St Benedict's Catholic School
The Catholic Secondary School for West Suffolk

Ora et Labora

Computer Science Curriculum Guide

Year 7

Autumn Taught Content

- Introduction to school IT systems - students will learn how to login to the school network and how to access remote learning tools such as Edulink, email and accessing their files from home.
- E-safety – we believe it is important that students know how to stay safe online.
- Effective Internet use – the internet is a powerful tool students will learn how make the most of search engine features to help them research and learn.
- Professional use of E-mail – students will learn about the features and functions of email as well as email etiquette
- Desk Top Publishing (E-safety Poster – assessed work) – An introduction to some basic DPT techniques to present the important messages of e-safety.

Spring Taught Content

- Games development with Scratch – students will use the scratch block coding platform to create a number of tutorial games before designing and developing their own computer game.
- Introduction to programming concepts – Throughout the scratch unit students gain experience of programming concept such as variables and the control structures; sequence, selection and iteration.
- Game Exhibition (Scratch Game – assessed work) – This is a chance for everyone to show off their games and good practice for the inter-school scratch competition later in the year.

Summer Taught Content

- Computational Thinking – This is a problem solving technique used to find efficient solutions to a wide range of real world problems. It includes four stages; decomposition, pattern recognition, abstraction, and algorithms.
- Flowcharts (assessed work) – A commonly used design tool in software development, students will learn to use the British Computer Society (BCS) standard symbols to design algorithms with flowcharts.

Assessment

Each unit of work (each term) will be assessed in two ways.

1. There will be an online multiple-choice and short answer test usually in the penultimate lesson of the term. Homework will be set in the week before the test as revision with a list of topics on Edulink. This test provides the grade for their report.
2. There will also be an assessed piece of classwork for each unit, this will be a digital product or artefact. Students will self-evaluate their work in the final lesson of term. Teachers will provide written feedback in the form of "What Went Well" and "Even Better If" on this piece of work.

Homework Expectations

Homework will be set every lesson via Edulink. Homework will consist of either researching or preparing for the next lesson and is therefore vital for the successful participation in the following lesson.

Reading List

E-safety and internet use
https://www.bbc.co.uk/bitesize/guides/zrtrd2p/revision/1

Scratch
https://scratch.mit.edu/

Computational Thinking
https://www.bbc.co.uk/bitesize/topics/z7tp34j

Extra and Super Curricular Opportunities

An inter-school Scratch Games and Programming event is planned for the end of the year to be hosted at the STEM Innovation Centre.

Year 7 Lunchtime "Coding Club" will resume once school returns to a regular timetable.

As the Community Leader for Computing At Schools (CAS) West Suffolk Community, I am first to receive news of any competitions and extra-curricular activities taking place in the region. If there are any interesting opportunities that will benefit our students learning we will be involved.