SM3120: GAME LEVEL DESIGN

Effective Term
Semester A 2025/26

Part I Course Overview

Course Title
Game Level Design

Subject Code
SM - School of Creative Media

Course Number
3120

Academic Unit
School of Creative Media (SM)

College/School
School of Creative Media (SM)

Course Duration
One Semester

Credit Units
3

Level
B1, B2, B3, B4 - Bachelor's Degree

Medium of Instruction
English

Medium of Assessment
English

Prerequisites
SM2705 Creative Media Studio III: Technology, Coding & Tangible Media or SM2715 Creative Coding (Waiver to be granted to BScCM students)

Precursors
Nil

Equivalent Courses
Nil

Exclusive Courses
Nil

Part II Course Details

Abstract

The course provides a simple platform for the students to acquire the knowledge and skills of computer game level design from initial planning through design, implement and game testing. The basic principles and aesthetics of game level design will be covered. It also touches on game play design by scripting, writing game story and collecting player feedback. Students are expected to go through the whole process with the use of well-known game design toolsets.

Course Intended Learning Outcomes (CILOs)

	CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Understanding the process of game level design		x		
2	Ability to design, implement and balance multiplayer game level			x	
3	Ability to create an artistically interesting game level			x	
4	Demonstrate programming skill in level scripting			x	
5	Demonstrate teamwork in implementing game concept				x
6	Assign or link up extra self-initiated tasks on top of an assignment / coursework for further exploration of the subject		x		

A1: Attitude
Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability
Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments
Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Learning and Teaching Activities (LTAs)

	LTAs	Brief Description	CILO No.	Hours/week (if applicable)
1	Lecture	Lecture on topic of game level design	1	
2	Assignment	Building game level with toolsets; Game testing; Writing simple game design document	2	
3	Assignment	Game review and collect player feedback	3	
4	Group Assignment	Script programming for controlling the game play	4	
5	Group Assignment	Group project: Online multiplayer game level design	5, 6	

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks ("-" for nil entry)	Allow Use of GenAI?
1	Game World Creation · Terrain design	1, 2, 3	35	-	No
2	2D Game Level Design · Game balance	2, 3, 5	20	-	No
3	3D Game Level Design · Level Design · Game play programming · Character modification/ Texture Mapping	2, 3, 4, 5, 6	45	-	No

Continuous Assessment (%)

100

Examination (%)

0

Minimum Continuous Assessment Passing Requirement (%)

0

Minimum Examination Passing Requirement (%)

0

Assessment Rubrics (AR)

Assessment Task

1. Game World Creation, Cinematic Design, Online Multiplayer Game Design

Criterion

Students should demonstrate ability to utilize primary and secondary sources, execute creative ideas and projects. The threshold of ‘discovery’ lies in a student’s proactively turning theory into praxis, to transform course material into self-owned authorship.

Excellent (A+, A, A-)

· Work has strong affective quality and the articulation of personal styles and signature
· Excellent appreciation, exploration and/or application of the aesthetic and expressive qualities of the medium
· Work raises questions and instill insights about the process of conception, creative strategization and production
· Innovative exploration by combining knowledge from different disciplines (e.g. mathematics, psychology, physics, anthropology, etc.) to create an inter-disciplinary project
· Efficient adjustment of plans and strategies in response to resources (time, space, equipment, etc) available with constructive adjustment

Good (B+, B, B-)

· Strong appreciation, exploration and/or application of the aesthetic and expressive qualities of the medium
· Ability to create project/ work that demonstrate the processes of thinking and creative exploration
· Proper adjustment of plans and strategies in response to resources (time, space, equipment, etc) available and constructive feedback/ suggestions

Fair (C+, C, C-)

- Basic appreciation and/or application of the aesthetic and expressive qualities of the medium
- Limited ability to create project/ work that demonstrate the processes of thinking and creative exploration
- Adjustment of plans and strategies in response to resources (time, space, equipment, etc) available

Marginal (D)

- Marginal appreciation of the aesthetic and expressive qualities of the medium
- Marginal ability to create project/ work that demonstrate the processes of thinking and creative exploration
- Limited adjustment of plans and strategies in response to resources (time, space, equipment, etc) available

Failure (F)

- No appreciation of the aesthetics and expressive qualities of the medium
- Fail to create project/ work that demonstrate the processes of thinking and creative exploration
- Minimal adjustment of plans and strategies in response to resources (time, space, equipment, etc) available

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Assessment Task

2. Class Participation and Performance

Criterion

This assessment task reviews students' participation and performance in discussions, debates and peer critique during the tutorial sessions. The evidence of 'negotiation', the sign of discovery, lies in students' pre-class preparation and interpersonal sensitivity to his/her peer members.

Excellent (A+, A, A-)

- Active in-class participation, positive listening, strong ability to stimulate class discussion and comment on other points
- In-depth pre-class preparation and familiarity with peer reports and other materials
- Interpret others' views with an open mind and ready to negotiate
- Readiness to share personal insight via analysis and synthesis with informed views
- Constructively critical, thus facilitating the discovery of new issues

Good (B+, B, B-)

- Active in-class participation, positive listening, ability to initiate class discussion and comment on other points
- Adequate pre-class preparation and familiarity with peer reports and other materials
- Interpret opinions effectively

Fair (C+, C, C-)

- Attentive in in-class participation, listening with comprehension, but only infrequently contributing
- Adequate pre-class preparation but little familiarity with peer reports and other materials
- Fair ability in interpreting opinions

Marginal (D)

- Unmotivated to participate in class discussion or comment on other people's views
- Little pre-class preparation and familiarity with peer reports and other materials
- Poor ability in interpreting opinions

Failure (F)

- Unwilling to participate in class discussion and comment on other points, even when requested by the teacher
- No pre-class preparation and familiarity with peer reports and other materials
- Minimal ability in interpreting opinions

Additional Information for AR

All A+/A/A- grade assignment should comply with the highest performance of Discovery-oriented learning.

Part III Other Information

Keyword Syllabus

Game design; game level design; computer game; level design tools; game play; player experience; game balance; game genres; terrain design; building architecture and spaces; AI; dialogue and story; scripting; polishing; texture mapping; 3D modelling; cinematic

Reading List

Compulsory Readings

	Title
1	Game design perspectives / edited by Francois Dominique Laramee Andrew Rollings and Ernest Adams on Game Design
2	Game Level Design (Game Development Series) by Ed Byrne
3	Beginning Game Level Design (Premier Press Game Development) by John Harold Feil , Marc Scattergood

Additional Readings

	Title
1	Game Architecture and Design: A New Edition