
PREVOCATIONAL MATHEMATICS (*HEAD OF DEPARTMENT – Mr Chris Blood*)**Authority-Registered Subject - Vocational Education**

Aims

The course is designed to build confidence and success when using mathematics in everyday contexts, to develop skills such as using a calculator, maps and tables and to identify and use relevant technologies in mathematics. The course aims to improve boys' numeracy skills as preparedness for work entry through apprenticeships and traineeships. Boys will be expected to work cooperatively with others, in groups. The course expects boys to make informed mathematical decisions after researching and suitably presenting various projects and tasks.

General Objectives

In this course, the teaching and learning context is one that has personal relevance to students and is related to real life. This is achieved primarily through the three general objectives of *knowing*, *applying* and *explaining*.

Knowing involves the knowledge of content and basic procedures that are required to carry out tasks. Applying involves the identification of basic strategies in order to solve familiar problems by applying known rules and procedures. Explaining consists of using everyday language and basic mathematical language to present and describe responses to tasks that are undertaken. The general objectives of knowing, applying and explaining are regarded equally.

The course also promotes affective general objectives which are concerned with attitudes, values and feelings. In particular are the attributes of critical, creative and self-regulated thinking, encouraging students to be accurate and not careless, clear and not confusing, open-minded and not biased, patient and persistent but sensitive to the level of knowledge and feelings of others. It is intended that boys will become engaged intensively in tasks and confident to provide feedback to others from their own work by being aware of their own strategies and approaches and being able to set goals and monitor their own progress.

Topics

The course is based on five topic areas:

- Mathematics for interpreting society: number (study area core).
- Mathematics for interpreting society: data.
- Mathematics for personal organisation: location and time.
- Mathematics for practical purposes: measurement.
- Mathematics for personal organisation: finance.

These topics are studied in combination in a number of contexts involving mathematical themes that are meaningful to students. They may be revisited in different contexts throughout the course.

Assessment

Assessment is an integral part of the course of study. It is both formative and summative. The assessment program involves a process of continual assessment using items such as folios of student work over a term, group and individual projects, assignments and oral presentations. There are no formal examinations.

At exit students are graded in each of the three general objectives of knowing, applying and explaining with grades ranging from A to E. An exit grade of Very High Achievement (VHA), High Achievement (HA), Sound Achievement (SA), Limited Achievement (LA) or Very Limited Achievement (VLA) is awarded at the end of year 12. The exit grade is awarded using the table below.

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| VHA | At least standard A in any two criteria and a B in the third. |
| HA | At least standard B in any two criteria and a C in the third. |
| SA | At least standard C in any two criteria and a D in the third. |
| LA | At least standard D in any two criteria and an E in the third. |
| VLA | Less than the requirement for LA. |