

Intro to Game Development

**South Eugene High School
2017-2018**

Faculty Name:	Mary Taylor
Contact:	taylor_m@4j.lane.edu
Room:	9 (Computer Center)
IA time:	Ms. Taylor is always available via email (taylor_m@4j.lane.edu) and by appointment.
Credits:	.5 credit, Applied Arts (elective)
College Credits:	Aligns with CIS 125G (Software Tools 1: Game Development) at LCC for 4 Computer Science credits
Course website:	eugene4j.edmodo.com
Grade updates:	staff.4j.lane.edu/~taylor_m login with last name (username) and student ID number (password)

Course Description

This is an introductory course in game development focusing on practical exercises in building games using development tools. The course focuses on two main themes: development and design.

- 1) In the development portion of the course, we will be focusing on the “nuts and bolts” of making games. Using the Game Maker development environment you will learn about basic programming concepts in order to make a series of games, culminating in a final project in which you produce a game of your own design.
- 2) In the design portion of the course, we will be looking at what makes a good game. Whereas the development portion of the course seeks to answer “How do we make a game?” the design portion asks “What sort of game should we make?”. As part of this process you will study and analyze existing games as you prepare to create your own game design for your final project.

There will be no final examination; the final exam time will be used for presentations of your final projects.

Topics Covered

- Planning and designing games
- Interface Design
- Level Development
- Event Handling
- Manipulating Variables
- Control Structures
- Debugging Techniques
- Scripting
- Game Genres
- User Interface Design

Prerequisite Knowledge and Skills

Students are not automatically admitted into this course; an informal admission process occurs, between prospective course members and Ms. Taylor, at the start of the term. Students need to be quite computer literate, self-motivating, mature, and detail-oriented to succeed in this course.

Texts, Equipment, and Software

There is no text required for this course. All required materials are provided through Edmodo, online.

Designated computers in Room 9 have the software installed on them. The version we are using is the current version -- **GameMaker: Studio 1.4**.

If you intend to work at home, you will need a Windows-based (XP, Vista, Win 7) computer system that can run the GameMaker software. You will need a copy of Game Maker, which is freely available from YoYo games: <http://www.yoyogames.com/>.

Teaching Methods Employed

Differentiated (Individualized) Instruction. In an attempt to maximize course offerings and learning at SEHS, Ms. Taylor offers all eight (8) computer courses every period she teaches. Seven of these are “College Now” courses (see below). The curriculum for each course is broken into weekly chunks and students are expected to keep their eye on each weekly Due Date. If they are unable to complete the week’s work by that date, students are welcome to work during free periods, lunch, and/or to take learning materials home and work there. Late work is not penalized; the Due Dates exist to ensure that each student will have the greatest chance of successfully completing the course by the end of the term.

If students wish to move more quickly through the material, they are welcome to do so.

Work revision. Each assignment/product receives close attention by Ms. Taylor. Scoring is as described in “Grading Policies” below. If a top score was not reached, Ms. Taylor gives specific feedback as to what was missed, and students are invited to learn these additional skills/concepts and re-submit the assignment. By analyzing the questions missed, students can earn the privilege of re-taking quizzes, as well.

Peer support. The lab (Room 9) has 40 computers, and classes are generally full. At the start of each term, each student is invited to choose one of the eight course offerings, and they are assigned a computer, usually in proximity with other students taking the same course. Cross-fertilization of ideas and learning is encouraged, especially in this course!!

Online course management. . The “Edmodo” online tool is used to deliver course content. There, students find each assignment – organized by due date – turn in their work, and make comments. Ms. Taylor receives, grades, and comments on each assignment via Edmodo, as well. Overall grades are posted on an almost-daily basis (see above for link).

Dual (College Now) Credit

Computer Fundamentals is one of a number of courses for which Ms. Taylor has an articulation agreement with Lane Community College, through the High School Connections/College Now program. When it has become clear that the student is going to succeed in completing the course and earning an A or B, Ms. Taylor guides them through admission as a College Now student at Lane, and, with their “L number” they enroll in the corresponding course and term. At the end of the term, Ms. Taylor inputs grades via LCC, so the student receives college credit on their Lane transcript. The credit is good at almost every college/university in the U.S.

Classroom/Behavioral Expectations

1. Students are expected to arrive on time. Attendance is reported within the first 10 minutes of class.
2. Students are expected to use their assigned computer and to report any difficulties to Ms. Taylor.
3. Students are expected to ask for help ANY time a direction is not clear or there is any other hindrance to their learning. It is not acceptable to skip over anything that is not understood.
4. Students are expected to work consistently for the duration of the class; when one lesson is finished, the next one should be started. (Likewise, if a course is finished, another is begun!)
5. Students are expected to save ALL work on in their school server (files1) account, instead of the particular computer (hard drive) where they sit and work. This is a much safer place for the files.
6. Students in this class are not allowed to use the Internet for anything other than logging into Edmodo and completing course activities.
7. Games of any kind are not allowed (except as they are being tested by Game Dev students).
8. Students may not have food (including candy) or drink at the computers, except for water in closed containers. They may keep other drinks, in closed containers, at the computer-less tables, and visit them there.

9. Students are expected to check in with Ms. Taylor if they need to leave the room for a short period of time (bathroom, drink, etc.).
10. Students are expected to take breaks when and if they are needed; staring at a monitor for 70 minutes straight is not encouraged. Simple exercises to relieve eyes, wrists, etc. are encouraged.
11. Students may not socialize (talk) during class, other than to help each other understand the computer concepts at hand.
12. Cell phones should not be seen or heard, with the exception of their use with headphones for providing music, if it helps the student work.

Special Needs

Appropriate modifications and accommodations will be made for students with identified special needs. Identified IEP, 504, and TAG students generally feel at home in this classroom environment, since learning is pursued without comparisons of any sort being made, and distractions are minimized. Each student is encouraged to take the time they need for the activities of this course, which they have elected to take.

Grading Policies

This course uses the following category weights, to honor the relative importance of various assignment types:

Reading/Writing	25%
Games	64%
Final Project	10%
Start-of-term (syllabus, etc.)	1%

Writing. In the Lane version of this course, lectures used to introduce and discuss important game concepts. Since students in computer class are engaged in a wide variety of courses and topics, this is not possible for any one pursuit. Lecture outlines, reading materials, and demonstrations in GameMaker are provided for students to review on their own. Students write to process what they have learned, each step of the way. For each writing, they receive a grade and instructor response. Grading is on the same 4-1 scale as that used for grading games, with a 4 representing a thorough explanation of the concept, and fewer points when less understanding is shown.

Games. Since “the proof is in the pudding” – much emphasis is given to the games, themselves. Each game is given a score of 1-4, according to the following rubric.

Level of Mastery	Indicated by	Score given
Complete	Game runs perfectly.	4
Approaching	Game has a small glitch.	3
More work needed	Game has more than one small glitch, or a large glitch.	2
Much work needed	Game doesn't work at all.	1

