



Three Rivers School District
PLANNED COURSE STATEMENT

Course Title: Computer Programming	Grade Level(s): 8
Length of Course: Quarter	Required/Elective: Elective
Adopted/Supplemental Materials: N/A	

Offered at:	Applegate	Fleming X	Lincoln Savage	Lorna Byrne
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COURSE DESCRIPTION: In this class students will work through several coding based challenges to slowly expand both their understanding on how programming works inside of computers, but more importantly how to use programming to solve problems that occur in their real lives. Students will finish each course with a capstone project that shows the skills they have acquired throughout the course. Concepts covered will include: programming flow, high and low level programming, variable initialization and use, conditional statements, for and while loops, input via mouse and keyboard, and arrays.

Finally, lesson plans will also go over basic technological literacy and citizenship such as internet safety, password security, and online copyright law

COURSE GOALS:

Students will:

- 1) Break down a situation that can be solved using programming into inputs, outputs, and calculations.
- 2) Identify and utilize proper time and place to use programming techniques to solve a problem.
- 3) Debug a broken program and solve simple errors found in programming
- 4) Work collaboratively to design and troubleshoot programs
- 5) Describe how to avoid phishing scams, how to create a proper password, and how to proper attribute work and sources online.

ASSESSMENT STRATEGIES:

Formative assessments will be daily worksheets, weekly coding challenges, or short questions and answer activities.

Summative assessment: Capstone project where students create a program that displays the skills and techniques they have acquired over the course. An example would be a mini game selector where each game highlights a different coding skill.

ACCOMMODATIONS AND MODIFICATIONS:

Lessons have been designed to allow for a broad range of skills. Multiple programming languages can be utilized to bring content to where student's skills with typing, and computer science reasoning skills are at. Formative assessments will be used to ensure all students make meaningful progress. TAG students will be able to work ahead, expand on a current topic, or pursue topics of independent study.

CAREER RELATED LEARNING STANDARDS:

The standards put out by the Computer Science Teachers Association have served as the inspiration and foundation for this course. Further details can be found here:

<https://csteachers.org/page/standards-for-cs-teachers-interactive>