

**University of Adelaide College Subject:**

General Mathematics

**Subject Aims:**

The aim of the General Mathematics course is to prepare students for tertiary study in a variety of areas where an ability to critically analyse information and work with data is inherent. Students with tertiary pathways into areas such as health science, psychology and commerce would benefit from studying this course.

**Learning Outcomes:**

**After successfully completing this unit students should be able to:**

- Have knowledge of content and understanding of mathematical concepts and relationships.
- Use mathematical algorithms and techniques (implemented electronically where appropriate) to find solutions to routine and complex questions.
- Apply knowledge and skills to answer questions in applied and theoretical contexts.
- Apply mathematical models to data in order to make predictions.
- Develop solutions to mathematical problems set in applied and theoretical contexts.
- Interpret mathematical results in the context of the problem.
- Understand the reasonableness and possible limitations of the interpreted results, and recognise any assumptions made.
- Develop and test conjectures.
- Communicate mathematical ideas and reasoning to develop logical arguments.
- Use appropriate mathematical notation, representations, and terminology.

**Prerequisites and assumed knowledge**

Mathematics to an Australian Year 11 standard.

**Subject Content:**

<b>Week</b>	<b>Topic and Assessment Schedule</b>
1	Orientation week
2-6	Modelling with Linear Relationships – Linear Relations
7-9	Modelling with Linear Relationships – Linear Programming
10	Matrices and Applications
Break	
11-13	Matrices and Applications
14-17	Networks and Applications
18	Revision For examination
19	Exam Week
20	Exam review. Statistical Modelling
Break	
21-24	Statistical Modelling
25-27	Financial Modelling – Models for Saving
27-30	Financial Modelling – Models for Borrowing
Break	
31-33	Discrete Models
34-36	Revision. SWOTVAC
37-38	Exams
39	Graduation and transcript collection
40	End of course

**Assessment**

**General weightings and approximate due dates for each assessment item are outlined below.**

<b>Assessment Item</b>	<b>Weighting</b>	<b>Due Dates</b>
Tests	40%	As per assessment schedule
Assignments	7%	As per assessment schedule
Project	8%	As per assessment schedule
Midyear examination	15%	As per college examination timetable
Final examination	30%	As per college examination timetable