



Otumoetai College

Mathematics Department

National Certificate in Educational Achievement Level 2 Mathematics B 2011

To the students:

This course is intended for those students who intend taking Level 3 Statistics and Modelling in Year 13.

The course consists of these units of work:

Standard	Topic	Credit Value	Type of Assessment
AS 90284	Manipulate algebraic expressions and solve equations	4	External
AS 90287	Use coordinate geometry methods	2	External
AS 90288	Select a sample and use this to make an inference about the population	3	Internal
AS 90289	Simulate probability situations, and apply the normal distribution	2	Internal
AS 90290	Solve straightforward problems involving arithmetic and geometric sequences	2	External
US 5244	Demonstrate calculus skills	2	Internal
US 5251	Choose and apply trigonometric methods to solve problems involving lengths and angles	3	Internal
US 5260	Find and use derivatives to solve problems involving rate of change	2	Internal

Your teacher and the Mathematics Department have the responsibility to help you to achieve to your full potential.

You have the responsibility to complete all set work to the best of your ability, to be in class on time, to meet all deadlines and to act and behave in a responsible manner so that you can achieve to your potential. Your behaviour in the class should not impact on the other people in the classroom.

Resources

You will be requested to purchase a copy of **Theta Mathematics Homework Book**, from your classroom teacher if you have not purchased one from down town, which is a Write-On homework book.

Assessment

At the beginning of each unit you will be informed as to the form of assessment for the unit.

Standard	Term	Topic	Credit Value	Type of Assessment
AS 90288	1	Select a sample and use this to make an inference about the population	3	Internal
AS 90284	1	Manipulate algebraic expressions and solve equations	4	External
US 5244	2	Demonstrate calculus skills	2	Internal
US 5260	2	Find and use derivatives to solve problems involving rate of change	2	Internal
AS 90289	2	Simulate probability situations, and apply the normal distribution	2	Internal
US 5251	3	Choose and apply trigonometric methods to solve problems involving lengths and angles	3	Internal
AS 90287	3	Use coordinate geometry methods	2	External
AS 90290	3	Solve straightforward problems involving arithmetic and geometric sequences	2	External

Assessment

How will you be marked?

Assessments may be formative or summative.

Formative assessments, such as assignments or end of unit tests, are used to give an indication of areas of weaknesses and to give you an opportunity to improve on them before the summative assessment.

Summative assessments are used to determine your understanding of a section of work.

Formative assessments are **not** counted toward your final grade.

Summative assessments **are** recorded and determine your final grade and have to be sat on the specified day.

All assessments are **COMPULSORY**.

As previously mentioned there are two main types of assessment this year, internal and external.

At the beginning of each new section of work you will be informed as to the form of assessment.

Assessment for qualification – National Certificate of Educational Achievement (NCEA)

Each Achievement Standard and Unit Standard will be awarded its own separate grade.

For Achievement Standards	N	=	Not Achieved
	A	=	Achievement
	M	=	Achievement with Merit
	E	=	Achievement with Excellence

And for Unit Standards	N	=	Not Achieved
	A	=	Achievement

All Unit Standards and some Achievement Standards are assessed internally. The balance of the Achievement Standards are assessed externally.

Externally Assessed Standards

The New Zealand Qualification Authority sets the examination papers. What you do on the day of the examination will determine the level of achievement you will be awarded in each of the externally assessed Achievement Standards.

Internally Assessed Standards

The College is responsible for conducting this assessment for qualification. For internally assessed standards a student **may** have more than one opportunity to gain achievement in Unit Standards, but there will be no further assessment opportunity for internally assessed Achievement Standards. The internally assessed grade they have achieved by the end of the year will be their final achievement grade.

College Reporting

The College conducts formative assessments throughout the year in preparation for the externally assessed Achievement Standards. These will only be an indication of the level of achievement. For the internally assessed Achievement and Unit Standards the grade at the end of the year will be the final grade however, the College will report **ALL** results as **PROGRESS GRADES** using the above descriptors.

College Examinations

Both College examinations are compulsory. The internally and externally assessed Achievement/Unit Standards are reported as previously mentioned.

Recording marks

You will be given a summary sheet of all the Achievement and Unit Standards, and their credit value, for you to fill in after every assessment. This is designed to be your record of your running credit total and you will be responsible for maintaining it. Your teacher will also keep a record. Remember external credits can only be gained at the end of the year in the examination organised by NZQA.

At sometime during the year you will be asked to confirm and sign that the data entry on the College database is an accurate record of your results throughout the year.

You may be given assignments by your mathematics teacher to complete during each unit of work; you are expected to complete them. They will give you direct feedback on your understanding of what you have been taught.

Moderation between Classes

All assessments are common to all classes and have a common marking schedule. Inter-class moderation is achieved by check marking across the classes.

Samples of student work will be sent to NZQA to compare with student work from other secondary schools to ensure consistency of standards.

Authenticity of Student Work

All work must be the student's own. If a staff member is in doubt the student will be asked to provide further evidence, orally or in writing, by explaining or solving a similar problem etc. An inadequate explanation will result in no achievement grade being awarded. NZQA Policy will be followed.

Appeals

If a student is not satisfied with a particular assessment result, the student must discuss it with the class teacher within 24 hours of the assessment being handed back. The assessment **does not** leave the classroom.

Students not satisfied with the discussion should approach the Head of the Mathematics Department (Mr Dixon) as soon as possible, to collect an application form for appeal within 48 hours, provided the assessment does not leave the room and is handed onto the Head of the Mathematics Department, by the classroom teacher.

Students taught by Mr Dixon should approach Mr Ellwood.

Derived Grades

It is necessary to achieve to your full potential throughout the year in all assessments in case the need arises for you to seek a Derived Grade in the final external examination.

Reports

There will be a Report Evening in Term 1, Week 10.

Written reports are issued in Term 2, Week 11, and in Term 3, Week 10.

Storage of Student Work

The College will keep all student work for internally assessed standards until such time as it is no longer required for moderation purposes.

It is expected of you to satisfactorily prepare yourself for each Achievement Standard Assessment through the guidance of your teacher.

The prerequisite to be considered to attempt any YEAR 13 Mathematics Course is a minimum of 14 credits, from Achievement Standards, in mathematics at NCEA level 2 which must include:

For Statistics and Modelling

Achievement Standard	Level of Attainment
90289	Merit
90284	Achievement

Remember once a total of 80 credits have been achieved you are eligible to receive The National Certificate of Educational Achievement Level 2 but to do so you must have at least 60 credits at Level 2 plus 20 other credits from either Level 1 or Level 2.

Satisfactory Completion of Course – Minimum Requirements

You are expected:

1. To attend class regularly. All absences from class, **for whatever reason**, will be recorded as an absence.
2. To have all necessary equipment – stationery, calculator, etc., to be able to participate fully in the classroom.
3. To complete all class work and assessment pieces as set by the classroom teacher.
4. To complete all set work on time.
5. To sit all assessments. Should you miss an **INTERNAL** assessment you will **NOT** be allowed to sit it at a later date

Note:

1. Should a class be missed, for whatever reason, you are responsible for catching up in your **own time**.
2. In the event of an absence for an extended period, you are expected to see the Head of the Mathematics Department, Mr Dixon, and the Deans to discuss how you are to catch up on the missed work.
3. Sporting and Cultural Trips are not an excuse for work not being handed in on time. **Permission for extensions** should be sought in advance.
4. Any work completed on a computer should be backed up on a disc. Should a computer or printer malfunction the night before the work is to be handed in the disc will be evidence that it was completed on time. A hard copy will have to be produced at school that day from the disc.
5. These are minimum requirements and are designed to help you achieve to your potential.

H. Dixon
HOD MATHEMATICS
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