Course Title - Introduction to Animation Programming
Course Prefix and Number - Game 1309
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
Equate Pay hours for course - 3

Course Catalog Description - 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.

Prerequisites/Co-requisites - ITSE 1307, ARTV 1303, MATH 1316, PHYS 1401

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 OpenGL
     - State Management
     - Drawing Geometric Objects
     - Viewing
     - Lighting
     - Blending

   Instructional Methods:
   - Lecture
   - Written and Hands-on Lab Assignments
   - Exams

II. Course Learning Outcomes

<table>
<thead>
<tr>
<th>Learning Outcomes</th>
<th>Methods of Assessment</th>
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<tr>
<td>Upon successful completion of this course, students will:</td>
<td>All outcomes will be assessed by one or more of the following:</td>
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<tr>
<td>Develop programs that apply the basic character animation techniques, build and pose animated characters, and implement proper timing within animations</td>
<td>Programming Projects</td>
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<td>Tests and Quizzes</td>
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<td>Final Exam</td>
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III. Required Text(s), Optional Text(s) and/or Materials to be Supplied by Student.

   - USB Flash Drive
   - High-speed Internet Connection

IV. Suggested Course Maximum - 20

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

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

<table>
<thead>
<tr>
<th>Course Requirements</th>
<th>Grading System</th>
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<tbody>
<tr>
<td>Programming Assignments</td>
<td>Programming Assignments 20-40%</td>
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<tr>
<td>Tests &amp; Final Exam</td>
<td>Tests &amp; Final Exam 40-60%</td>
</tr>
<tr>
<td>Attendance &amp; Participation</td>
<td>Attendance &amp; Participation 0-20%</td>
</tr>
<tr>
<td>100 -90</td>
<td>= A</td>
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<td>89 - 80</td>
<td>= B</td>
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<td>79 - 70</td>
<td>= C</td>
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<tr>
<td>69 - 60</td>
<td>= D</td>
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<td>and below</td>
<td>= F</td>
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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.