



SAMPLE COURSE OUTLINE

MATHEMATICS ESSENTIAL
GENERAL YEAR 11

Acknowledgement of Country

Kaya. The School Curriculum and Standards Authority (the Authority) acknowledges that our offices are on Whadjuk Noongar boodjar and that we deliver our services on the country of many traditional custodians and language groups throughout Western Australia. The Authority acknowledges the traditional custodians throughout Western Australia and their continuing connection to land, waters and community. We offer our respect to Elders past and present.

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Any resources such as texts, websites and so on that may be referred to in this document are provided as examples of resources that teachers can use to support their learning programs. Their inclusion does not imply that they are mandatory or that they are the only resources relevant to the course

Sample course outline

Mathematics Essential–General Year 11

Unit 1 and Unit 2

Semester 1 – Unit 1

Week	Syllabus content
	<p>Throughout Unit 1, students apply the mathematical thinking process to real-world problems relating to the topic content.</p> <p>Students:</p> <ul style="list-style-type: none"> interpret the task and gather the key information identify the mathematics which could help to complete the task analyse information and data from a variety of sources apply existing mathematical knowledge and strategies to obtain a solution verify the reasonableness of the solution communicate findings in a systematic and concise manner.
1–5	<p>Topic 1.1: Basic calculations, percentages and rates</p> <ul style="list-style-type: none"> Checking and making sense of all calculations Basic calculations Percentages Rates (no inverse proportion) <p>1.1.1 – 1.1.18</p>
6–7	<p>Topic 1.2: Using formulas for practical purposes</p> <p>1.2.1–1.2.2</p>
8–13	<p>Topic 1.3: Measurement</p> <ul style="list-style-type: none"> Linear Measure Area measure Mass Volume and capacity Units of energy <p>1.3.1–1.3.18</p>
14–16	<p>Topic 1.4: Graphs</p> <ul style="list-style-type: none"> Reading and interpreting graphs Drawing graphs <p>1.4.1–1.4.6</p>

Semester 2 – Unit 2

Week	Syllabus content
	<p>For topic 2.1 students apply the statistical investigation process to real-world tasks relating to the topic content.</p> <p>Students:</p> <ul style="list-style-type: none"> clarify the problem and pose one or more questions that can be answered with data design and implement a plan to collect or obtain appropriate data select and apply appropriate graphical or numerical techniques to analyse the data interpret the results of this analysis and relate the interpretation to the original question communicate findings in a systematic and concise manner.
1–5	<p>Topic 2.1: Representing and comparing data</p> <ul style="list-style-type: none"> Classifying data Data presentation and interpretation Summarising and interpreting data Comparing data sets <p>2.1.1–2.1.17</p>
	<p>Throughout topics 2.2, 2.3 and 2.4, students apply the mathematical thinking process to real-world problems relating to the topic content.</p> <p>Students:</p> <ul style="list-style-type: none"> interpret the task and gather the key information identify the mathematics which could help to complete the task analyse information and data from a variety of sources apply existing mathematical knowledge and strategies to obtain a solution verify the reasonableness of the solution communicate findings in a systematic and concise manner.
6–7	<p>Topic 2.2: Percentages</p> <ul style="list-style-type: none"> Percentage calculations Applications of percentages <p>2.2.1–2.2.4</p>
8–10	<p>Topic 2.3: Rates and ratios</p> <ul style="list-style-type: none"> Ratios Rates <p>2.3.1–2.3.12</p>
11–16	<p>Topic 2.4: Time and Motion</p> <ul style="list-style-type: none"> Time Distance and length Speed <p>2.4.1–2.4.14</p>