

**CS 74.41A Course Outline as of Fall 2017****CATALOG INFORMATION**

Dept and Nbr: CS 74.41A Title: GAME DESIGN 1

Full Title: Game Design 1

Last Reviewed: 11/26/2018

Units	Course Hours per Week		Nbr of Weeks		Course Hours Total	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	0	4	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00

Total Student Learning Hours: 157.50

Title 5 Category: AA Degree Applicable

Grading: Grade or P/NP

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

**Catalog Description:**

This course will introduce students to the basics of game design and theory using analysis, research, critiques and projects. Students will learn about the game industry and what is required to develop a video game through assignments that simulate employment by a game developer. Students will design, model, animate, script and compile to a level file.

**Prerequisites/Corequisites:****Recommended Preparation:**

Eligibility for ENGL 100 or ESL 100 and Course Completion of CS 74.11

**Limits on Enrollment:****Schedule of Classes Information:**

Description: This course will introduce students to the basics of game design and theory using analysis, research, critiques and projects. Students will learn about the game industry and what is required to develop a video game through assignments that simulate employment by a game developer. Students will design, model, animate, script and compile to a level file. (Grade or P/NP)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100 and Course Completion of CS 74.11

Limits on Enrollment:

Transfer Credit: CSU;UC.

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>	Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>IGETC:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>CSU Transfer:</b>	Transferable	Effective: Fall 2010	Inactive:
<b>UC Transfer:</b>	Transferable	Effective: Fall 2020	Inactive:

**CID:**

**Certificate/Major Applicable:**

Both Certificate and Major Applicable

## **COURSE CONTENT**

### **Outcomes and Objectives:**

Upon completion of the course, students will be able to:

1. Create storyboard drawings and design documents for a proposed game.
2. Create a 3D demo of a game to be developed.
3. Add keyboard commands and collision detection to a game.
4. Add sound effects, music and narration to a game.
5. Play the test projects and write bug reports.
6. Present a completed game to possible investors or clients.

### **Topics and Scope:**

- I. Course overview
  - A. Brainstorming
  - B. Comp (comprehensive) drawings
- II. Storyboarding
  - A. Technical documents
  - B. Design documents
- III. Introduction to 3D Studio Max
- IV. 3D modeling with 3D Studio Max
- V. Environment / worldbuilding
- VI. Lights, cameras, and animations
- VII. Introduction to Director
- VIII. Lingo scripting for keyboard controls and collision
- IX. Scripting goals
- X. Audio
- XI. Title and credit screens
- XII. Publishing and CD covers

- XIII. Beta testing and bug reporting
- XIV. Last fixes before going to Gold Version
- XV. Presenting projects

**Assignment:**

1. Internet research assignments, 15-20 pages per week
2. Written review of a favorite video game (1 page)
3. Written assignments on Internet research topics (7-9 one page assignments)
4. Job Order 1:
  - a. Storyboard drawings: minimum of eight sketches (top and side view)
  - b. Design document: minimum 2 pages
  - c. Instructor & peer critique
5. Job Order 2:
  - a. Preliminary 3D modeling
  - b. Vehicle model and environment
  - c. Instructor & peer critique
6. Job Order 3:
  - a. Lingo scripting goal, trap, sound and overlay
  - b. Playable executable file
  - c. Instructor & peer critique
7. Job Order 4:
  - a. Sound
  - b. Title and credit screens
  - c. Instructor & peer critique
8. Job Order 5:
  - a. Bug reports (4)
  - b. Playable executable Gold Version presented on a CD with all required files
  - c. Instructor & peer critique
9. Final Project
  - a. All working files turned in on a CD with a labeled cover
  - b. All 5 Job Orders submitted inside a labeled folder
  - c. Presentation of projects

**Methods of Evaluation/Basis of Grade:**

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Review and assignments

Writing  
5 - 10%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Job Orders 1-5

Problem solving  
50 - 70%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Final project

Skill Demonstrations  
20 - 30%

**Exams:** All forms of formal testing, other than skill performance exams.

Midterm & final exam

Exams  
0 - 25%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

None

Other Category  
0 - 0%

**Representative Textbooks and Materials:**

Instructor prepared materials

Fundamentals of Game Design, 3rd ed. by Ernest Adams, New Riders Press, 2013

Challenges for Game Designers by Brenda Brathwaite & Ian Schreiber, Charles River Media, 2008

Creating Games: Content, Mechanics & Technology by Morgan McGuire & Odest Jenkins, AK Peters, 2009

Learning Autodesk 3ds Max 2010 Foundation for Games, by Autodesk, Focal Press, 2009

The Art of Game Design: A book of lenses by Jesse Schell, Morgan Kaufmann, 2008

How to Cheat in 3DS Max 2010: Get Spectacular Results Fast by Michele Bousquet, Focal Press, 2009