



Purpose: It is the intention of this Administrative-Master Syllabus to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by the faculty of Wharton County Junior College, regardless of who teaches the course, the timeframe by which it is instructed, or the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in the improvement of instruction.

Course Title - Game & Simulation Group Project (Capstone)

Course Prefix and Number - Game 2359

Department – Computer Science

Division – Technology & Business

Course Type: (check one)

- Academic General Education Course (from ACGM – but not in WCJC Core)
- Academic WCJC Core Course
- WECM course (This course is a Special Topics or Unique Needs Course: Y or N)

Semester Credit Hours #: Lecture Hours #: Lab/Other Hours #: 3:2:2

Equated Pay hours for course - 3

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.

Prerequisites/Co-requisites: Completion of 30 hours in the degree and ITSE 2370, ARTV 2301, GAME 1309

List Lab/ Other Hours
Lab Hours 2
Clinical Hours 0
Practicum Hours 0
Other (list) 0

Prepared by: Donna Schilling

Date: 7-8-2015

Reviewed by Department Head: Donna Schilling

Date: 7-8-2015

Accuracy verified by Division Chair: David Kucera

Date: 8/12/15

Approved by Dean or Vice President of Instruction: Leigh Ann Collins

Date: 3-4-16



I. Topical Outline – Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, 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

II. Course Learning Outcomes

Learning Outcomes	Methods of Assessment
<p>Upon successful completion of this course, students will:</p> <p>Develop a complete game and/or simulation project working as a member of a team</p>	<p>All outcomes will be assessed by one or more of the following:</p> <p>Programming Projects Tests and Quizzes Final Exam</p>

III. Required Text(s), Optional Text(s) and/or Materials to be Supplied by 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

IV. Suggested Course Maximum - 16

V. List any specific spatial 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

VI. 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		<i>Grading System –</i>	
Labs	20-40%	100 -90	= A
Tests and Quizzes	20-40%	89 - 80	= B
Projects	20-40%	79 - 70	= C
Final Exam	20-40%	69 - 60	= D
Attendance & Participation	0-20%	and below	= F

VII. Curriculum Checklist

- **Academic General Education Course** (from ACGM – but not in WCJC Core)
No additional documentation needed
- **Academic WCJC Core Course**
Attach the Core Curriculum Checklist, including the following:
 - Basic Intellectual Competencies
 - Perspectives
 - Exemplary Educational Objectives
- **WECM Courses**
If needed, revise the Program SCANS Matrix & Competencies Checklist.