Tuesday, 15th March 2022

Dear Year 10 Parents and Guardians

As we approach Semester 2 at WSSC, your child will be selecting a pathway for their future mathematics study at the school. This letter is to inform you of the options that they have and how these will be enacted over the next two and a half years. It should be noted that the options described below are considered the default possibilities that all Year 10 students can choose from. Variations from these options can occur to cater for particular student needs, such as acceleration or extra support. Such variations can be organised through an Individual Education Plan.

The four options that Year 10 students can choose from in Semester 2 are:

1. **Mathematical Methods as part of a Scored VCE program:**

   This mathematics pathway leads towards university study in areas such as Sciences (particularly Physics, Chemistry and Mathematical Sciences), Engineering (all branches), Computer Science & Game Design, Economics, and Medicine. It involves the study of a variety of functions and graphs, calculus, higher-level statistics, and higher-level probability. Students who select Mathematical Methods in the second half of Year 10 leave their options open to choose Mathematical Methods or General Mathematics in Year 12. Reasonably strong numeracy and algebra skills are required for success.

2. **Specialist Mathematics as part of a Scored VCE program:**

   This mathematics pathway must be selected in addition to Mathematical Methods, leading towards university study in advanced mathematics and other STEM fields. It involves extending the content from Mathematical Methods to include other functions, as well as advanced mathematics topics such as logic and proof, complex numbers, vectors, differential equations, kinematics, and statistical inference. Students who select Specialist Mathematics in the second half of Year 10 leave their options open to choose any VCE mathematics in Year 12. Strong mathematical thinking skills are required for success.

3. **General Mathematics as part of a Scored VCE program**

   This mathematics pathway leads towards any other career that you can think of (other than those described above). It involves the study of probability and statistics, financial mathematics, linear functions and graphs, matrices, networks, measurement and trigonometry. Students who select General Mathematics in the second half of Year 10 can study General Mathematics as their Unit 3-4 option in Year 12. General Mathematics is accessible for most students and provides preparation for employment or further study at TAFE or university.

4. **Foundation Mathematics as part of a Vocational Major.**

   This mathematics pathway provides for the continuing mathematical development of students who have selected the Vocational Major. It focuses on problems encountered in practical contexts in everyday life at home, in the community, at work, and in study. Foundation Mathematics satisfies all of the mathematics requirements for the VCE Vocational Major.

As part of the process of getting ready for Semester 2, we have done some analysis of students' current numeracy levels. This indicates that the two years of COVID related lockdowns may have contributed to some gaps in their skills and understanding. Because of this, we will be running a preparatory program at Year 10 level for Mathematical Methods, Specialist Mathematics and General Mathematics during Semester 2. This will allow the subjects to be taught at the point of need for all of our students, without the demands of meeting Unit 1 outcomes until 2023. We are confident that all of our year 10 students will be in a great position for their Year 11 mathematics study by the end of this year.

If you have any questions about Year 10 Mathematics pathways in Semester 2, please feel free to contact me, Michael Barnard, via the school office or the acting Assistant-Principal for Curriculum, Nicole Jasinowicz.

Kind Regards,

Michael Barnard

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