

Game Programming and Design

James Madison High School - Career & Technical Education
Course Syllabus and Guidelines- 2016-2017

Teacher: Michael S. Soto
Location: Room H2002
Planning Period: 2nd Period (9:42 AM—10:35 AM)
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I. Class Overview

Recommended Prerequisite: Algebra I.

This course is recommended for students in Grades 9-12.

Game Programming and Design will foster student creativity and innovation by presenting students with opportunities to design, implement, and present meaningful programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve gaming problems. Through data analysis, students will include the identification of task requirements, plan search strategies, and use programming concepts to access, analyze, and evaluate information needed to design games. By acquiring programming knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will create a computer game that is presented to an evaluation panel.

II. Textbooks and Materials

Texts: Ploor, D. Michael. Video Game Design: Composition. The Goodheart-Willcox Company Inc. Tinley Park, IL. 2014.

Harvey, B., Mönig, J., Snap! Reference Manual. Version 4.0. www.scratch.mit.edu,
www.snap.berkeley.edu/run . 2016.

Cook, Charles E. Blue Pelican Java. Version 3.0.5K. Refugio, TX: Charles E. Cook: 2010.

A pen drive or portable storage device, minimum of (1GB), will be required for saving projects, and a Spiral or Composition notebook dedicated to the course is required, as well.

III. Course Description

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IV. Software

We will use Snap!, Jeroo, DrJava, JCreator and Java JDK class – all are free and available for download and home use.

V. Scope and Sequence

We will work on programming assignments, lab quizzes and enrichment assignments during class time. Hands-on projects will be the basis of the course. Potential topics, in no particular order, may include:

- Game design
- Games and strategy theory
- Business of games in industry
- Game computer architectures
- History of games
- Language processing and adventure games
- Wireless games
- Internet games
- Humor in games
- Non-linearity in games
- AI in games
- Physics in game

VI. Attendance and Course Evaluation

Grades will be based on attendance, participation, and successful completion of various assignments, and projects throughout this course. Quizzes and tests will be given periodically to check your knowledge and multimedia skills.

Attendance Policy

An unexcused absence is an absence from school that the parents/guardians are aware of, but was not approved by school administration as an excused absence. Make-up work for unexcused absences will be penalized equal to late work. A 20percent deduction from the total grade earned will be taken on make-up work for unexcused absences.

Grading

Grading Guidelines	
Daily Assignments	25%
Quizzes/Tests/Projects	50%
Final Exam	25%
Total	100%

Grading Scale	
A	90-100%
B	80-89%
C	70-79%
F	<69%

Late Work

- A. Late work is defined as any assignment that is not submitted on the due date and class period with the exception of make-up work for absences or approved school activities.
- B. A 20% deduction from the total grade earned will be taken for late assignments.
- C. Late assignments will be accepted until the material has been assessed summatively or within a three week grading period.
- D. Extenuating circumstances may occur that prevent the completion and turning in of assignments on the due date. It is the parent/guardian and/or student's responsibility to inform the teacher and/or an appropriate administrator of any such circumstances so that an exception to the rule may or may not be granted. The teacher and/or appropriate administrator shall have the authority to render a final decision on the granting of any exceptions.



James Madison High School

Career & Technical Education Department

Receipt of Game Programming and Design Syllabus

I have read the Game Programming and Design Syllabus and understand the expectations and mature behavior that are expected for students who take the course.

Student Name: _____

Student Signature: _____

Parent's Name: _____

Parent's Name: _____

Parent Signature: _____ Date: _____

Home Phone Number: _____

Mom's Cell Phone No.: _____

Dad's Cell Phone No.: _____

E-mail Address: _____

Home Address: _____

Zip Code: _____