



GAME DEVELOPMENT 2 - TEC 512

COURSE DESCRIPTION

TEACHER INFORMATION

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RESOURCES

Course Website	SHS Game Development Website	Canvas Link	Classroom Link
Software Website	Unreal Engine Website	Check Grades	Interactive Report Card

COURSE DESCRIPTION

This course builds on the principles introduced in Game Development 1, offering students a deeper exploration into game development using the Unreal Game Engine. Students will expand their skills in object-oriented programming and focus on more advanced techniques for resource creation, including detailed 2D and 3D design.

Throughout the course, students will create games across a variety of genres. Emphasis will be placed on developing engaging gameplay mechanics, visual storytelling, and immersive environments. The course concludes with a capstone project where students design and build a full game that showcases the creativity, technical skills, and design principles they have developed.

COURSE ASSESSMENTS

Tech Ed embraces a balanced approach to assessment for all courses, integrating both formative and summative assessments. Through this balanced approach, assessment is an ongoing activity that provides students with a variety of opportunities to demonstrate their knowledge and skills, which allows teachers to monitor student progress and modify instruction accordingly. Tech Ed students show what they've learned by completing classroom activities, projects, and design challenges that undergo assessment and by evaluating work through a range of tools, such as performance rubrics and reflective questioning, to deepen and expand their knowledge and skills.

SOFTWARE

We will be using the Unreal Engine, a free game engine that can be downloaded from <https://www.unrealengine.com>

MAKE UP POLICY

Classes have course essential assessments that students must complete to demonstrate proficiency in the class.

All essential course assessments that are not submitted by the initial deadline will be given a two-week grace period.

When special circumstances apply to the missing evidence (illness, extended excused absence, etc.), the use of X + 5 may be applied (students will have the number of days missed plus five additional school days to complete the missing work).

CLASSROOM EXPECTATIONS

All students are expected to follow the guidelines as set in the Stevenson High School Student Guidebook, as well as the ones stated below:

1. Students will be expected to be in the classroom before the bell rings with all necessary materials.
2. Students will be expected to act professionally in the classroom (appropriate attire, language, and attitude).
3. All students will be respectful to others and participate in creating a safe classroom environment.
4. All work, including ideas and solutions, must be school-appropriate.
5. The classroom will be clean and organized before any student leaves
6. If you have a concern about something that happens within our class, please let your teacher know, and you are encouraged to:

Interrupt	Question	Educate	Echo
Speak up against every biased remark- every time, in the	Ask simple questions in response to hateful remarks to find out why	Explain why a term or phrase is offensive. Encourage the person	If someone else speaks up against hate, thank them and

moment, without exception. Think about what you'll say ahead of time so you're prepared to act instantly. "I don't like words like that." "That phrase is hurtful."	the speaker made the offensive comment and how you can best address the situation. "Why do you say that?" "What do you mean by..." "Tell me more about..."	to choose a different expression. Hate isn't behind all hateful speech. Sometimes ignorance is at work, or lack of exposure to a diverse population. "Do you know the history of that word?"	reiterate their anti-bias message. One person's voice is a powerful start. Many voices together create change. "Thanks for speaking up" "I agree that word is offensive and we shouldn't use it."
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LAB EXPECTATIONS

1. Required Supplies - Bring a jump drive to save your games - Bring headphones or earbuds – it can get a little loud when we start adding music and sound effects to the games - Bring a pen or pencil	2. At the end of each class, you must: - Put all supplies back where they belong - Make sure your table is clean - Log off, restart, or shut down your computer	3. No food in class.	4. No video games will be played in class, except for those assigned as part of coursework.
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EVIDENCE BASED REPORTING (EBR)

This course uses Evidence Based Reporting to communicate student progress. The purpose of Evidence Based Reporting is to ensure that a student's grade truly reflects his or her meeting of course expectations. Evidence Based Reporting gives a student the opportunity to grow their knowledge and skills throughout the semester. To learn more about Evidence Based Reporting, please visit: myebrexperience.com

PROFICIENCY SCALES

This scale will be used to communicate student progress in each learning skill. The codes 1, 2, 3, 4, M, and N will be used to report student performance through the [Interactive Report Card \(IRC\)](#). The Interactive Report Card (IRC) will be used to communicate student progress in each learning skill. It will also be used to communicate missing assignments, teacher comments, Social and Emotional Learning (SEL) concerns, and predicted grades.

4	3	2	1	M	N
Exceeds Standard	Meet Standard	Approaching Standard	Developing Standard	Missing Evidence <i>Can Be Turned In</i>	Missing Evidence <i>Cannot Be Turned In</i>

GAME DEVELOPMENT LEARNING SKILLS

SKILL 1 - GAME DESIGN			
Standard - I create a game that uses all of the required game design elements.			
Exceeds	Meets	Approaching	Developing
I create a game that uses all of the required and some advanced game design elements.	I create a game that uses all of the required game design elements.	I create a game that uses some of the required game design elements.	I create a game that attempts to use the required game design elements.
Success Criteria are specific to each game being developed. Criteria include: - Menu and UI Design - Gameplay Elements - Game Resources			
SKILL 2 - LOGIC DEVELOPMENT			
Standard - I create a game that executes without errors and completes all required tasks.			
Exceeds	Meets	Approaching	Developing
I create a game that executes without errors and completes all required and advanced tasks .	I create a game that executes without errors and completes all required tasks .	I create a game that executes without errors and completes some of the required tasks .	I attempt to create a game that does not execute or complete any required tasks .
Success Criteria are specific to logic being taught. This includes: - Sequential flow of executable events - Input related events - Loops and conditional statements - Use of variables			

SKILL 3 - GAME ART & MEDIA DESIGN

Standard - I create game resources that include all required design elements.

Exceeds	Meets	Approaching	Developing
I create game resources that include all required and advanced design elements.	I create game resources that include all required design elements.	I create game resources that include some required design elements.	I attempt to create game resources that include none of the required design elements.

Success Criteria are specific to the design concepts being taught. This includes:

- Creating meshes
- Creating materials and textures
- Creating and using light
- Creating and using music and sound effects
- Scene design

GRADE DETERMINATION

In this course, there are three academic skills: Game Design, Logic Development, and Game Art and Media Design. To earn a score of Meets in any skill, a student must demonstrate meets or exceeds in each of the last 3 checks for that skill.

The scale below is used to determine the final letter grade at the end of the semester based on the three academic skill scores:

A = A score of 3 or 4 for each of the skills

B = A score of 2 for any skill, a 3 or 4 in the remaining skills

C = A score of 2 for two or more skills **or a score of 1 for one skill with scores of 3 or 4 for all other skills**

D = A score of 1 in one skill, with one **or more remaining skills with a score of 2**

F = A score of 1 in two or more skills

** Important Note: If a student has Ns or Ms in any amount, the student runs the risk of failing the course. In these cases, I may not have enough evidence to determine proficiency and ultimately determine a grade.**