### Higher Computing Science



#### Family Learning



Welcome!

**Learning Intentions** 



- ✓ Explain the course structure
- ✓ Explain the course assessment
- ✓ Identify key subject milestones
- ✓ Demonstrate how to answer a Higher Computing Science question
- ✓ Answer any questions relating to the course



#### Course Structure

4 units of theory (SDD, Computer Systems, DDD, WDD)

Assignment undertaken Feb/March 2020

Computing Science Subject Page

https://www.sqa.org.uk/sqa/56924.html



### **Course Contents**

#### 4 Units

- Database Design and Development (DDD)
- Software Design & Development (SDD)
- Web Design and development (WDD)
- Computer Systems (CS)



# Database Design & Development (DDD)

- Analysis
- Design
- Implementation (using SQL via MS Access)
- Testing
- Evaluation



# Software Design & Development (SDD)

- Development Methodologies
- Analysis
- Design
- Implementation (using Python)
  - Data Types and Structures
  - Computational Constructs
  - Algorithm Specification
- Testing
- Evaluation



# Web Design & Development (WDD)

- Developmental Methodologies
- Analysis
- Design
- Implementation (using HTML5, CSS, JavaScript)
- Testing
- Evaluation



# Computer Systems (CS)

- Data Representation
- Computer Structure
- Environmental Impact
- Security Risks and Precautions



### The Assignment

The Higher Assignment is carried out in class and accounts for **31% (50 out of 160)** of the final mark for the Higher course.

The assignment is marked externally by the SQA and is performed under exam conditions (8 hours). It is an open book assignment.

Pupils are asked to show their skills, knowledge and understanding in:

- 1. developing a solution to an appropriately challenging Computing Science problem.
- 2. analysing a problem, designing, implementing and testing a solution to the problem, and reporting on that solution.



#### **Question Paper**

The Question Paper is split into 2 sections.

Section 1 consists of short answer questions. (25 marks)

This section gives learners an opportunity to demonstrate breadth of knowledge from across the topics specified in the course content tables.

Section 2 consists of structured questions. (85 marks)

This section gives learners an opportunity to demonstrate application of knowledge and understanding to answer appropriately challenging context-based questions.



### How the final grade is calculated

Component	Mark Range
Question Paper (May/June 2020)	0-110
Higher Assignment (marked by SQA)	0-50
Total Marks	0-160



The percentage is then worked out and the final Grade awarded, roughly based on:

>=70% A

>=60% B

>= 50% C

>=45% D

< 45% No Award



#### **Course Milestones**

#### **Significant Dates**

Jan: Prelim consisting of DDD,SDD and WDD Units

End of Feb: Course Assignment

Throughout the year we have end of topic assessments that allow us to check individual progress.



#### Resources

**Our notes** 

Book

**SQA Website** 

**Revision Website** 

**Glow Group** 



### Specimen Paper Examples

#### **Section 1**

*Q9* 

Section 2

Q14

See handouts



## Any Questions?

