Name of Course	MATHEMATICS
Examination Board	AQA

Aims of the Course

The purpose of GCSE mathematics is to provide a broad, coherent, satisfying and worthwhile course to study. It encourages students to develop confidence in, and a positive attitude towards, mathematics and to recognise the importance of mathematics in their own lives and to society. **It also provides a strong mathematical foundation for students who go on to study mathematics at a higher level post-16.**

We aim to enable students to:
1. Develop fluent knowledge, skills and understanding of mathematical methods and concepts
2. Acquire, select and apply mathematical techniques to solve problems
3. Reason mathematically, make deductions and inferences and draw conclusions
4. Comprehend, interpret and communicate mathematical information in a variety of forms appropriate to the information and context.
5. Students will learn that mathematics can be used to develop models of real situations and that these models may be more or less effective depending on how the situation has been simplified and the assumptions that have been made. Students will also be able to recall, select and apply mathematical formulae.

Content of the Course

The course is split up into a number of topic areas.
Please follow the link below to the college web page providing further detail of these topics:
http://smartfuse.s3.amazonaws.com/oathall.org/uploads/2012/11/Contents-for-2015-GCSE.pdf

Structure of the Course

The GCSE is split into 2 possible routes; Foundation and Higher, a majority of students at Oathall will undertake the higher route. Movement between routes is possible.
The course is designed to be taught over 2–3 years. With summative assessment through regular examinations at the end of each half term, these are internal mock examinations designed to cover only the work completed during that half term. The GCSE is assessed at the end of year 11; it is 100% examination with no coursework or controlled assessment. There are 3 examinations each 1 hour 30 minutes in duration.
The first paper is non-calculator the second and third both calculator, all papers are equally weighted and out of 80 marks.

Paper1: Non-Calculator	Paper 2: Calculator	Paper 3: Calculator
What's assessed Content from any part of the specification may be assessed	**What's assessed** Content from any part of the specification may be assessed	**What's assessed** Content from any part of the specification may be assessed
How it's assessed • written exam: 1 hour 30 minutes • 80 marks	**How it's assessed** • written exam: 1 hour 30 minutes • 80 marks	**How it's assessed** • written exam: 1 hour 30 minutes • 80 marks

• non-calculator • 33⅓% of the GCSE mathematics assessment	• Calculator allowed • 33⅓% of the GCSE mathematics assessment	• Calculator allowed • 33⅓% of the GCSE mathematics assessment
Questions A mix of question styles, from short, single-mark questions to multi-step problems. The mathematical demand increases as a student progresses through the paper.	**Questions** A mix of question styles, from short, single-mark questions to multi-step problems. The mathematical demand increases as a student progresses through the paper.	**Questions** A mix of question styles, from short, single-mark questions to multi-step problems. The mathematical demand increases as a student progresses through the paper.

Requirements for Student Success

To achieve examination success students need to adopt good working habits including checking throughout each topic that they have understood the central parts of the work; if they have not fully understood, they should seek teacher help. In the examination students are expected to show working and demonstrate the methods by which answers are determined. Students will be expected to explain solutions to problems, give reasons for various outcomes and establish and justify their results. **It is essential that all mathematics work throughout the course is explained fully and working shown clearly**.

It is vital that students come fully equipped to **all** mathematics lessons with the basic mathematics equipment. These items are as follows:

pen or biro	10p	scientific calculator	£6.50	These items, and others, can
pencil	10p	protractor	10p	be purchased from
ruler(30cm)	20p	pair of compasses	40p	Mathematics teachers
rubber	5p			(current prices indicated).

Level 2 certificate in Further Maths

A number of students from our top sets will be entered for the further maths certificate. This is a great stepping stone between GCSE maths and A level. This course culminates in two examinations at the end of Year 11; one non-calculator paper (1hr 45mins) and one calculator paper (1hr 45mins). Both papers are equally weighted and are out of 80 marks. Although all students in top sets will cover the course content, the examinations are not compulsory.

Trips

Resources

It would be advantageous to have access to a computer with internet at home to log on to college web pages, PixL Maths app and Insight.

For further information contact Mrs C Todman, Faculty Leader