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: 4/28/2025

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:

AS Degree:	**Area**	Effective:	Inactive:
CSU GE:	**Transfer Area**	Effective:	Inactive:
IGETC:	**Transfer Area**	Effective:	Inactive:

CSU Transfer:	Transferable	Effective:	Fall 2010	Inactive:	
UC Transfer:	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