

OVERVIEW

The 7th grade component of the curriculum for Technological Literacy, Computer Science 7 provides students the opportunity to build upon skills and concepts learned in Grade 6 - Computer Science 6.

Computer Science 7, as part of the multi-grade curriculum continuum, defines in-depth learning and skill acquisition in the following areas:

- Computer & Network Operations
- Productivity, Communication and Digital Tools
- Information Access and Research
- Data Gathering and Analysis
- Coding: Problem-Solving and Decision-Making
- Social and Ethical Aspects of Technology

SOFTWARE USED:

GAFE/Microsoft Office

Code.org - App Lab

Adobe Photoshop

Canva

Additional software will be included when necessary

HARDWARE/MATERIALS USED:

Desktop Computers

Headsets

ESSENTIAL QUESTIONS:

- What are the benefits and limitations of using computer technology?
- What skills must I possess to adapt to the ever changing technological landscape?
- How do I choose which technological tools to use and when it is appropriate to use them?

At the end of the marking period, students shall:

KNOW:

- Multiple vocabulary words associated with the software applications that we use
- The steps involved in creating various projects
- They can integrate various technical resources to accomplish a single goal
- There are many features of the software that we use, and learning those features will help them improve the quality of their work
- We learn certain applications, but there are many more that have similar features and functionality
- How to use various software applications to create a professional looking work

UNDERSTAND:

- The basic functionalities of all software applications used in class

- Technology-based tools and resources enable them to complete a variety of tasks, activities and projects

BE ABLE TO DO (SKILLS):

- Independently use coding applications to create a variety of projects
- Master the use of Spreadsheets and analyzing data
- Independently use Adobe Photoshop & Canva in order to create a variety of projects
- Create a Google Form, integrate it into their spreadsheets, collect and analyze data
- Transfer the skills that they learned in this class to create other projects

UNIT 1: EXPLORE INFLUENCE OF TECHNOLOGY ON PERCEPTIONS OF THE ENVIRONMENT

How does the Influence of technology impact how we perceive, interact with and understand the natural world? Students will explore how technology can influence their opinions and feelings about various topics including the environment. Technologies such as games, tv shows, ads, social media, and others can be used as tools for influencing perceptions and informing the public.

UNIT 2: IDENTIFY THE PROBLEM THROUGH THE LENS OF DATA

What is the role of data when trying to understand the impacts of a social/environmental issue?

How do we gather relevant and credible information to support a claim?

Students will learn how to manipulate data within the capabilities of a data analysis tool. Students will engage in researching an aspect of climate change. Students will use research strategies to identify and analyze key data points to support their chosen topic. Students will use various techniques and infographics to represent their data and their findings.

UNIT 3: PUBLISH RESULTS

Students will design and code an interactive digital product using their findings to educate an audience.

DIGITAL CITIZENSHIP (VARIES, THROUGHOUT MARKING PERIOD)

PRESENTATIONS

- Students will present their App concept to the class.

EVALUATION OF STUDENTS INCLUDES:

- Teacher observation of student work during a lesson
- Assessment of student projects using teacher/student-created rubrics
- Student self-assessment
- Class participation
- Individualized student conferencing