



**Course Information**

<b>Course Title</b>	Multi-User Game Programming I
<b>Course Prefix, Num. and Title</b>	Game 1353 - Multi-User Game Programming I
<b>Division</b>	Technology & Business
<b>Department</b>	Computer Science
<b>Course Type</b>	WECM Course
<b>Course Catalog Description</b>	Network topologies, architecture and protocols, and communication in game and simulation programming. Introduces sockets programming utilizing TCP and UDP protocols in a high-level language. Focuses on blocking and asynchronous modes.
<b>Pre-Requisites</b>	ITSE 2331
<b>Co-Requisites</b>	None

**Semester Credit Hours**

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

**Approval Signatures**

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

## 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):

- Multi-player overview
- Peer to Peer Computing
- Client Server Computing
- Socket Based Connections
- Socket Server (SmartFox Server)
- Game Lobbies
- Personal Inventory Systems
- Communicating with Other Players
- Interacting with NPC
- Designing Quests
- Social Communities

### Course Learning Outcomes:

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

Describe network topologies and their relationship to multi-user game and simulation programming; identify the fundamentals necessary for writing multi-user games; and develop programs using socket protocols for multi-user games.

**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:

- Flash Multiplayer Virtual Worlds by Makzan From Packet Publishing ISBN: 978-1-849690-36-2
- USB Flash Drive
- High-speed Internet Connection

### Suggested Course Maximum:

18

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

- Computer for each student
- ActionScript 3.0 can be installed
- Adobe Flash CS4
- MySQL 5.1
- SmartFox serverPro version 1.6.6 per 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**

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
59 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
  - Basic Intellectual Competencies
  - Perspectives
  - Exemplary Educational Objectives
- WECM Course** -If needed, revise the Program SCANS Matrix and Competencies Checklist