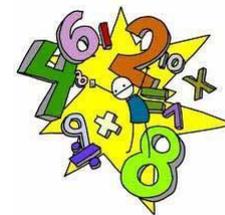


Mathematics / *Mathemateg*



Curriculum Leader Mrs K Lloyd-Hughes

Examination Board WJEC

Overview of course content

Mathematics at Key Stage 4 follows on directly from Key Stage 3. Pupils will further their study of familiar topics and also meet some new ones. From September 2015, the GCSE Mathematics pathway changed for all students. Pupils are now able to achieve two GCSE's in Mathematics and will study for these at the same time. The new qualifications are called GCSE Mathematics and GCSE Mathematics- Numeracy. Mathematics is compulsory for all pupils in Key Stage 4. The department aims to enter every pupil for both GCSE qualifications during Key Stage 4. A small number of pupils will follow only one GCSE Mathematics pathway and/or be entered for Entry Level if the GCSE course is too demanding for them. It is possible to be entered for both GCSE and Entry Pathway.

The course covers the two qualifications highlighted above. There is a significant amount of cross-over between topics in the GCSE Mathematics and GCSE Mathematics-Numeracy which enables the two qualifications to be taught at the same time. The GCSE Mathematics-Numeracy will assess the mathematics that learners will need in their everyday lives, in the world of work and in other general curriculum areas. The GCSE Mathematics will extend to aspects of mathematics needed for progression to scientific, technical or further mathematical study. The two GCSE courses cover the following topics: Number, Geometry & Measure, Algebra, Statistics (including Probability). The exact content will depend upon the tier of entry for GCSE but all courses cover basic skills and there is a strong emphasis on application of Mathematics in real life situations. There is a strong focus on developing problem solving skills.

Summary of assessment

The course is split into several units in both Year 10 and Year 11. There is an emphasis on Assessment for Learning and pupils can expect a variety of assessment techniques over the two years including formal tests, open book tests, extended homework exercises, 'spot the mistake' exercises, and past paper consolidation. Pupils will study the two qualifications over 9 hours each fortnight. 1 hour will be specifically set aside for support and consolidation to help pupils address any difficulties and weaknesses.

At GCSE there is no longer any coursework requirement for Mathematics. Two examinations will be in GCSE Mathematics-Numeracy and two examinations will be in GCSE Mathematics, pupils will typically sit both GCSE's in Year 11, either in the November or Summer, depending on the departmental policy at that time. For both GCSE's there will be a non-calculator paper and a calculator paper. There are three tiers of entry: Higher (Grades A* to D available), Intermediate (Grades B to E available) and Foundation (Grades D to G available).

Learning Pathways post 16

Mathematics at GCSE is required for a wide variety of careers, with many asking for at least a Grade C, most teaching based onward pathways now require Mathematics of Grade B or above. The GCSE Mathematics-Numeracy and GCSE Mathematics form a key component of the Welsh Baccalaureate qualification and learners will need to secure at least a grade C in one of the GCSE's to achieve this qualification at intermediate level. Both of the GCSE qualifications also provide good preparation for Level 3 Mathematics.