L3 MAC Course Outline 2024

Course description
The aim of the course is to introduce and develop advanced mathematical skills, concepts and understandings of the Level 8 Mathematics Curriculum in the areas of Algebra, Trigonometry, Calculus and Trigonometry.

This course will cover four of the NCEA Level 3 Mathematics Achievement standards. It is possible to obtain a maximum of 21 credits. It contains the following subject areas: Trigonometry, Algebra of Complex Numbers, Differentiation and Integration. This course uses the Nulake EAS Calculus Workbook and Delta textbook for extra practice and homework as well as a Walker Math workbook for Trigonometry. By the end of this course, students will have developed sufficient knowledge and skills to solve problems by applying algebraic, calculus and graphical methods.

Assessments

Standard		Title	Type	Credits
AS 91575	3.3	Apply trigonometric methods in solving problems	Internal	4
AS91577	3.5	Apply the algebra of complex numbers in solving problems	External	5
AS91578	3.6	Apply differentiation methods in solving problems	External	6
AS91579	3.7	Apply integration methods in solving problems	External	6

Assessment of the internally assessed achievement standard will follow the school and NCEA policies and procedures on lateness, misconduct, extensions, missed / delayed assessments and appeals. An assessment will not automatically be offered for a catch-up opportunity if a student is absent. If the internal assessment is missed, there must be valid medical evidence to say why the student was absent.

There will be common practice externals, based on past examination papers, on every topic. These results are recorded for both school and NCEA purposes. There will also be a three-hour practice NCEA examination in September, during week 9 or 10 of Term 3. These assessments are important as practice for the November examination and will provide evidence in conjunction with the results for the internally assessed achievement standard for the award of the school subject prize as well as for derived grades if needed.

Student Work

All students are expected to bring a graphic calculator to every lesson. The Casio model fx-9860GIII is recommended, as teachers will be able to most easily support students in the use of this model. These calculators are best purchased through Warehouse Stationery while they have their February Back to School Specials. Students must provide their own calculators for all assessments. The Mathematics Faculty is not able to lend calculators.

If a student is absent from class on any given day, it is the student's responsibility to catch up on missed work. This means that all students must ensure that they copy out any missed theory notes, collect missed hand-outs, check the Google classroom for any learning materials shared and catch up on any work set during their absence.

Homework

The work you do at home is an essential part of this course, as it gives you the opportunity to consolidate the day's lesson, investigate the work that lies ahead, and revise for tests and examinations. Whether homework is officially set or not, any work that is not finished or not understood in class constitutes homework. It is essential that all students regularly revise the work that they have been doing to affirm those areas that they are confident in and to focus on those areas requiring extra attention and effort.

We encourage students who are struggling with their homework or maths tasks to seek additional support at Maths Coaching. Help is available after school on Tuesdays in RN46 to provide support to any students who have questions about their homework or course material.

Every Level 3 Calculus student is expected to buy the NuLake EAS Calculus Workbook and a Walker Maths 3.3 Trigonometry workbook. These workbooks can be purchased through the stationery shop.

D&D Revision Workbooks will be made available for students to purchase in Term 3. This workbook provides essential support for examination revision and students are strongly advised to purchase this.

Assessment Calendar

2024 LEVEL 3 ASSESSMENT CALENDAR					
				L3MAC	Notes
Term 1	1	Jan-29	Feb-2		
	2	Feb-5	Feb-9		Waitangi Day Wed 06/02
	3	Feb-12	Feb-16		
	4	Feb-19	Feb-23		
	5	Feb-26	Mar-1		
	6	Mar-4	Mar-8	3.3 Trigonometry	
	7	Mar-11	Mar-15		
	8	Mar-18	Mar-22		Summer Tournament Week
	9	Mar-25	Mar-29		Good Friday 29/03
	10	Apr-1	Apr-5		
	11	Apr-8	Apr-12		
Term 2	1	Apr-29	May-3		
	2	May-6	May-10	3.5 Complex	
	3	May-13	May-17		
	4	May-20	May-24		
	5	May-27	May-31		
	6	Jun-3	Jun-7		Kings Birthday Weekend Mon 03/06
	7	Jun-10	Jun-14		
	8	Jun-17	Jun-21		
	9	Jun-24	Jun-28		
	10	Jul-1	Jul-5	3.6 Differentiation	
Term 3	1	Jul-22	Jul-26		
	2	Jul-29	Aug-2		
	3	Aug-5	Aug-9		
	4	Aug-12	Aug-16		
	5	Aug-19	Aug-23		
	6	Aug-26	Aug-30		
	7	Sep-2	Sep-6		Winter Tournament Week
	8	Sep-9	Sep-13	3.7 Integration	
	9	Sep-16	Sep-20	**EXAM**	
	10	Sep-23	Sep-27		
Term 4	1	Oct-14	Oct-18	**REVISION**	
	2	Oct-21	Oct-25	**REVISION**	Labour Day Mon 28/10
	3	Oct-28	Nov-1	**REVISION**	
	4	Nov-4	Nov-8		
	5	Nov-11	Nov-15		
	6	Nov-18	Nov-22		
	7	Nov-25	Nov-29		
	8	Dec-2	Dec-6		

Teachers

Teachers teaching this course this year can be contacted at:

- Paul Joseph p.joseph@tgs.school.nz
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Teacher In Charge for this Course: Kevin Hu k.hu@tgs.school.nz