



El Camino College
COURSE OUTLINE OF RECORD – Official

Subject:	GPM
Course Number:	190
Descriptive Title:	Level Design
Division:	Library and Learning Resources
Department:	Games and Playable Media
Course Disciplines:	Games and Playable Media
Catalog Description:	In this course, students will explore the art of video game level design. The course follows the level designer through the game development process. Using industry standard software, students will develop and refine a two- or three-dimensional video game level. Topics covered include theme, audience, mood, player challenges, level narrative, puzzle design, diagram design, template creation, play-testing, and troubleshooting. Students will build, test, and distribute a working video game prototype at the conclusion of this course.
Prerequisite:	GPM 110
Co-requisite:	
Recommended Preparation:	GPM 150 or DART 150 or DART 155
Enrollment Limitation:	
Hours Lecture (per week):	2
Hours Laboratory (per week):	3
Outside Study Hours:	4
Total Course Hours:	90
Course Units:	3
Grading Method:	Letter Grade and Pass/No Pass
Credit Status:	Credit, degree applicable
Transfer CSU:	Yes
Effective Date:	Fall 2026
Transfer UC:	Yes
Effective Date:	pending Fall 2026
General Education ECC:	
Term:	
Other:	
CSU GE:	
Term:	
Other:	
IGETC:	
Term:	

Other:	
CalGETC:	
Term:	
Other:	
Student Learning Outcomes:	Upon completion of this course, the student should be able to: 1. design from specification and align work with game design documentation work performed by other team members on a medium or large game project. 2. use a game engine for prototyping, production, and testing of completed levels. 3. describe how story, foreshadowing, rewards, and challenge define level design.
Course Objectives:	1. Create, manipulate, and implement video game levels through the practice of iterative design. 2. Demonstrate an understanding of how the level design process fits into the game development cycle. 3. Deconstruct the work of professional level designers and critically analyze the components of a level. 4. Integrate a variety of assets into a game engine to create an interactive experience. 5. Apply game logic through visual scripting to facilitate player interaction and explore the affordances of game mechanics.
Major Topics:	Lecture I. Level design and architecture A. Line of sight B. Purpose of space C. Gamespaces II. Tools and techniques A. Design goals B. Drawings & diagrams C. CAD & 3D software D. Spreadsheets as design tool E. Workflow III. Level considerations A. Form follows gameplay B. Genre C. Camera & point of view D. Goals and rewards E. Player motivation & behavior F. Player agency G. Pacing IV. Level components A. Player challenges B. Flow C. Narrative D. Environmental storytelling E. Scripted sequences F. Audio

	V. Level design process A. Context within development cycle B. Scope C. Grayboxing D. Scripting E. Player metrics F. Game feel G. Playtesting Lab I. Analyze levels A. Level deconstruction B. Affective State C. Designing to documentation II. Design and build levels A. Spreadsheets B. Player Metrics C. Scale D. Camera behavior & screen view E. Diagrams & maps F. Grayboxing environments G. Scripting H. Playtesting I. Updating documentation I. Polish II. A. Implementing art & audio B. Game balance and optimization C. Playability
Total Lecture Hours:	36
Total Laboratory Hours:	54
Total Hours:	90
A.1. Primary Methods of Evaluation (Part 1 - CCN courses only):	
Primary Method of Evaluation:	3) Skills demonstration
Typical Assignment Using Primary Method of Evaluation:	For the final project in this course you will complete the design of a new fully playable level for the project that was approved at the start of the term. Your playable game level must have a minimum of six game mechanics, and at least one mechanic should be a novel feature of the level you are designing. Your level must go through an iterative and substantive playtesting process such that you can demonstrate the ways in which you have incorporated player feedback to refine and improve gameplay.
Critical Thinking Assignment 1:	For this assignment, you will create a diagram and walkthrough of a single player level design. You can use the tools of your choosing in order to create the diagram, but the diagram and walkthrough should be combined into a single readable document 5 to 7 pages in length.

Critical Thinking Assignment 2:	Using the provided template create a project proposal for the game you want to work on throughout this course. Specify the game title, genre, theme, target audience, and platform. Also provide a brief synopsis of the game.
Other Evaluation Methods:	Completion, Presentation
If Other:	
Instructional Methods:	Demonstration, Discussion, Guest Speakers, Lab, Lecture, Multimedia presentations
If other:	
Work Outside of Class:	Skill practice
If Other:	
Up-To-Date Representative Texts:	Totten, Christopher W. <i>An Architectural Approach to Level Design</i> . A K Peters/CRC Press, 2019 (2nd edition). (discipline standard) Schell, Jesse. <i>The Art of Game Design: a Book of Lenses</i> . Elsevier/Mogan Kaufmann, 2019 (3rd addition). (discipline standard)
Alternative Texts:	Frederick, Matthew. <i>101 Things I Learned in Architecture School</i> . The MIT Press, 2007 (1st edition). (discipline standard)
Required Supplementary Readings:	
Other Required Materials:	
Requisite	Prerequisite
Category	sequential
Requisite course:	GPM 110
Requisite and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s).	Fundamental game design knowledge GPM 110 - Design game prototypes using industry practices and language. GPM 110 - Compare and contrast different elements of game design and the affordances and constraints they offer for creating play experiences.
Requisite Skill:	
Requisite Skill and Matching skill(s): Bold the requisite skill(s). if applicable	
Requisite course:	GPM 150 or DART 150 or DART 155
Requisite and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s).	Demonstrate basic familiarity with an industry standard game engine GPM 150 - Create and modify scripts within an existing game project. DART 150 - Plan and execute a working and playable game prototype from original assets in a contemporary game engine. DART 155 - Plan and execute a working and playable game prototype from original assets in a contemporary game engine.
Requisite Skill:	

Requisite Skill and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s). if applicable	
Enrollment Limitations and Category:	
Enrollment Limitations Impact:	
Course Created by:	Arnold Martin
Date:	03/17/2025
Original Board Approval Date:	06/26/2025
Effective Term:	FA 2026