must attain a mark of at least 50% overall in order to pass the subject.

Students must keep a copy of all work submitted.

Successful completion of this subject will not be counted for academic credit in any future studies at Western Sydney University.