

2010 SENIOR COURSE INFORMATION

Head of Department
SUBJECT:

C. McBride
Mathematics

	Year 11 - 101	Year 12 - 201	Year 13 - Calculus
Course Content	Algebra Graphs Number Measurement Statistics Probability Geometry Trigonometry	Algebra Graphs Calculus Coordinate Geometry Probability Sequences Trigonometry Equations	Differentiation Integration Trigonometry Complex Numbers Conics
Pre Requisites	Nil <u>Note</u> – all students have been assessed in 1.3 Measurement (3 credits) and 1.4 Geometric Techniques (2 credits) in Year 10	Achievement in 1.1 Algebra 1.2 Graphs 1.7 Number At least 12 (out of 16) Level 1 credits assessed externally.	Achievement in any two of 2.1 Algebra 2.2 Graphs 2.3 Calculus At least 13 (out of 17) Level 2 credits assessed externally.
Assessment	101 External (16 Credits) 1.1 Use straightforward algebraic methods and solve equations (4) 1.2 Sketch and interpret graphs (3) 1.6 Determine probabilities (2) 1.7 Solve straightforward number problems in context (3) 1.8 Solve right angled triangle problems (2) 1.9 Use geometric reasoning to solve Problems (2) Internal (8 Credits) 1.5 Use Statistical methods and information (3) 2.5 Select a sample and use this to make an inference about the population (3) 2.8 Solve trigonometry problems requiring modelling of practical situations (2)	201 External (17 Credits) 2.1 Manipulate algebraic expressions And solve equations (4) 2.2 Draw straightforward non-linear Graphs (3) 2.3 Find and use straightforward Derivatives and integrals (4) 2.4 Use coordinate geometry methods (2) 2.7 Solve straightforward problems Involving arithmetic and geometric Sequences (2) 2.9 Solve straightforward trigonometric Equations (2) Internal (2 Credits) 2.6 Simulate probability situations, and Apply the normal distribution (2)	Calculus External (20 Credits) 3.1 Differentiate functions and use derivatives to solve problems (6) 3.2 Integrate functions and use integrals to solve problems (6) 3.4 Manipulate real and complex numbers, and solve equations (5) 3.5 Sketch graphs of conic sections and write equations related to conic sections.(3) Internal (4 Credits) 3.3 Solve problems and equations involving trigonometric functions (4)
Costs	\$35 – including revision examination papers and workbook with CD	\$35 – including revision examination papers and workbook with CD	\$40 – including Nulake workbook and revision exam papers

