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 (artifical 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