

There are four topics we will cover this year:

1. **Computing Essentials, Network Focus**
2. **Programming & Logic**
3. **Gaming Essentials**
4. **Web Design Essentials**

Here is a closer look at the course contents.

1. Computing Essentials, with a focus on networking.

Students will study the basics of computer networking, including network topologies and models, protocols, connectivity, IP addressing and the OSI reference model

2. Database Programming & Logic Essentials

The ICT Database Essentials course focuses on fundamentals of using relational databases. Students will learn about common database components including tables, record and field structures, and data types. They will learn about queries and how to create them. They will study data import/export mechanisms. They will learn the basics of Structured Query Language (SQL) statements for managing and manipulating data. Finally, they will use the skills they have learned to create basic database tables, data queries and data reports.

3. Gaming Essentials

This course focuses on fundamentals of interactive computer game creation. Students will learn about the design process for creating a gaming program, including criteria and constraint identification, content research and storyboard creation. They will also study computer programming concepts that are essential to game development, including program flow modeling, program code creation, and result evaluation and modification practices..

4. Web Design Essentials

The ICT Web Design Essentials course focuses on fundamentals of designing websites. Students will learn to identify elements of a webpage, and will evaluate the aesthetics and functionality of websites. They will learn the steps in the web design process, such as determining website purpose, goals and target audience, and planning the site content, structure and navigation. They will also explore web authoring tools. They will be introduced to the technical aspects of the Internet and the World Wide Web. Students will build a web site using a GUI web editor, and they will create web pages that include audio, video and animation. Finally, students will prepare their websites for publishing. They will learn about web hosting services, domain names,

uploading files, implementation issues (bandwidth, compression, streaming) and collaboration tools (wikis, blogs).

Assessments:

20% Formative, 80% Summative

Students will be required to complete multiple activities both online and in class. There are several quizzes that will be given. All of these activities are formative.

All review materials are generously posted in Edmodo, which creates ready reference for students from school and home for review purposes.

Earning a Digital Tool Certificate within each of the course categories demonstrates students know the information and can complete an associated task, which for grading purposes is summative. At the end of major section within a unit, students can expect a summative test.

The ICT framework offers a basic, intermediate and advanced assessment, only available online in the school setting. Passing the advanced exam within each of the major categories is what earns Digital Tool Certification.

Our goal is to prepare your students to be knowledgeable, informed and productive users of technology.

Quiz/Test Retake

- A student may retake any quiz or test after completing and submitting a review packet.
- Additional work may include test corrections, flashcards, online study, student/teacher conference, extra practice or worksheets.
- Retake must be scheduled a day in advance and done before or after school
- Retake must be done before the next Unit Test is given
- Vocabulary Quiz retake must be done before the Unit Test
- Unit 1 Test retake must be done before the Unit 2 Test is given

Extra credit

- Due to the quiz/test retake policy, there is no extra credit offered

Late work

- Incomplete and late work is entered in the gradebook as a zero
- The zero grade is changed to partial credit when the work is complete
- Late work must be turned in before the Unit Test
- Late projects may have 5-20% deducted

Excused Absence

- Students are given extra time to complete work missed due to an excused absence
- Exception: no extension for a project announced at least two weeks in advance
- It is the student's responsibility to ask for make-up work
- Make up work may be done during ICT class time OR scheduled a day in advance and done before or after school.
Keep in mind that information is readily available in Edmodo, ideal for home access.