

KS5 Long Term Plan

Subject: Computer Science

Exam Board OCR H446

Curriculum Statement of Intent

• Computer science KS5 builds on the skills and knowledge of KS4. We follow national curriculum; The exam board is OCR. By the end of two years, we intend all students to have strong content knowledge and be equipped with the necessary skills needed to succeed in their exams. The department aims to encourage all students to develop excellence in computing and to work in a confident and independent manner. The department achieves this through providing a supportive learning environment and encouraging all students to be the best that they can be. We prepare our students to achieve outstanding result underpinned by our mission statement of achieving excellence and try to ensure students feel confident to progress to university / relevant apprenticeships.

Curriculum Statement of Implementation

We will achieve the above mentioned intend by:

- Ensuring pupil progress in every lesson.
- No student should be left behind, support educational journey of all students (including SEN, EHCP) in safe and secure environment
- Covering curriculum content and making sure students have sound knowledge.
- Mapping every lesson to curriculum content. Students knowing the learning journey and the big picture.
- Promoting independent activities / tasks to help students become independent learners.
- Ensuring our students can articulate in the digital world knowing the pros and cons of technology in modern world.
- Working online and teacher tracking their progress using showbie. Students always have access to their work and can see their progress.
- Regular AFL in lessons to check student knowledge.
- Summative assessments every half term to recap / test learning.

	Autumn 1	Autumn 2	Spring 1
Yr. 12	Topics	Topics	Topics
	2.2.1 Programming techniques	2.1.2 Thinking ahead	2.1.4 Thinking logically
	2.1.1 Thinking abstractly	2.2.1 Programming techniques	2.2.1 Programming techniques
	1.4.1 data types	1.1.1 Structure and function of the processor	1.3.2 Databases
	1.1.1 Structure and function of the processor1.4.3 Boolean Algebra	1.4.3 Boolean Algebra 1.1.2 Types of processors	1.1.3 Input, output and storage
Assessments	Self-assessment of tasks (AfL)	Self-assessment of tasks (AfL)	Self-assessment of tasks (AfL)
	Teacher assessment of exam style questions (AoL)	Teacher assessment of exam style questions (AoL)	Teacher assessment of exam style questions (AoL)
	Autumn 1 Assessment	Autumn 2 Assessment	Spring 1 Assessment
	Spring 2	Summer 1	Summer 2
Yr. 12	<u>Topics</u>	Topics	Topics
	2.1.3 Thinking procedurally	1.4.2 Data Structures	2.3.1 Algorithms
	1.4.2 Data Structures	2c. NEA	2c. NEA
	2c. NEA	1.2.1 System Software	1.2.2 Application Generation
	1.3.4 Web Technologies2.1.5 Thinking concurrently	1.2.1 System Software 1.2.3 Software Development	1.2.2 Application Generation 1.2.4 Types of Programming Language
	1.3.4 Web Technologies		
Assessments	1.3.4 Web Technologies		

	Autumn 1	Autumn 2	Spring 1
<u>Yr. 13</u>	Topics	Topics	Topics
	1.3.1 Compression, Encryption and Hashing 1.5.1 Computing related legislation	1.3.3 Networks	1.5.2 Moral and ethical Issues
	2.3.1 Algorithms 2.2.2 Computational methods NEA	2.2.2 Computational methods 2c. NEA	2.2.2 Computational methods 2c. NEA
Assessments	Self-assessment of tasks (AfL) Teacher assessment of exam style questions (AoL)	Self-assessment of tasks (AfL) Teacher assessment of exam style questions (AoL)	Self-assessment of tasks (AfL) Teacher assessment of exam style questions (AoL)
	Spring 2	Summer 1	Summer 2
Yr. 13	Revision	Revision	Exam Season
Assessments	Self-assessment of tasks (AfL) Peer assessment of exam style questions (AfL) Teacher assessment of exam style questions		