ACADEMIC SKILLS FOR SCIENCE

700230/900101

2018

UNIT OUTLINE
# Academic Skills for Science

<table>
<thead>
<tr>
<th><strong>Unit name</strong></th>
<th>Academic Skills for Science</th>
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<tbody>
<tr>
<td><strong>Unit number</strong></td>
<td>700230/900101</td>
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<tr>
<td><strong>Coordinator</strong></td>
<td>Phillip Newman</td>
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<tr>
<td><strong>Session</strong></td>
<td>2018.3</td>
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</tbody>
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## Handbook summary
This unit 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.

<table>
<thead>
<tr>
<th><strong>Credit point value</strong></th>
<th>10</th>
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### Prerequisite/s

### Corequisite/s

### Unit incompatible with and not to be counted for credit with

### Unit level
Level Z — Non-award preparatory unit

### Attendance requirements
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.

### Enrolment restrictions
Only students of The College can enrol in this unit.

## Learning outcomes
On successful completion of this unit, students should be able to:

1. use both independent and collaborative learning strategies to advance the knowledge of the individual and that of their peers
2. communicate effectively through the development of critical reading, listening, speaking and writing skills in context
3. locate and use information technology systems and educational technologies to support learning and assessment
4. apply critical thinking and use problem-solving skills and research skills to make informed decisions
5. apply the process of reflection to learning experiences in order to assess their own learning styles and “learn how to learn”, and
6. describe criteria for successful posters and oral presentations and write and evaluate a scientific report.
Unit content
In this unit 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.

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

Online learning requirements

Essential requirements

- Essential text:

Further resources:
- To be supplied in class
ASSESSMENT ITEMS AND WEIGHTING

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

<table>
<thead>
<tr>
<th>Task</th>
<th>Weighting</th>
<th>Learning outcomes assessed</th>
<th>Mandatory task</th>
</tr>
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<tbody>
<tr>
<td>1. Oral presentation (five minutes)</td>
<td>10%</td>
<td>2, 3 and 6</td>
<td>Yes</td>
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<tr>
<td>2. Reflective learning journal (800–1200)</td>
<td>30%</td>
<td>1, 2, 3, 4, 5 and 6</td>
<td>Yes</td>
</tr>
<tr>
<td>3. Research project report (1000–1200 words):</td>
<td>Part A — 10%</td>
<td>1, 2, 3, 4, 5 and 6</td>
<td>Yes</td>
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<tr>
<td></td>
<td>Part B — 10%</td>
<td></td>
<td>Yes</td>
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<tr>
<td></td>
<td>Part C — 40%</td>
<td></td>
<td>Yes</td>
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<tr>
<td>TOTAL</td>
<td>100%</td>
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For details of assessment due dates, please refer to the learning guide for this unit.

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 unit, 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 unit.

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

Students must keep a copy of all work submitted.

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