



Three Rivers School District
PLANNED COURSE STATEMENT

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| Course Title: Introduction to Game Design | Grade Level(s): 9-12 |
| Length of Course: Trimester | Credit Area: Business - Technology |
| Prerequisite: MS Office Suite, Computer Graphics or teacher approval | Amount of Credit: .5 |
| Adopted/Supplemental Materials: GameMaker 8.1 Lite, Web Based GAME:IT Curriculum, Teacher Generated Materials | |
| Dual Credit Articulation: None at this time. RCC is considering. | |

COURSE DESCRIPTION:

This is an introductory level computer programming course, but a lot more. The course will not only focus on programming skills, but also on each discipline related to STEM. Using game design and development as the teaching vehicle, this course exposes students to a wide range of concepts and technical skills in six separate areas of ISTE-Nets standards that will greatly help them succeed in the future.

COURSE GOALS:

Students will learn:

- How physics and math play a large role in making games playable and realistic
- How to develop, program and market an original game
- The technical skills needed to create a game & how those skills are transferable to all types of industries
- How to form and work in project development teams
- How the same engineering cycle used to design bridges and buildings is used to design games and solve all types of problems.

ASSESSMENT STRATEGIES:

1. Students will complete a series of exercises to demonstrate an understanding the GameMaker interface.
2. Student will participate in several group critiques. Criteria for assessment includes the students ability to evaluate his/her work and the work of others, identify problems, and apply standards to correct or improve their solutions.
3. Additional Tests, Quizzes and projects will be utilized.

ACCOMMODATIONS AND MODIFICATIONS:

Following mastery of introductory concepts, the class will be modified by individual pacing.

CAREER RELATED LEARNING STANDARDS:

Essential skills are embedded in the curriculum. Among those students will have an opportunity to continue toward mastery include:

- Read and comprehend a variety of text
- Write clearly and accurately
- Apply mathematics in a variety of settings
- Listen actively and speak clearly and coherently
- Think critically and analytically
- Use technology to learn, live, and work
- Demonstrate personal management and teamwork skills