

Game Development

Course Overview

This one-semester elective course is intended as a practical, hands-on guide to help you understand the process of game development.

This course is structured into lessons and Course Activities as follows:

- The first four lessons are about the history of video games, types of early consoles, arcades, personal computers, and platform convergence.
- The next four lessons deal with game and player goals, game genres, player motivations, and player demographics.
- The next four lessons provide students an understanding of story and character development, gameplay, game styles, and level design.
- The next four lessons discuss game user interface, game audio, mobile and social gaming, and the different job roles in the video game industry.
- The next three lessons focus on game development phases, the role of management in game production, and various methods used for marketing games.
- The final lesson is about the future of gaming; it discusses existing trends and possible directions in video gaming.

You will submit the Course Activity documents to your teacher and will check your own answers in the Lesson Activities that accompany each lesson. Each lesson also has a multiple-choice mastery test. A multiple-choice end-of-semester test completes the course.

The Course Activities (submitted to the teacher) and the Lesson Activities (self-checked) are major components of this course.

Course Goals

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

- Describe the history of video games and the early devices used to play games.
- Describe game and player goals, game genres, player motivations, and player demographics.

- Describe the use of story elements in video games, character development, gameplay challenges and strategies, and level design.
- Describe the various components of game interfaces, game audio, and mobile and social gaming.
- Describe the phases of production and role of management in game development, and methods used for marketing games.
- Identify and evaluate different careers in the video game industry.
- Describe the existing trends and possible directions in video gaming.

Prerequisite Skills

Game Development is a beginning class that does not have specific prerequisites. Nevertheless, these fundamental skills will be helpful:

- an interest in playing video games and knowing more about the process of game development
- observation and research skills
- creative ability to use story elements and characters to develop a game story
- familiarity with various gaming platforms, components, devices, and technologies

General Skills

To participate in this course, you should be able to do the following:

- Perform basic operations with word processing software, such as Microsoft Word or Google Docs.
- Understand the basics of presentation software, such as Microsoft Power Point.
- Perform online research using various search engines and library databases.
- Communicate through email and participate in discussion boards.

For a complete list of general skills that are required for participation in online courses, refer to the Prerequisites section of the Plato Student Orientation document, found at the beginning of this course.

Credit Value

Game Development is a 0.5-credit course.

Course Materials

- Notebook
- Presentation software

- Computer with Internet connection and speakers or headphones
- Microsoft Word or equivalent

Course Pacing Guide

This course description and pacing guide is intended to help you stay on schedule with your work. Note that your course instructor may modify the schedule to meet the specific needs of your class.

Day	Activity / Objective	Type
1 day: 1	Course Orientation <i>Review the Plato Student Orientation and Course Syllabus at the beginning of this course.</i>	Course Orientation
3 days: 2-4	Video Game Beginnings and Arcades <i>Describe the early history of video games, including key influences.</i>	Lesson
3 days: 5-7	Introduction to Home Consoles <i>Compare features of early console companies.</i>	Lesson
3 days: 8-10	The Bit Wars and Personal Computers (PCs) <i>Describe key influences and events during the early console wars.</i>	Lesson
3 days: 11-13	Platforms and Convergence <i>Analyze the many different types of gaming platforms and how the new technologies are converging.</i>	Lesson
3 days: 14-16	Video Game History	Course Activity
1 day: 17	Games as Entertainment	Course Discussion
1 day: 18	Game	Activity
3 days: 19-21	Game and Player Goals <i>Describe non-entertainment goals within video game development.</i>	Lesson
3 days: 22-24	Game Genres <i>Describe various game genres and their characteristics.</i>	Lesson

3 days: 25-27	Player Motivations <i>Describe player motivations for playing games and how they have changed over time.</i>	Lesson
3 days: 28-30	Game and Player Demographics <i>Describe the different demographics and how they differ over geographic markets.</i>	Lesson
4 days: 31-34	Video Game Psychographics	Course Activity
1 day: 35	Mobile Gameplay	Course Discussion
1 day: 36	Game	Activity
3 days: 37-39	Story <i>Compare the use of story elements in video games with their use in traditional elements.</i>	Lesson
3 days: 40-42	Character Development <i>Describe the different areas of character development and how story is involved.</i>	Lesson
3 days: 43-45	Gameplay <i>Describe the use of various gameplay challenges and strategies.</i>	Lesson
3 days: 46-48	Building the Worlds <i>Describe how various features in gameplay contribute to level design.</i>	Lesson
3 days: 49-51	Video Game Story	Course Activity
1 day: 52	Effect of Hardware on Game Development	Course Discussion
1 days: 53	Game	Activity
3 days: 54-56	Game User Interface <i>Describe the components of game interfaces and how they draw on the theory of player-centered design.</i>	Lesson
3 days: 57-59	Game Audio <i>Analyze the importance of audio in video game development.</i>	Lesson

3 days: 60-62	Industry Roles <i>Identify the various job roles within the video game industry and their responsibilities.</i>	Lesson
3 days: 63-65	Mobile and Social Gaming <i>Describe the pros and cons of delivering video games through mobile devices.</i>	Lesson
3 days: 66-68	Mobile Video Games	Course Activity
1 day: 69	Puzzles in Games	Course Discussion
1 day: 70	Game	Activity
3 days: 71-73	Development Phases <i>Describe the various phases of production for game development.</i>	Lesson
3 days: 74-76	Management Methodologies <i>Analyze the role of management in the game production process.</i>	Lesson
3 days: 77-79	Marketing of Games <i>Describe various methods used to successfully market games.</i>	Lesson
3 days: 80-82	The Future of Gaming <i>Describe the existing trends and possible directions in video gaming.</i>	Lesson
4 days: 83-86	Future of Video Games	Course Activity
1 day: 87	Compare and Contrast Game Design and Software Development	Course Discussion
1 day: 88	Game	Activity
1 day: 89	Course Review	
1 day: 90	End of Semester	Assessment