



General Mathematics, MAG 212 2009

Aims/General Learning Outcomes

- To develop the skills, concepts, understandings and attitudes which will enable to cope confidently with the mathematics of everyday life and the world of work
- To develop a variety of approaches to solving problems
- To develop the ability to think and reason logically

Course Content

1. Number – solving problems involving decimals, percentages, money
2. Measurement – using measurements to solve problems, solving problems involving right angled triangles, navigation
3. Geometry - using transformations to describe situations and solve problems using angle properties of parallel lines, geometry patterns
4. Statistics – gathering and reporting on data, evaluating statistical reports, statistical graphs, designing questionnaires, determining probabilities
5. Algebra – using formulae and equations to solve problems, basic algebra skills, using graphs to determine rates, sequences

At the start of each unit of work you will be given a handout with the objectives for that topic.

Although there is a long list of Unit Standards for this course, you will have already passed some of them so it is not expected that you repeat them although you will need to be reminded of the work.

Equipment

You must have a scientific calculator which you are to bring to every lesson. It is an advantage to have a calculator which does fractions.

Appeals

Any queries about an assessment decision should be made to your class teacher when the assessment is handed back. Any formal appeals should be made, **within one week** of the assessed work being returned to the Head of Department, Mrs Bull, or the Principal's Nominee, Ms Lynch in term 1 and Mrs Butler in term 2, 3 and 4, who will investigate it further.

Work done in pencil or which has 'white-out' corrections cannot be reconsidered for appeals. Appeals need to be made within one school week of receiving a result.

Further assessment opportunities

For each Unit Standard assessment there will be one reassessment opportunity except in the case of Unit Standard 12333, where a resubmission opportunity will be available only.

Where a reassessment opportunity is offered it will be available to all eligible students regardless of the level of achievement in the first assessment.

Numeracy requirement for NCEA

You must have a minimum of 8 credits in Mathematics Achievement Standards or Unit Standards to meet the basic numeracy requirements for a Level 1 National Certificate of Educational Achievement. If you want entry to University you will need a minimum of 14 Level 1 numeracy credits.

GENERAL MATHEMATICS 212
TEACHING AND ASSESSMENT PROGRAMME 2009

<i>Term 1</i>					Credits	Result
Number	Weeks 2 - 5	Unit standard assessments	Using decimals and percentages to solve problems and use strategies to solve number problems	5224 (v4) 5235 (v4)	2 2	
Number	Weeks 6 - 9	Unit standard assessments	Calculations and problems involving money. Investigate and report on a project	5227 (v4) 5234 (v4) 12331 (v3)	3 3 3	
Geometry	Week 10		Prepare for geometry unit standards for term 2			
<i>Term 2</i>						
Geometry	Weeks 1 - 3	Unit standard assessments	Describe situations and solve problems using geometry Geometrical constructions and drawings Describe situations using transformations and loci	5229 (v3) 5231 (v4) 5237 (v3)	2 2 3	
Measurement	Weeks 4 - 9	Unit standard assessments	Solve measurement problems Solve right angle triangle problems Solve navigation problems Solve triangles to find angles and sides	5228 (v4) 5341 (v4) 5236 (v4) 7560 (v2) 5251 (v4)	3 3 2 3 3	
<i>Term 3</i>						
Statistics	Weeks 1 - 3	Unit standard assessments	Investigation and data interpretation Explore data and evaluate reports Using data displays to compare data Questionnaire design	5230 (v4) 5240 (v3) 12332 (v3) 12333 (v3)	3 3 2 2	
Probability	Weeks 4 - 5	Unit standard assessments	Determine probabilities	5232 (v3) 5242 (v3)	2 2	
	Week 6	School exams				
Algebra	Weeks 7 - 10	Unit standard assessments	Solve problems using equations and formulae Basic algebra skills	5223 (v3) 20659 (v1)	2 2	
<i>Term 4</i>						
Algebra	Weeks 1 - 2	Unit standard assessments	Patterns, problems and equations Formulae and rates from graphs Sequences and series	5239 (v3) 7568 (v2) 5248 (v3)	2 2 2	
Geometry	Weeks 3 - 6	Unit standard assessments	Geometry of patterns Networks	7559 (v2) 5249 (v3)	2 2	

All unit standard assessments are written tests

