



# Introduction to Game Development

2023-2024 Catalog

[ARCHIVED CATALOG]

## SDEV 148 - Introduction to Game Development

**PREREQUISITES/COREQUISITE:** [SDEV 120 - Computing Logic](#), OR [CSCI 101 - Computer Science I](#) OR Advisor Approval.

PROGRAM: Software Development

**CREDIT HOURS MIN:** 3

LECTURE HOURS MIN: 2

LAB HOURS MIN: 2

DATE OF LAST REVISION: Fall, 2020

Game development involves a rich set of interrelated fields including computer science, graphics design, physics, music, and narrative. This course seeks to introduce the fundamental principles of computer game development. Provides a basic understanding of the fundamentals of game design and development. Topics will include history of game development, game theory, game design, development phases, and common resources, libraries and development tools. Students will become familiar with the different game genres, the roots of computer gaming, market forces, and various careers in the game design and development industry. Students will develop a game using an industry standard platform.

**MAJOR COURSE LEARNING OBJECTIVES:** Upon successful completion of this course the student will be expected to:

1. Discuss basic simulation and game design.
2. Discuss the history and evolution of game design and development.
3. Compare and contrast various types, categories and genres of computer games.
4. Explain non-entertainment goals associated with game development.
5. Describe various game platforms and identify specific elements associated with each platform.
6. Discuss concepts and issues in game interface design.
7. Discuss the use of physics and realism in game design.
8. Explain usability and its importance in game interface design
9. Identify and describe various careers in Game Design and Development
10. Describe security issues in relation to Game Design and Development.
11. Design and develop a game utilizing software development methodologies.

**COURSE CONTENT:** Topical areas of study include -

- Historical Elements
- Player Elements
- Gaming Platforms
- Role Play
- Turn-Based/Time-Limited/Real-Time
- Player Mode
- Game Genres
- Documentation
- Teamwork and communication
- Gaming Engines
- Copyright/Trademarks
- Art

- Audio
- Development Roles
- Marketing
- Testing
- Accessibility
- Artificial Intelligence
- Fuzzy Logic
- Rule Based systems
- Level Design
- Creative Commons



[Course Addendum - Syllabus \(Click to expand\)](#)

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