GCSE Computer Science

Course Specifications

Course Title: Computer Science

Exam Board: OCR

Link to specification: Click here

Grading: 9-1

Course Details

What will you learn?

Year 10

Autumn

Unit 1: Computer systems

- 1.1 Systems architecture
- 1.2 Memory and storage
- 1.3 Computer networks, connections and protocols

Spring

Unit 1: Computer systems

- 1.4 Network security
- 1.5 Systems software
- 1.6 Ethical, legal, cultural and environmental impacts of digital technology

Summer

Unit 2: Computational thinking, algorithms and programming

- 2.1 Algorithms
- 2.2 Programming fundamentals
- 2.3 Producing robust programs

Year 11

Autumn

Unit 2: Computational thinking, algorithms and programming

- 2.4 Boolean logic
- 2.5 Programming languages and Integrated Development Environments

Programming project:

You will be given the opportunity to undertake a programming project consisting of a number of tasts, to solve a given problem, during your course of study. You may draw on some of the content in both components when engaged in Practical Programming.

Spring

Exam Preparation

Past papers

Summer

2x Final Exams

How will you be assessed?

During the course:

Year 10:

Mid Year Exam: This will be a multiple choice and a short answer question

End of Year Exam. This will be an exam based on previous exam questions.

Year 11:

PPE1 and PPE2. These two exams will be very similar to the real exam. This will give you a very good feel for how the final exams will be.

At the end of the course: **Your final grade will be awarded based on the following two examinations only. There will be no coursework or an other set tasks which will count towards your final grade.**
Paper 1: Written paper: 1 hour and 30 minutes 50% of total GCSE 80 marks This is a non-calculator paper. All questions are mandatory. This paper consists of multiple choice questions, short response questions and extended response questions. **Paper 2:** Written paper: 1 hour and 30 minutes 50% of total GCSE 80 marks This is a non-calculator paper. This paper has two sections: Section A and Section B. Students must answer both sections. All questions are mandatory. In Section B, questions assessing students' ability to write or refine algorithms must be answered using either the OCR Exam Reference Language or the high-level programming language they are familiar with.

What independent work can you do?
Learn:
Glossary of Key Terms and command words. This is in the Specification linked above.
RAG and Revisit:
PLCs: available on google classroom as a google form.
Explore:
Little Man Computer https://www.101computing.net/lmc/
Revise:
Top tips and strategies: Familiarise yourself with how to solve Algorithms using pseudocode and Flowcharts
Prepare:
Past Exam papers are the best way to prepare for the final exam.

Which resources should you use?
Textbooks, websites, online resources
https://www.scribd.com/document/547418031/OCR-Reference-language-guide-cheat-sheet https://www.gcsecomputersciencetutor.com/GCSE https://www.youtube.com/watch?v=7Up7DIPkTzo&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF