Government of **Western Australia**
School Curriculum and Standards Authority

SAMPLE ASSESSMENT OUTLINE

MATHEMATICS METHODS

ATAR YEAR 12

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.

Sample assessment outline
Mathematics Methods – ATAR Year 12
Unit 3 and Unit 4

Assessment type	Assessment type weighting	Assessment task weighting	When	Assessment	Syllabus content
Response	40%	9%	Semester 1 Week 8	**Task 2:** In-class test	**Further differentiation and applications:** exponential and trigonometric functions, differentiation rules, the second derivative and applications of differentiation (3.1.1–3.1.16) **Integrals:** anti-differentiation, definite integrals and the Fundamental theorem (3.2.1–3.2.17)
		10%	Semester 1 Week 14	**Task 3:** In-class test	**Integrals:** applications of integration (3.2.18–3.2.22) **Discrete random variables:** general discrete random variables, Bernoulli and binomial distributions (3.3.1–3.3.16)
		7%	Semester 2 Week 7	**Task 6:** In-class test	**The logarithmic function:** logarithmic functions, calculus of the natural logarithmic functions (4.1.1–4.1.14) **Continuous random variables:** general continuous random variables (4.2.1–4.2.4)
		14%	Semester 2 Week 14	**Task 7:** In-class test	**Continuous random variables and the normal distribution:** normal distributions (4.2.5–4.2.7) **Interval estimates for proportions:** random sampling, sample proportions, confidence intervals for proportions (4.3.1–4.3.10)

Assessment type	Assessment type weighting	Assessment task weighting	When	Assessment	Syllabus content
Investigation	20%	10%	Semester 1 Week 5	**Task 1:** Plan, research, conduct and communicate the findings of an investigation	**Further differentiation and applications:** differentiation rules, applications of differentiation (3.1.7–3.1.16)
		10%	Semester 2 Week 2	**Task 5:** Select, adapt and apply models to investigate and solve practical problems	**The logarithmic function:** logarithmic functions (4.1.1–4.1.8)
Examination	40%	15%	Semester 1 Week 15	**Task 4: Semester 1 examination.** Two sections, Calculator-free (50 mins) and Calculator-assumed (100 mins)	Application of mathematical understanding and skills to analyse, interpret and respond to a variety of question types that require both open and closed responses based on Unit 3 content
		25%	Semester 2 Week 15	**Task 8: Semester 2 examination.** Two sections, Calculator-free (50 mins) and Calculator-assumed (100 mins)	Application of mathematical understanding and skills to analyse, interpret and respond to a variety of question types that require both open and closed responses based on Unit 3 and Unit 4 content
Total	**100%**	**100%**			