



Course Information

Course Title	Game & Simulation Group Project (Capstone)
Course Prefix, Num. and Title	GAME 2359 – Game & Simulation Group Project (Capstone)
Division	Technology & Business
Department	Computer Science
Course Type	WECM Course
Course Catalog Description	Creation of a game and/or simulation project utilizing a team approach. Includes the integration of design, art, audio, programming, quality assurance and testing.
Pre-Requisites	Completion of 30 hours in the degree and GAME 2347, GAME 2341, ARTV 1345
Co-Requisites	None

Semester Credit Hours

Total Semester Credit Hours (SCH): Lecture Hours:	3:2:2
Lab/Other Hours	
Equated Pay Hours	3
Lab/Other Hours Breakdown: Lab Hours	2
Lab/Other Hours Breakdown: Clinical Hours	0
Lab/Other Hours Breakdown: Practicum Hours	0
Other Hours Breakdown	0

Approval Signatures

Title	Signature	Date
Prepared by:		
Department Head:		
Division Chair:		
Dean/VPI:		
Approved by CIR:		

Additional Course Information

Topical Outline: Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, and clinical or other non-lecture instruction).

Introduction to Game Testing

Software Quality

Test Phases

The Game Testing Process

Types of Testing (Combinatorial, Test Flow, Clean room)

Test Trees

This will be a group project class.

Students will be assembled into teams that will develop a simple game concept and game development

Skills that should be used include:

1. Languages: C#, C++, or Java
2. Game Graphics: Photoshop or Maya
3. Game Engine: Unity or Android
4. Animation Programming: OpenGL or OpenGL ES

Course Learning Outcomes:

Learning Outcomes – Upon successful completion of this course, students will:

Develop a complete game and/or simulation project working as a member of a team

Methods of Assessment:

All outcomes will be assessed by one or more of the following:

Programming Projects

Tests and Quizzes

Final Exam

Required text(s), optional text(s) and/or materials to be supplied by the student:

- Game Testing All in one, 2nd Edition By Charles Schultz from Mercury Learning ISBN: 978-1-9364201-6-2
- USB Flash Drive
- High-speed Internet Connection

Suggested Course Maximum:

16

List any specific or physical requirements beyond a typical classroom required to teach the course.

- Computer with an Graphic Card supporting Open GL 4.1 or later for each student
- Eclipse C++ Ide for each student
- Eclipse Java with Android SDK installed for each student
- Unity Game Engine for each student
- Adobe Photoshop CS 5.5 or later for each student
- Autodesk May 2012 or later for each student

Course Requirements/Grading System: Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course.

Course Requirements:

Version: 12/16/2020

Labs: 20-40%

Tests and Quizzes: 20-40%

Projects: 20-40%

Final Exam: 20-40%

Attendance & Participation: 0-20%

Grading System:

100-90 = A

89-80 = B

79-70 = C

69-60 = D

and below = F

Curriculum Checklist:

- Administrative General Education Course** (from ACGM, but not in WCJC Core) – No additional documents needed.
- Administrative WCJC Core Course.** Attach the Core Curriculum Review Forms
 - Critical Thinking
 - Communication
 - Empirical & Quantitative Skills
 - Teamwork
 - Social Responsibility
 - Personal Responsibility
- WECM Course** -If needed, revise the Program SCANS Matrix and Competencies Checklist