

GD310

Managing Game Development

[Onsite]

Course Description:

This course offers an overview for the game design process, from the concept phase to the final delivery phase. Topics include project management and game design documents.

Prerequisite(s) and/or Corequisite(s):

None.

Credit hours: 4

Contact hours: 50 (30 Theory Hours, 20 Lab Hours)

SYLLABUS

Instructor: _____

Office hours: _____

Class hours: _____

MAJOR INSTRUCTIONAL AREAS

1. Unit 1: Introduction to Game Management
2. Unit 2: Game Concept
3. Unit 3: Core Design
4. Unit 4: Detailed Design and Prototyping
5. Unit 5: Preproduction
6. Unit 6: Game Balance
7. Unit 7: Look and Feel
8. Unit 8: Milestones and Deadlines
9. Unit 9: Team Management I : Roles and Divisions
10. Unit 10: Team Management II : Procedures, Process and Risk

COURSE OBJECTIVES

After successful completion of this course, the student will have the opportunity to:

1. Gain an overview of game development.
2. Identify the steps that lead to a game specification.
3. Explain the composition and implementation of milestones in the game industry.
4. Explain the need for pre-production.

5. List the tasks that need to be defined before the production phase.
6. Manage the content and programming required for a successful game.
7. Describe the development phases and processes involved at each phase.
8. Demonstrate an understanding of game balance.
9. Describe the process of risk management.
10. Create prototypes using the Gamemaker software.
11. Use Microsoft Project to create a project schedule and manage milestone deadlines.
12. Describe the functions of the key roles in the development team.
13. Describe the importance of marketing and public relations in the gaming industry, using online games as an example.
14. Create a game design document.

Related SCANS Objectives

1. Select relevant, goal-related activities in order of importance to follow schedule in game management.
2. Evaluate the need for data from existing sources to manage the game.
3. Perform the tasks of organizing and maintaining information including understanding and organizing information in gaming.
4. Analyze the information to communicate the results to others using oral, written, graphical, pictorial, or multi-media methods in gaming.
5. Process the information including entering, modifying, retrieving, storing, and verifying data and other gaming information.
6. Demonstrate your understanding of gaming systems.
7. Analyze the correct set of procedures, tools, or machines, including computers and programs, to design games.
8. Apply the technology to design games.

TEACHING STRATEGIES

The curriculum is designed to promote a variety of teaching strategies that support the outcomes described in the course objectives and that foster higher cognitive skills. Delivery makes use of various media and delivery tools in the classroom.

COURSE RESOURCES

Student Textbook Package

Rollings, Andrew, Dave Morris, Jessica Mulligan, Bridgestte Patrovsky. *Game Development: Management and Design*. Indianapolis: Pearson Custom Publishing, 2006.

References and Resources

General References

Books

- Rollings, Andrew, Dave Morris. *Game Architecture and Design*. New Riders 2003.

Online Periodicals

- <https://www.gamasutra.com>

Other Resources

- Feldman, Ari, *Designing Arcade Computer Game Graphics*, Wordware Publishing, 2000.
- <http://www.gamedev.net/reference/articles/article1063.asp>
- http://www.cs.ubc.ca/spider/forsey/448/Primers/01_HighConceptPrimer.doc
- http://www.cs.ubc.ca/spider/forsey/448/Primers/01_HighConceptTemplate.doc
- http://www.gamasutra.com/features/20041101/rouse_01.shtml (free registration required)

EVALUATION & GRADING

COURSE REQUIREMENTS

1. Attendance and Participation

Regular attendance and participation are essential for satisfactory progress in this course.

2. Completed Assignments

Each student is responsible for completing all assignments on time.

3. Team Participation (if applicable)

Each student is responsible for participating in team assignments and for completing the delegated task. Each team member must honestly evaluate the contributions by all members of their respective teams.

Evaluation Criteria Table

The final grade will be based on the following weighted categories:

| CATEGORY | WEIGHT |
|-----------------|-------------|
| Assignment | 20% |
| Participation | 10% |
| Project | 20% |
| Quizzes | 20% |
| Lab Assignments | 10% |
| Final Exam | 20% |
| Total | 100% |

Grade Conversion Table

Final grades will be calculated from the percentages earned in class as follows:

| | | |
|----|---------|-----|
| A | 90-100% | 4.0 |
| B+ | 85-89% | 3.5 |
| B | 80-84% | 3.0 |
| C+ | 75-79% | 2.5 |
| C | 70-74% | 2.0 |
| D+ | 65-69% | 1.5 |
| D | 60-64% | 1.0 |
| F | <60% | 0.0 |

COURSE OUTLINE

| Wk | Lesson | Lesson Title | Reading (chapter) | Activity Type | | | | | |
|----|--------|---------------------------------|-----------------------|---------------|------|---------------|---------|------|-----|
| | | | | Assignment | Quiz | Participation | Project | Exam | Lab |
| 1 | 1 | Introduction to Game Management | 1, 2,3 (partially) | x | | x | | | x |
| 2 | 1 | Game Concept | 3 | x | x | x | x | | x |
| 3 | 1 | Core Design | 4 | | | x | | | x |
| 4 | 1 | Detailed Design and Prototyping | 5,6 | x | | x | x | | x |
| 5 | 1 | Preproduction | 7,8,9,10 | x | | x | | | x |

| | | | | | | | | | |
|----|---|--|----------|---|---|---|---|---|---|
| 6 | 1 | Game Balance | 11 | | x | x | x | | x |
| 7 | 1 | Look and Feel | 12,13,14 | x | | x | x | | x |
| 8 | 1 | Milestones and Deadlines | 15,16 | | x | x | x | | x |
| 9 | 1 | Team Management I: Roles and Divisions | 17,18 | x | | x | | | x |
| 10 | 1 | Team Management II : Procedures, Process, and Risk | 19,20 | | | x | | x | x |
| 11 | | Final Exam | | | | | | x | |

INTENT/INTERFACE

This course offers an overview of the game design process, from the concept phase to the final delivery phase. Some of the topics include project management and creating game design documents. The game design process is explored by examining a game creation package known as Gamemaker. As a team-based course project, students need to develop their game concepts from the preproduction stage through the prototyping stage. This course is built as a precursor to Game Design Process and Physics of Animation.