



**Course Information**

<b>Course Title</b>	Introduction to Animation Programming
<b>Course Prefix, Num. and Title</b>	GAME 1309 - Introduction to Animation Programming
<b>Division</b>	Technology & Business
<b>Department</b>	Computer Science
<b>Course Type</b>	WECM Course
<b>Course Catalog Description</b>	Mathematical elements and algorithms involved in basic animation. Includes generating graphics, viewing 3D environments such as visible line detection and 3D surfaces, image processing techniques, and special effects.
<b>Pre-Requisites</b>	ITSE 1307, ARTV 1303, MATH 1316, PHYS 1401
<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).

Introduction to OpenGL

State Management

Drawing Geometric Objects

Viewing

Lighting

Blending

Instructional Methods:

Lecture

Written and Hands-on Lab Assignments

Exams

### Course Learning Outcomes:

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

Develop programs that apply the basic character animation techniques, build and pose animated characters, and implement proper timing within animations

**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:

- OpenGL Programming Guide: 8th edition : The official Guide to Learning OpenGL Version 4.1 By Dave Shreiner From Addison Wesley ISBN: 978-0321773036
- USB Flash Drive
- High-speed Internet Connection

### Suggested Course Maximum:

20

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

- Computer with a Graphics Card supporting Open GL 4.1 or later for each student
- Eclipse IDE installed on each computer

**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:

Programming Assignments: 20-40%

Tests & Final Exam: 40-60%

Attendance & Participation: 0-20%

Grading System:

Version: 3/20/2019

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