Otumoetai College
Mathematics Department
Year 9 Mathematics 2019

Dear Parents/Caregivers - Kia ora and welcome to OTC!

All students in Years 9 – 11 at Otumoetai College are required to study Mathematics - most students in Years 12 and 13 also study Mathematics and/or Statistics.

In 2019, Year 9 will be taught in a collaborative learning space. Although students are broadly streamed, two classes will regularly work together on various activities and investigations. Students will be consolidating and extending their current knowledge at relevant levels of the curriculum. Our aim is to create confident, capable and resilient learners. To this end, there will be three types of lessons every week.

Content based learning. Teachers will cover the curriculum topic by topic, using a variety of resources to support students in their learning.

Students will also engage in **self directed learning** (with teacher assistance). They will be issued with **I Can Do** sheets for each topic, which list the objectives and curriculum levels, linked to learning resources. They will be able to work through any gaps at their own pace.

Project work: Finally, about once a week (on average) students will work in groups on some big project. Teachers want students to understand the way mathematics works in real life, and to get away from the more contrived text book approaches.

Parents can be of great assistance when supporting students in learning mathematics. Research confirms that most learning occurs when students are struggling, often for a prolonged period, rather than when they are getting a series of problems right. We expect students to struggle, to make mistakes, to try various approaches - indeed we celebrate this rather than criticise this. Students must work hard, develop resilience, be relentlessly curious, and to develop a range of problem solving strategies.

Topics
1. Measurement
2. Number
3. Statistics
4. Algebra: Patterns to Graphs
5. Geometry: Space and Shape
6. Probability

Assessment
Students will be assessed at the beginning and end of each topic using an online Ministry of Education based **e-asTTle test**. Pre-tests will enable students and teachers to determine aspects already mastered, and highlight where most emphasis needs to be placed. Post tests will allow students to gauge their progress at the end of the topic. The I Can Do sheets mentioned above, which contain learning objectives linking test questions with page references in main textbooks, will help students to take responsibility for their learning, including allowing students to carry out background work on weaker areas in their own time.

There is likely to be a one hour exam in Term Four focusing on Number and Algebra. There may also be other project type assessments - students will be warned of these.
Test and examination results will help decide class placement for the following year.

Homework
A commercial web based package called MangaHigh will be the main source of homework. The registration cost is $10 for the year. Each classroom teacher will set exercises weekly, which students are to complete. The exercises are marked electronically and feedback is immediate. Feedback is the most effective way for students to learn.

Equipment
Students receive a separate stationery list. For this subject they will require quad books, the normal range of pens, rulers, and protractors, as well as a scientific calculator.

Appeals
If a student is not satisfied with an assessment result, the student must discuss it with the class teacher immediately - **before** the assessment leaves the room.

If any student is not satisfied with this discussion he or she should approach Mr Ellwood (Head of Department) as soon as possible. The assessment can be handed to Mr Ellwood by the classroom teacher.

Mathematics Competitions
Your student will be invited to enter the Otago University NZ Mathematics competition and the Australian Mathematics competition. There will be a small charge to cover entry fees for these competitions. We encourage many students in Year 9 to enter. There is also a quiz competition between Bay of Plenty schools, called Mathmind.

Your teacher and the Mathematics Department have the responsibility to help you achieve to your full potential. If students, parents and teachers work together then students can achieve great progress.

Students: 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, along with all your classmates.

Final Comment: A major focus this year is the development of a Mathematics and Statistics website which will be a repository for a large amount of information valuable to teachers, students and parents. Check this out at
https://sites.google.com/otc.school.nz/otc-maths-and-stats/otc-maths

On behalf of all OTC mathematics teachers, I wish your son or daughter a very successful 2019. Please do not hesitate to email your designated mathematics teacher with any queries or concerns.

Jason Ellwood
HOD Mathematics
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