MONTGOMERY COUNTY COMMUNITY COLLEGE
CIS 176
Electronic Game Design & Development 1: Concepts
3-2-2

CATALOGUE DESCRIPTION

This course introduces the fundamental techniques, concepts, and vocabulary of electronic game and simulation development. Students will explore the historical, social, and cultural effects of electronic games while applying modern game design and development methodologies and principles to create their own game.

PREREQUISITES

MAT 100 or MAT 115, with "C" or better or placing above (ABV) MAT 100 on the math placement test.

LEARNING OUTCOMES/COMPETENCIES

1. Describe the historical, social, and cultural effects of electronic games.
2. Describe the principles and methodologies behind the rules and play of games.
3. Define basic vocabulary and fundamental concepts of electronic game development.
4. Demonstrate a working knowledge of game development, production, and design by developing an electronic game.
5. Explain the construction and appeal of popular electronic and non-electronic games of various genres.
6. Display an understanding of the modern game development process.

LEARNING ACTIVITIES

Lecture, discussion, hands-on lab exercises, homework assignments, group projects, quizzes and exams

SEQUENCE OF TOPICS

1. History of games and the electronic game industry.
2. The social and cultural impact of electronic games both in the United States and overseas.
3. Deconstruction and analysis of current electronic games
4. Critical game studies (“Ludology”) – Options for gameplay
5. Introduction to game design principles and methodologies (with specific focus on text-based adventure games) including the following concepts:
   - Level construction and development
   - Character design
   - Storytelling
   - Rules and gameplay
• User interface design
• Using sound and music to develop atmosphere
6. Overview of electronic game production methodology and marketing (who does what when and why).
7. Introduction to game programming and the development of interactive fiction. (Supplements)

LEARNING MATERIALS


**Required Projects**

1. Students will work in teams to design and develop a work of interactive fiction using the Alan development tool (or equivalent) for their capstone project in this course. This will include all corresponding development research and design documentation along with a functional game.
2. Students will critically analyze (deconstruct) a series of electronic and non-electronic games over the semester.
3. Students will perform extensive research and writing assignments related to a specific genre of electronic games and present their findings to the class.

This course is consistent with Montgomery County Community College’s mission and educational goals.

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