# Unit Outline

## Essential Academic Skills for the Sciences

<table>
<thead>
<tr>
<th>Unit Number:</th>
<th>SC101</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode of Study:</td>
<td>Internal</td>
</tr>
<tr>
<td>Credit:</td>
<td>3 credit points</td>
</tr>
<tr>
<td>Pre-requisites:</td>
<td>Academic Writing</td>
</tr>
</tbody>
</table>
| Location: | Sheridan College  
18/7 Aberdeen St, Piccadilly Square West, Perth WA 6000 |
| Study Hours: | 168 hours (12 hours per week over 14 weeks)  
Seminars/Workshops/Tutorials/Labs – 72 hours (6 hours per week over 12 teaching weeks)  
Private Study – 96 hours (6 hours per week over 12 teaching weeks + 12 hours per week over 2 non-teaching weeks) |
| Primary Text(s): | Peter Zeegers, Kate Deller-Evans, Sandra Egege, Christopher Klinger (2011). *Essential Skills For Science and Technology*. Oxford University Press.  
| Learning Management System: | Canvas (canvas.sheridan.edu.au) |

## Unit Coordinator:

| Dr Jason Coughran | Phone: 9221-8170 |
| Email: jcoughran@sheridan.edu.au |

## Course Coordinator:

| Dr Maya Krayneva | Phone: 9221-8170 |
| Email: mkrayneva@sheridan.edu.au |
Introduction

Welcome to Essential Academic Skills for the Sciences. This unit helps students develop the core academic skills required to effectively learn science and be productive in their university studies.

Key topics include: introduction to tertiary studies; reading scientific literature; thinking like a scientist and arguing critically; researching; writing; and presenting. A number of basic quantitative methods are also introduced. Introduction to tertiary studies covers topics such as graduate attributes, academic preparedness and academic progress, as well as organisational skills such as time management, decision making and priority setting.

The unit also explains how to retrieve relevant scientific literature from a range of sources, read it and understand its different writing and presentations styles, and conflicting interpretations. It also teaches students to think and assess evidence critically, and how to develop a good academic argument. Students learn how to write for science, including reports and article reviews, and learn to present their findings in the form of posters and oral presentations.

Finally, students are introduced to basic laws of mathematics that can be used to analyse their data and findings.

Diploma of Science Learning Outcomes

Sheridan College’s Diploma of Science program provides a first-year undergraduate program for students interested in preparing for a career in the STEM disciplines (science, technology, engineering and mathematics), or as a pathway towards future study in the sciences.

The Sheridan College Diploma of Science has been accredited by the Tertiary Education Quality and Standards Agency (TEQSA) as meeting the standards set by the Australian Qualifications Framework (AQF).

Upon completing a Diploma of Science, you will be able to:

- Demonstrate your theoretical and technical knowledge of the scientific consensus in specialised learning areas within mathematics, physical sciences and life sciences
- Exercise your cognitive skills successfully to search for, identify, and carefully analyse scientific and mathematical evidence.
- Plan, propose and evaluate potential solutions to problems relating to specialised learning areas within mathematics, physical sciences and life sciences
- Communicate your understanding of knowledge and skills relating to specialised learning areas within mathematics, physical sciences and life sciences to others in various learning contexts.
- Apply learned technical and creative tools from one or more specialised learning areas within mathematics, physical sciences and life sciences to interpret and resolve unpredictable problems in a range of scenarios.
- Demonstrate your capacity to seek scientific and mathematical knowledge and truth with persistence, independence, rigour, and integrity.
- Evaluate the relevance of Christian faith and practice to the pursuit of scientific knowledge.
- Model self-discipline, servant leadership and respect for the dignity of individuals and groups in various settings.

Each unit you take in the Diploma of Science program will contribute towards the fulfilment of these broader learning outcomes.
Essential Academic Skills for the Sciences Learning Outcomes

On successful completion of this unit, students will be able to:

A. Develop basic academic qualities necessary for effective undergraduate studies.
B. Research and read scientific literature.
C. Think critically, assess and evaluate credibility and reliability of scientific findings.
D. Develop academic argument using reliable evidence and reasoning.
E. Write scientific reports, review articles and poster presentations.
F. Present their own ideas and findings to peers and the wider community.
G. Evaluate results using a number of basic quantitative methods.

Graduate Attributes

Study does more than equip you with knowledge in a specific academic discipline. It can also have a transformational effect on your own nature.

Moreland and Craig write:

“Study itself is a spiritual discipline, and the very act of study can change the self. One who undergoes the discipline of study lives through certain types of experiences where certain skills are developed through habitual study: framing an issue, solving problems, learning how to weigh evidence and eliminate irrelevant factors, cultivating the ability to see important distinctions instead of blurring them, and so on. The disciplines of study also aids in the development of certain virtues and values; for example, a desire for the truth, honesty with data, an openness to criticism, self-reflection and an ability to get along nondefensively with those who differ with one.”


The higher education sector in Australia describes these kinds of outcomes as “Graduate Attributes” (GAs). GAs don’t necessarily follow in a direct line from learning outcomes (LOs) but are shaped by the learning process itself. Sheridan College’s GAs, displayed in the table on the next page, are integrated into the College’s assessments and cultivated in all the College’s learning activities. They describe the kind of personal characteristics we hope you will exhibit when you graduate. If in future your referees use these kinds of descriptors when writing about you, we will consider this a sign of a successful higher education.
### College Vision Statement
To offer higher education to those who are seeking to live an extraordinary life. To this end, the College will inspire its students to...

### College Graduate Attributes
Sheridan College graduates will be...

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Methods of Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lovers of truth who:</strong></td>
<td></td>
</tr>
<tr>
<td>a. Pursue knowledge, understanding and insight with persistence, independence, rigour, critical thinking and academic integrity.</td>
<td>Assignments, Projects, Tests &amp; Exams, Research, Academic Integrity Policy</td>
</tr>
<tr>
<td>b. Attain a comprehensive understanding of the body of knowledge and professional skills within a specialised learning area or discipline.</td>
<td></td>
</tr>
<tr>
<td>c. Identify and analyse the pre-theoretical assumptions that underpin the relevant theoretical frameworks and perspectives within a specialised learning area or discipline.</td>
<td></td>
</tr>
</tbody>
</table>

| **Seekers of wisdom who:** | |
| a. Recognise the limits of their knowledge and understanding, receiving and evaluating correction or advice with grace and humility. | Assignments, Projects, Tests & Exams, Research, Academic Integrity Policy, Peer review |
| b. Exercise sound, fair and ethical judgment in study and workplace learning environments. | |
| c. Carefully consider their life’s purpose and make the most of opportunities as they emerge. | |

| **Innovative thinkers who:** | |
| a. Identify research gaps and make original contributions that extend the body of knowledge, both independently and in collaboration with others. | Assignments, Projects, Tests & Exams, Research, Peer review |
| b. Synthesise, analyse and interpret information drawn from diverse sources using diverse mechanisms. | |
| c. Adapt effectively to changing circumstances, take appropriate risks, and solve problems in new situations. | |

| **Effective communicators who:** | |
| a. Demonstrate the ability to communicate clearly and effectively to a range of audiences and across a range of mediums/technologies. | Assignments, Projects, Tests & Exams, Research, Peer review |
| b. Build classmates and colleagues up according to their needs and for their benefit. Avoid slanderous speech. | |
| c. Promote respect, hospitality and understanding towards cultures and groups. | |

| **Independent learners who:** | |
| a. Perform tasks to the best of their own abilities and strive for a high academic standard. | Assignments, Projects, Tests & Exams, Research |
| b. Set reasonable goals, determine personal boundaries and drive set tasks to completion. | |
| c. Take responsibility for their own learning and research. | |

| **Servant leaders who:** | |
| a. Model respectful and ethical behaviour in team environments. | Assignments, Projects, Research, Peer review, Student-led activities |
| b. Serve the local, national and global community. | |
| c. Understand and support Australian democratic traditions, including pluralism, freedom of speech, freedom of association, and equality of opportunity. | |
Course Structure

Academic Calendar
Diplomas are 1-year programs at Sheridan College. Units are delivered in 15-week trimesters. Each trimester comprises 12 weeks of teaching, two non-teaching study weeks, and an examination week.

Trimesters 1 and 3 are dedicated coursework trimesters. If you are enrolled full-time, you will take 3-4 core or elective units during this trimester.

Trimester 2 is a dedicated research trimester. Whether you are enrolled full-time or part-time, your only formal study during Trimester 2 will be a single research-related unit relevant to your field of study. The schedule provides a focused opportunity to acquire valuable research skills, and to practise applying those skills under the direction of the College faculty.

The Trimester 2 schedule also offers you some freedom to pursue personal, professional and learning goals outside of your formal coursework. The College provides a range of informal extra-curricular programs during this trimester for you to gain life experience and enhance your employability. A description of these programs can be found on the College website at http://sheridan.edu.au/index.php/home/academic-calendar.

In the table below, the student will complete the minimum requirements for the Diploma of Science.

<table>
<thead>
<tr>
<th>TRIMESTER 1</th>
<th>TRIMESTER 2</th>
<th>TRIMESTER 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essential Academic Skills for the Sciences (3cp)</td>
<td>Research Project 1: Problem Definition and Experimental Design (3cp)</td>
<td>Linear Algebra and Calculus (3cp)</td>
</tr>
<tr>
<td>Biology: Diversity of Life (3cp)</td>
<td><em>Extra-curricular activities and programs</em></td>
<td>Foundations of Physics (3cp)</td>
</tr>
<tr>
<td>Foundations of Chemistry (3cp)</td>
<td></td>
<td>Fundamentals of Physical Geography (6cp)</td>
</tr>
<tr>
<td>Introduction to Christianity (3cp)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Unit Organisation

Seminars
You will meet with the lecturer for two 3-hour sessions per week. The purpose of this time is for you to ask questions, clarify issues, and receive assistance with your assignments, for the lecturer to highlight areas of special focus, and to conduct minor assessments, evaluating your understanding of the course material to date.

Please arrive with a willingness to learn, reflect and contribute to class discussions. It is essential that you prepare thoroughly for each class by reading the assigned chapters.

Private Study Expectations
You should expect to spend an additional 6 hours per week of private study, immersing yourself in the course material and completing the assessment requirements. There is a significant amount of reading to get through in a short period of time.

Reading and preparation for each course week should be done prior to or during the early part of each course week. Students may choose to begin reading over the weekend prior to each course week, keeping a notebook of insights and questions to contribute during the week’s discussion.
Consultation
At Sheridan College, lecturers make themselves available during office hours for individual consultations for a minimum of 25% of the total time spent teaching the unit. For this unit, the lecturer will nominate an additional 1.5 hours per week either before or after class to be available for individual student queries. The specific times will be set after discussions with the class on the first day.

IT Resources
The internet is an extraordinary resource for students and using it effectively contributes to the nurturing of the College’s graduate attributes in each student. We encourage you to bring your electronic devices (college-supplied or personal tablets, mobile phones, laptops) into the class as a learning resource. As a courtesy to your classmates, please keep these learning devices on “silent” and do not take phone calls during class hours.

Wireless internet access will be available for all students at the Piccadilly Square West campus, if you wish to meet there in study groups or for private study. You can also access printers, scanners and photocopiers at the office.

Location
Classes:
Sheridan College
18/7 Aberdeen St, Piccadilly Square West, Perth WA 6000

Learning Resources
Prescribed Reading(s)


Supplementary Reading(s)
You may find some of the texts listed below useful for additional explanation and for assistance in writing essays. Copies of these texts have been placed in the Reserve Section of the Sheridan College Library.


Students can also find relevant journal articles in the following journals:
- International Journal for Academic Development
- Australian Academic and Research Libraries
- Academic Writing: interdisciplinary perspectives on communication across the curriculum
- International Journal for Researcher Development
- Academic Exchange Quarterly

College Library Resources
In 2017, Sheridan College students will have direct access to four (4) major academic database collection providers, granting Sheridan College students direct onsite (IP) and remote access to:

1. Academic OneFile from Cengage Gale (now active)
2. Oxford University Press Arts and Humanities Collection (now active)
3. **EBSCO collections** (to be activated from 1 February 2017), including:
   - Business Source Premier
   - Academic Search Premier
   - Humanities International Complete
   - Science and Technology Collection

4. **Informit collections** (to be activated from 1 February 2017), including:
   - Business Collection
   - HSS Collection

**Cunningham Library**
Sheridan College is an institutional member of the *Australian Council of Educational Research*’s Cunningham Library.

Cunningham Library is a unique, comprehensive collection of Australian educational research material dating from the early 1900s to the present day. The vast resources of Cunningham Library offer the researcher a complete and up to date collection of educational research documents in Australia, including:

- books with over 50,000 titles, both Australian and overseas publications
- journals with over 400 titles, both Australian and overseas publications
- e-journals
- government reports & conference proceedings
- bibliographic database of educational theses
- audio, video & CD-ROM material
- educational and psychological tests
- databases, directories and research discovery tools
- web documents & e-books


**Aberdeen Street Campus Reserve Collection**
A growing physical reserve library of books will be maintained at the Aberdeen St campus for resources specifically chosen by lecturers for individual units. These resources will be nominated by the lecturers and purchased if there are no online options available.

**Public Libraries**
You will have signed up with the *State Library of WA (SLWA)* and the *National Library of Australia (NLA)* when you enrolled led at Sheridan College. It takes about one week from the date of enrolment for your subscription to SLWA to become active.

The e-resources of SLWA and NLA are available online for library members (free to members of the public with an Australian residential address), including thousands of peer-reviewed journals across the full range of academic disciplines.

**Other Free Resources**
Access to free full-text journals can also be found through the following sites, among many others:

- Stanford University’s Highwire site ([http://highwire.stanford.edu/lists/freeart.dtl](http://highwire.stanford.edu/lists/freeart.dtl))
Community Memberships
If those are insufficient for research purposes, community memberships are also available at Perth higher education institutions. Research students wishing to join the libraries of Perth’s universities will be fully reimbursed by Sheridan College for their membership costs.

Community memberships are available at the following university and other higher education libraries:

- Curtin University: ($70.40) https://library.curtin.edu.au/borrowing/non-curtin-borrowers/community-borrowers.cfm
- Murdoch University: ($99) http://library.murdoch.edu.au/Our-services/Community-members/
- University of Notre Dame ($40) http://library.nd.edu.au/content.php?pid=50125&sid=642804
- UWA http://www.is.uwa.edu.au/about/visitors-friends/visitors#community

Please note: For some universities, community members may only be able to access online resources while logging in from a terminal within the university library itself.

Learning Support
Any student who feels they may need special provisions for any type of disability should see a lecturer during regular office hours or contact the Registrar, Mrs Christa Smith, who will help you make any necessary accommodations for academic support.

Assessment Schedule

<table>
<thead>
<tr>
<th>Assessment Type</th>
<th>Value</th>
<th>Due Date</th>
<th>LOs Assessed</th>
<th>GAs Addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study report</td>
<td>20%</td>
<td>Week 12</td>
<td>A, B, C, D, E, G</td>
<td>1,2,3,4,5</td>
</tr>
<tr>
<td>Academic argument</td>
<td>30%</td>
<td>Week 5 - Week 12</td>
<td>A, B, C, D, F</td>
<td>1,2,3,4,5</td>
</tr>
<tr>
<td>Final Exam</td>
<td>50%</td>
<td>Week 13</td>
<td>A, B, C, D, E, G</td>
<td>1,2,3,4,5</td>
</tr>
</tbody>
</table>

Explanation of Assessments
Sheridan College assessments are designed both to measure your successful demonstration of the full range of learning outcomes in the unit, and to cultivate the Sheridan College graduate attributes.

You must submit all assessments to satisfy the course requirements.

1. Study report
Students will be assigned a scientific study during week 1. Students are free to choose their own topic of interest and own study methods. They will apply knowledge learned in this unit to carry out their study and write a scientific report. The report will have the following format: Purpose of the study, Study design and method, Results, Conclusion, and Life application. The length of report is 2000 words maximum.
Marking Guide: Study report

<table>
<thead>
<tr>
<th>Category/Grade</th>
<th>Fail (&lt;50)</th>
<th>Pass (50-64)</th>
<th>Credit (65-74)</th>
<th>Distinction (75-84)</th>
<th>High Distinction (85+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose of the study</td>
<td>No understanding of the purpose</td>
<td>Evidences a basic understanding of the purpose</td>
<td>Has begun to understand and define the purpose</td>
<td>Evidences understanding and ability to define the purpose</td>
<td>Demonstrates pronounced understanding and ability to define the purpose</td>
</tr>
<tr>
<td>Study design and method</td>
<td>No definition of applied study design and method</td>
<td>Some description of study design and applied study method</td>
<td>Study design and applied study method are defined with limited understanding</td>
<td>Study design and applied study method are understood and defined</td>
<td>Study design and method are clearly understood and well defined</td>
</tr>
<tr>
<td>Results</td>
<td>No results</td>
<td>Some results</td>
<td>Many but incomplete results</td>
<td>Most results are reported and understood</td>
<td>Correct reporting and clear understanding of results</td>
</tr>
<tr>
<td>Conclusion</td>
<td>Wrong or no conclusion</td>
<td>Some aspects of conclusion are covered</td>
<td>Most aspects of conclusion are covered</td>
<td>Conclusion is correct</td>
<td>Conclusion is correct and clearly formalized</td>
</tr>
<tr>
<td>Life application</td>
<td>No understanding of application of the study in real life</td>
<td>Some understanding of application of the study in real life</td>
<td>Ability to understand application of many aspects of study in real life</td>
<td>Clear understanding of application of the study in real life</td>
<td>Clear understanding of application of this and similar studies in real life</td>
</tr>
</tbody>
</table>

Every category/grade component has equal contribution (1/5) towards the total mark for this assignment.

2. Academic argument
During weeks 1-4, each student will select a controversial scientific topic of interest. The student will develop and formalise a scientific argument, and present that argument to the class during weeks 9-12. The presentation will take no longer than 15min, and be followed by a question and discussion time.
### Marking Guide: Academic argument

<table>
<thead>
<tr>
<th>Category/Grade</th>
<th>Fail (&lt;50)</th>
<th>Pass (50-64)</th>
<th>Credit (65-74)</th>
<th>Distinction (75-84)</th>
<th>High Distinction (85+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding of the topic in the context of existence of different points of views</td>
<td>No understanding of the topic</td>
<td>Evidences a basic understanding of the topic</td>
<td>Has begun to understand and define the purpose</td>
<td>Evidences understanding and ability to define the topic</td>
<td>Evidences sound understanding and ability to define the topic</td>
</tr>
<tr>
<td>Research and review of relevant evidence</td>
<td>No evidence on research and review of relevant evidence</td>
<td>Shows awareness of research and review of relevant evidence</td>
<td>Evidences engagement with research and review of relevant scientific sources</td>
<td>Shows promise in task of researching and reviewing relevant scientific evidence</td>
<td>Show promise in task of critically reviewing and relevant scientific evidence</td>
</tr>
<tr>
<td>Appropriate use of scientific evidence</td>
<td>Inappropriate or no use of scientific evidence</td>
<td>Attempts to select and use scientific evidence appropriately</td>
<td>Selects and uses reliable scientific evidence; limited ability to link this evidence to the relevant scientific context</td>
<td>Demonstrates ability to select and use reliable scientific in correct scientific context</td>
<td>Demonstrates pronounced ability to select and use reliable scientific in highly relevant scientific context</td>
</tr>
<tr>
<td>Public speaking</td>
<td>No ability to clearly communicate and present the argument; audience appears to be disinterested</td>
<td>Attempts to communicate and present some ideas related to the argument; evidence of some interest in the audience</td>
<td>Demonstrates capacity to communicate and present few aspects of the argument; audience is attentive but not engaged</td>
<td>Demonstrates ability to communicate and present most key aspects of the argument; audience is attentive and engaged</td>
<td>Demonstrates pronounced ability to clearly communicate and present the argument; audience retains interest and engagement throughout the whole presentation</td>
</tr>
</tbody>
</table>

Every category/grade component has equal contribution (1/4) towards the total mark for this assignment.

3. Final exam
The “Final exam” is in written form, and consists of 5 practical tasks, including reading, summarising and evaluating scientific literature, thinking critically, writing scientific reports and applying basic quantitative methods. Both theoretical and practical knowledge is required to complete the tasks covered in this unit.

### Marking Guide: Final exam

<table>
<thead>
<tr>
<th>Category/Grade</th>
<th>Fail (&lt;50)</th>
<th>Pass (50-64)</th>
<th>Credit (65-74)</th>
<th>Distinction (75-84)</th>
<th>High Distinction (85+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task completion</td>
<td>No ability to complete the task</td>
<td>Attempts to apply learned knowledge and complete the task</td>
<td>Demonstrates application of learned knowledge to complete some aspects of the task</td>
<td>Demonstrates ability to analyse the issue, think creatively and apply learned knowledge to complete most aspects of the task</td>
<td>Demonstrates pronounced ability to analyse the issue, think creatively and apply learned knowledge to complete the task</td>
</tr>
</tbody>
</table>

Each question contributes 1/5 towards the total mark for the final exam.
Guidelines for Written Assignments
These general guidelines will assist you in preparing and writing your assignments. Your lecturer will discuss these in greater detail before you commence your assignment. If you have any questions please ask your lecturer to assist you. Do not ask other students, as they may not give you the correct information.

Presentation
- The assignment must be typed on A4 paper with 1.5 or 2-line spacing and a 3cm margin at the top, bottom and right hand side to allow for marker's comments. Headings should be used to identify the main points in your discussion and may be underlined.
- Your assignment should be grammatically correct and well punctuated. A high standard of written English is expected and your assignments should be clear, concise, neatly presented and easy to read. Failure to comply with these requirements may result in a significant loss of marks.

Academic Integrity
- Your assignment must be your own original piece of work and not that of another student or previously submitted work for another subject. Please be aware that there are serious penalties for handing in assignments that have been copied from another source (plagiarism). Your lecturer will discuss this with you during your class. Please note also that Sheridan College deploys plagiarism-detection mechanisms. The Sheridan College Academic Integrity Policy can be found at [http://sheridan.edu.au/index.php/home/policy-library](http://sheridan.edu.au/index.php/home/policy-library).
- You are expected to acknowledge the source of your ideas and expressions used in your written work. Students at Sheridan College are required to use the APA Referencing style ([http://www.apastyle.org/](http://www.apastyle.org/)).

Submission
- Your assignment should be submitted to your lecturer by the date specified. If you require an extension of time, it is your responsibility to contact your lecturer before the due date, and provide documentation from a medical practitioner, or the student counsellor as to why you cannot adhere to the stated due date.
- Any assignment submitted after the due date without the lecturer’s permission will be subject to a deduction of 10% of the original mark for each day (including weekends) for which it is late. Assignments submitted more than one week late will only be accepted with a current medical certificate, which must be dated on the day of the illness.
- You must keep a copy of the completed assignment when you submit the original document for marking.
- If you are in doubt about any of these requirements, you should discuss them with your lecturer who will clarify any misunderstanding.
- All assignments must be submitted to assignments@sheridan.edu.au.

Assessment Moderation
- Your major assessment may also be marked by an external examiner, in addition to your lecturer. This is common practice in higher education and is designed to ensure that your marks are equivalent to students being assessed at comparable higher education institutions.
## Unit Outline

<table>
<thead>
<tr>
<th>WEEK NO.</th>
<th>TOPICS COVERED</th>
<th>READINGS</th>
<th>ASSESSMENTS</th>
</tr>
</thead>
</table>
| 1        | Welcome, Unit Outline & Structure; Administration Procedures; Discussion on Assessments  
You and the University  
Being Organised | Zeegers et al, Chapter 1-2 |  |
| 2        | Modes of Learning for Higher Education  
Lectures, Tutorials, and Laboratories | Zeegers et al, Chapters 3-4 |  |
| 3        | E-learning and Research Assessments | Zeegers et al, Chapters 5-6 |  |
| 4        | Order and Chaos  
Mending our Ways, Sharing our Science and Figuring the Future | McLeish, Chapters 3, 4, 6 |  |
|          | **In-Trimester Study Week** |  |  |
| 5        | Reading Scientific Literature | Zeegers et al, Chapters 7 |  |
| 6        | Critical Thinking  
Academic Argument | Zeegers et al, Chapters 8-9 |  |
| 7        | Writing for the Sciences: A Report; a Laboratory Report; an Article Review | Zeegers et al, Chapters 12-15 |  |
| 8        | Presentation Skills: Talks & Posters | Zeegers et al, Chapters 16 |  |
| 9        | Editing Your Writing, Academic Integrity and Plagiarism  
Referencing Styles | Zeegers et al, Chapters 17, 10, 11 | Academic argument* |
| 10       | Topic 15: An Approach to Problem Solving  
Topic 16: Fundamental Mathematics | Zeegers et al, Chapters 18-19 | Academic argument* |
| 11       | Topic 17: An Introduction to Calculus  
Topic 18: Basic Statistics | Zeegers et al, Chapters 20-21 | Academic argument* |
| 12       | Review |  | Academic argument*  
Study report |
|          | **Pre-Exam Study Week** |  |  |
| 13       | Examination |  | Final exam |

* If appointed