



## GAME DESIGN AND PROGRAMMING

*Fairfield Warde High School*  
*Fairfield Ludlowe High School*

Grades 9 - 12

Full Year Course  
Completion of Algebra 1 (B or better)

### COURSE DESCRIPTION

The purpose of this course is to give students the general knowledge required to understand many of the general programming concepts required in any programming language. In addition to the general programming concepts, students will gain the ability to design, create, test, and debug fully functioning programs using the most popular programming languages.

### COURSE OBJECTIVES

Students will be able to:

- Describe different career options in the computer industry.
- Describe the components of computer systems and how they interact.
- Use the Internet and various software applications for research, information analysis, problem solving, decision making, and creative production.
- Demonstrate proficiency in using a computer programming language in developing creative solutions to solving problems.
- Apply knowledge of other disciplines to problem solving; decision making; and quantitative reasoning.
- Recognize the ethical issues surrounding the use of computers in society.

### UNITS OF STUDY

- Unit 1: Introduction to Computer Careers
- Unit 2: Programming
- Unit 3: Game Design

### COURSE POLICIES AND REQUIREMENTS

#### GRADING

##### Cumulative / In-Progress Grade:

- 90% will reflect the student's mastery of course content and skills on summative assessments
- 10% will reflect the student's progress on formative assessments, homework, and behavior

##### End-of-the-Year Grade:

- 90% will reflect the student's cumulative course grade through summative and formative assessments as described above

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- 10% of the end-of-the-course grade will reflect the student's performance on the course final assessment

**MATERIALS:**

Access to a desktop computer and programs

**EXPECTATIONS OF STUDENTS:**

The Fairfield Public Schools provide a safe learning environment. Our high school community, in collaboration with parents and other townspeople, fosters a society that recognizes and promotes the dignity and worth of the individual. We believe that meeting the diverse needs of all students will encourage lifelong learning and responsible citizenship.

**EXTRA HELP:**

Appointments for extra help or individual conferences can be prearranged during a mutual common free period or after school.