Game Development

Credits: 0.5

Course Overview and Goals

Game Development is a comprehensive one-semester course. In this course, you will delve into the early history of video games, learn about key influences, the console wars, and the evolution of gaming platforms alongside converging technologies. You will compare storytelling elements in video games to those in traditional media, examine character development, and analyze gameplay challenges and level design features. Additionally, you will study game interfaces through a player-centered design approach, assess the significance of audio in game development, and analyze various roles within the industry. You will evaluate the advantages and disadvantages of delivering video games through mobile devices, analyze the phases of production, and understand management's role in the development process. Marketing strategies and current gaming trends will also be key topics, enabling you to assess future directions in the industry.

This course consists of 20 lessons organized into five units, each featuring one or more engaging Lesson Activities. You will grade your work in the Lesson Activities by comparing it to sample responses. Additionally, there is one Course Activity and Discussion in each unit. You will submit the Course Activity to your teacher for grading.

By the end of this course, you will be able to do the following:

- Evaluate the factors that have influenced the history of game development.
- Evaluate how non-entertainment goals, player motivations, and demographics influence game development.
- Compare story elements in video games and traditional media, and analyze the influence of gameplay mechanics on level design.
- Examine player-centered interfaces, industry roles, and trends in video gaming.

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Course Components and Grading Rubric

The table gives a breakdown of the weight for each component in the course. Weight represents the percentage of the total score coming from each activity.

Course Components	Count	Weight
Pretests. *Pretests are optional assessments, typically designed for credit recovery use. If a student shows mastery of a lesson's objective, the student may be automatically exempted from that lesson in the upcoming unit. Typically, teachers do not choose to employ exemptive pretests for first-time credit courses. Pretests are not included as a component of the student's final grade.*	5	0%
Module. *Each module in this course contains an interactive tutorial and an associated mastery test. Tutorials may include one or more Lesson Activities that constitute tasks associated with the tutorial. This course also includes practice questions to prepare students for the mastery test. The module score comes from a student's score on the mastery test.*	20	30%
Discussion. *Online discussions allow for higher-order thinking about terminal objectives. An online threaded discussion mirrors the educational experience of a classroom discussion. Teachers can initiate a discussion by asking a complex, open-ended question. Students can engage in the discussion by responding both to the question and to the thoughts of others. Each unit in a course has one predefined discussion topic; teachers may add more discussion topics.*	5	15%
Posttest. *The posttest appears at the end of the unit and mirrors the pretest in structure, content, and complexity.*	5	20%
Course Activity. *Course Activities are similar to Unit Activities in scope but may be found at any point in the course, either to prepare the student for new learning or to act as a performance-based activity required for a learning objective. Like Unit Activities, Course Activities include simple rubrics, and sample answers are available for teachers. Course Activities are teacher graded.*	5	20%
End of Semester Test. *The end of semester test (EOS) appears at the end of the course. Students are delivered a few items from every tutorial in the course in order to assess the major course objectives.*	1	15%
Total	**41**	**100%**

*Teachers may manually adjust these weights if desired, per district grading requirements.

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UNIT 1: THE EVOLUTION OF GAMING (DAYS 1 – 17)

In this unit, you will learn about the early history of video games, including key influences. You will assess and compare features of early console companies. You will analyze major influences and events during the early console wars. Additionally, you will examine various types of gaming platforms and how the new technologies are converging.

Lesson	Lesson Objective
Syllabus and Student Orientation	Review the Student Orientation and Course Syllabus at the beginning of this course.
Video Game Beginnings and Arcades	Examine the early history of video games, including key influences.
Introduction to Home Consoles	Compare features of early console companies.
The Bit Wars and Personal Computers (PCs)	Analyze key influences and events during the early console wars.
Platforms and Convergence	Analyze the many different types of gaming platforms and how the new technologies are converging.
Video Game History	Identify significant events in the history of video games.

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UNIT 2: UNDERSTANDING GAME DYNAMICS (DAYS 18 – 34)

In this unit, you will assess non-entertainment goals within video game development. You will learn about various game genres and their characteristics. You will also analyze player motivations for playing games and how they have changed over time. Additionally, you will examine different demographics and how they differ over geographic markets.

Lesson	Lesson Objective
Game and Player Goals	Analyze non-entertainment goals within video game development.
Game Genres	Analyze various game genres and their characteristics.
Player Motivations	Analyze player motivations for playing games and how they have changed over time.
Game and Player Demographics	Analyze the different demographics and how that differs over geographic markets.
Video Game Psychographics	Identify and explain the psychographics of different generations of gamers.

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UNIT 3: CRAFTING IMMERSIVE GAMES (DAYS 35 – 52)

In this unit, you will compare the use of story elements in video games with their use in traditional elements. You will analyze the different areas of character development and how the story is involved. You will also learn about the use of various gameplay challenges and strategies. Additionally, you will analyze how different features in gameplay contribute to level design.

Lesson	Lesson Objective
Story	Compare the use of story elements in video games with their use in traditional elements.
Character Development	Examine the different areas of character development and how story is involved.
Game Play	Examine the use of various gameplay challenges and strategies.
Building the Worlds	Examine how various features in gameplay contribute to level design.
Video Game Story	Create a video game script.

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UNIT 4: EXPLORING GAME DEVELOPMENT (DAYS 53 – 70)

In this unit, you will assess the components of game interfaces and how they draw from the theory of player-centered design. You will analyze the importance of audio in video game development. You will also learn about various job roles within the video game industry and their responsibilities. Finally, you will examine the advantages and disadvantages of delivering video games through mobile devices.

Lesson	Lesson Objective
Game User Interface	Examine the components of game interfaces and how they draw from the theory of player-centered design.
Game Audio	Analyze the importance of audio in video game development.
Industry Roles	Analyze the various job roles within the video game industry and their responsibilities.
Mobile and Social Gaming	Analyze the pros and cons of delivering video games through mobile devices.
Mobile Video Games	Create a game for a smartphone device.

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UNIT 5: NAVIGATING GAME DEVELOPMENT (DAYS 71 – 90)

In this unit, you will learn about the various phases of production for game development. You will assess the role of management in the game production process. You will also examine different methods used to successfully market games. Additionally, you will assess existing trends and possible directions in video gaming.

Lesson	Lesson Objective
Development Phases	Examine the various phases of production for game development.
Management Methodologies	Analyze the role of management in the game production process.
Marketing of Games	Analyze various methods used to successfully market games.
The Future of Gaming	Analyze existing trends and possible directions in video gaming.
Future of Video Games	Analyze the impact of video games on the society.

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