

CS 74.41B Course Outline as of Fall 2019**CATALOG INFORMATION**

Dept and Nbr: CS 74.41B Title: GAME DESIGN 2

Full Title: Game Design 2

Last Reviewed: 3/31/2014

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 guide the students through the development process of creating a video game with emphasis on team work. Industry software and techniques will be used by the students to design, storyboard, model, animate, script and publish a 3D video game. Students will work in teams with assigned tasks to develop a multi-level game including compelling story and cut-scenes. This game will be compiled to a level file.

Prerequisites/Corequisites:

Course Completion of CS 41 (or CS 74.41 or CS 74.41A)

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

Description: This course will guide the students through the development process of creating a video game with emphasis on team work. Industry software and techniques will be used by the students to design, storyboard, model, animate, script and publish a 3D video game. Students will work in teams with assigned tasks to develop a multi-level game including compelling story

and cut-scenes. This game will be compiled to a level file. (Grade or P/NP)
Prerequisites/Corequisites: Course Completion of CS 41 (or CS 74.41 or CS 74.41A)
Recommended:
Limits on Enrollment:
Transfer Credit:
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:		Effective:	Inactive:
UC Transfer:		Effective:	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. Brainstorm and develop 2D (comp) art drawings.
2. Create a storyboard and technical and design documents.
3. Use 3D modeling to create assets.
4. Draft a virtual environment and scale to vehicles.
5. Create environments, props, assets, and animations.
6. Place cameras.
7. Create materials, textures, lighting, and continuity.
8. Use and adjust scripts to make a game interactive.
9. Develop interface screens and cut scenes.
10. Create and edit a library of sound effects.
11. Test a game, write bug reports, and fix bugs.
12. Publish a finished game to a website.

Topics and Scope:

- I. Game design preliminaries
 - A. Brainstorming
 - B. Comp drawings
 - C. Working in a team
 - D. Documentation throughout the game development process
 - E. Copyright implications
- II. Storyboarding
 - A. Technical documents
 - B. Design documents

- III. 3D modeling with 3D Studio Max
 - A. Human vehicles
 - B. Alien vehicles
- IV. Roughout
 - A. Roughing out environment
 - B. Scaling environment with vehicles
- V. Environment
 - A. Props
 - B. Assets
 - C. Cameras
 - D. Animations
 - E. Materials
 - F. Textures
 - G. Lighting continuity
- VI. Scripting
 - A. For keyboard controls
 - B. For collision
- VII. Scripting goals
 - A. Score
 - B. Win/lose conditions
- VIII. Scripting props
 - A. Any enemy AI (artificial intelligence)
 - B. Easter eggs
- IX. Screens
 - A. Title
 - B. Intro movie
 - C. Cut-scenes
 - D. Win/lose screens
 - E. Credit screens
- X. Audio
 - A. Narration
 - B. Sound effects
 - C. Music
 - D. Cut scenes
- XI. Publishing a website version
- XII. Beta testing and bug reporting
- XIII. Last fixes before going Gold
- XIV. Presenting projects published from a website

Assignment:

1. Written review of a favorite game (2-5 pages)
2. Job Order 1:
 - a. Storyboard drawings
 - b. Design technical documents (3-5 pages)
3. Job Order 2:
 - a. Roughout 4 environments and scale with vehicles
 - b. Complete all 4 environments with modeling, animations, lighting, and materials
4. Job Order 3:
 - a. Level design scripting of ingame interactions
 - b. Interfaces, intro movie, and cut-scenes
5. Job Order 4:

- a. Audio, title, and credits screens
- b. Publish an executable of the game
6. Job Order 5:
 - a. Bug reporting
 - b. Post Gold version to the Web
7. Final Project: Submit all required working files. Present web version published on a website

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.

Game review and technical documents

Writing
5 - 10%

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

Job Orders 1-6

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.

None

Exams
0 - 0%

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

Teamwork

Other Category
0 - 10%

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