

GD400

Game Interface Design

[Onsite]

Course Description:

This course examines the navigation and control, visual appeal and functional aspects of the game interface. Case studies of successful and unsuccessful user interfaces are used to illustrate and evaluate the effectiveness of user interface designs.

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

Prerequisite: GD330 Game Design Process

Credit hours: 4

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

SYLLABUS

Instructor: _____

Office hours: _____

Class hours: _____

MAJOR INSTRUCTIONAL AREAS

1. Evolution of User Interface
2. What is a User Interface?
3. Interface Design Principles
4. Physical Design
5. Logical Design
6. Conceptual Design
7. Construction
8. Usability Testing

COURSE OBJECTIVES

1. Discuss the history and evolution of game interfaces.
2. Explain the main goals of designing a user interface for the current generation of games.
3. Explain the differences between various types and categories of game interfaces.
4. Describe the various game platforms and the manual and visual interfaces appropriate for each game platform.
5. Describe the major genres of games and their interface needs.
6. Explain the various control schemes used in game interface design.
7. Discuss the importance and use of feedback in a game interface design.
8. Describe the development cycle of a game interface design.
9. Create an interface design prototype for a hypothetical game.

10. Research the ITT Tech Virtual Library for a review of major hits and misses in the development of game interfaces.

Related SCANS Objectives

1. Apply the technology to acquire, organize, analyze, and present the information to the players.
2. Demonstrate competence in designing game interfaces.
3. Demonstrate competence in identifying the developments related to game interfaces.

COURSE OUTLINE

- **Unit 1:** All the concepts will be covered in the class; therefore, the specified readings are merely for your reference.
- **For all units, except unit 1:** It is recommended that you complete the readings before attending the class.
- In addition to general class participation and in-class activities, all discussion questions will be graded under the Participation evaluation category.

Unit #	Activities for the unit
1—History of User Interfaces in Electronic Games	<ul style="list-style-type: none"> • Content Covered <ul style="list-style-type: none"> ○ <i>Game Development Essentials: Game Interface Design:</i> <ul style="list-style-type: none"> ▪ Chapter 1, “History of Game Interface Design: how did we get here?” pp. 3-16 • Assignment: 1 • Lab: 1
2—Basic Goals of User Interfaces	<ul style="list-style-type: none"> • Content Covered <ul style="list-style-type: none"> ○ <i>Game Development Essentials: Game Interface Design:</i> <ul style="list-style-type: none"> ▪ Chapter 2, “Goals & Considerations: what are we

Unit #	Activities for the unit
	<p style="text-align: center;">trying to accomplish?" pp. 19-50</p> <ul style="list-style-type: none"> • Quiz: 1 • Assignment: 1 • Lab: 1
<p>3–Types of Interfaces</p>	<ul style="list-style-type: none"> • Content Covered <ul style="list-style-type: none"> ○ <i>Game Development Essentials: Game Interface Design:</i> <ul style="list-style-type: none"> ▪ Chapter 3, “Categorizing Interfaces: what are the options?” pp. 53-67 • Quiz: 1 • Assignment: 1 • Lab: 1 • Project Part 1: Introduction
<p>4–Hardware for Game Interfaces</p>	<ul style="list-style-type: none"> • Content Covered <ul style="list-style-type: none"> ○ <i>Game Development Essentials: Game Interface Design:</i> <ul style="list-style-type: none"> ▪ Chapter 4, “Platforms: game hardware and manual interfaces,” pp. 71-100 • Quiz: 1 • Assignment: 1 • Lab: 1
<p>5–Differences Between Genres of Interfaces</p>	<ul style="list-style-type: none"> • Content Covered <ul style="list-style-type: none"> ○ <i>Game Development Essentials: Game Interface Design:</i> <ul style="list-style-type: none"> ▪ Chapter 5, “Genres: game styles & visual interfaces,” pp. 103-146 • Quiz: 1

Unit #	Activities for the unit
	<ul style="list-style-type: none"> • Assignment: 1 • Lab: 1 • Project Part 1: Submission • Project Part 2: Introduction
6–Control Schemes	<ul style="list-style-type: none"> • Content Covered <ul style="list-style-type: none"> ○ <i>Game Development Essentials: Game Interface Design:</i> <ul style="list-style-type: none"> ▪ Chapter 6, “Control Schemes: empowering the player,” pp. 149-173 • Quiz: 1 • Assignment: 1 • Lab: 1 • Project Part 3: Introduction
7–Feedback Schemes	<ul style="list-style-type: none"> • Content Covered <ul style="list-style-type: none"> ○ <i>Game Development Essentials: Game Interface Design:</i> <ul style="list-style-type: none"> ▪ Chapter 7, “Feedback Schemes: informing the player,” pp. 178-208 • Quiz: 1 • Assignments: 1 and 2 • Lab: 1 • Project Part 2: Submission
8–Development Cycle of the User Interface	<ul style="list-style-type: none"> • Content Covered <ul style="list-style-type: none"> ○ <i>Game Development Essentials: Game Interface Design:</i> <ul style="list-style-type: none"> ▪ Chapter 8, “Process of Interface Design: how interfaces are created,” pp. 213-236

Unit #	Activities for the unit
	<ul style="list-style-type: none"> • Quiz: 1 • Assignment: 1 • Lab: 1 • Project Part 3: Submission • Project Part 4: Introduction
<p>9–Prototyping an Interface–I</p>	<ul style="list-style-type: none"> • Content Covered <ul style="list-style-type: none"> ○ <i>Game Development Essentials: Game Interface Design:</i> <ul style="list-style-type: none"> ▪ Chapter 9, “Prototype Interface Design: putting it all together,” pp. 239-257 • Quiz: 1 • Assignments: 1 and 2 • Lab: 1 and 2
<p>10–Prototyping an Interface–II</p>	<ul style="list-style-type: none"> • Content Covered <ul style="list-style-type: none"> ○ <i>Game Development Essentials: Game Interface Design:</i> <ul style="list-style-type: none"> ▪ Chapter 9, “Prototype Interface Design: putting it all together,” pp. 239-257 • Assignment: 1 • Lab: 1 • Project Part 4: Submission
<p>11–Review and Final Exam</p>	<ul style="list-style-type: none"> • Final Exam

Instructional Methods

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.

The course is composed of both theory and laboratory components.

Collaboration in class and laboratory activities will create a climate of high values with respect to both diversity and inclusiveness. An open communication environment will help to ensure useful interactions between you and the instructor and also among other students. Information obtained in the class activities will let you know what you need to accomplish, who will execute a procedure, and how to gauge if the laboratory activity was successful and meets the instructor's expectation.

COURSE RESOURCES

Student Textbook Package

- Saunders, Kevin, and Jeannie Novak. *Game Development Essentials: Game Interface Design*. Clifton Park: Thomson Delmar Learning.
- Companion DVD of the textbook *Game Development Essentials: Game Interface Design*.

References and Resources

ITT Tech Virtual Library

Log on to the ITT Tech Virtual Library (<http://www.library.itt-tech.edu/>) to access online books, journals, and other reference resources selected to support the ITT Tech curriculums.

- General References
 - Books

The following books are related to this course and are available through the ITT Tech Virtual Library:

- **Books> NetLibrary**

- Meigs, Tom. *Ultimate Game Design: Building Game Worlds*. NY: McGraw-Hill Professional (accessed January 09, 2007).
- Rouse, Richard. *Game Design: Theory & Practice*. Plano, Tex: Wordware Publishing, 2005 (accessed January 09, 2007).
- **Books> Ebrary**
 - Fox, Brent. *Game Interface Design*. Boston, MA: Course Technology PTR, 2004 (accessed January 09, 2007).
 - Irish, Daniel. *Game Producer's Handbook*. Boston, MA: Thompson Course Technology (accessed January 09, 2007).
- **Other Resources**
 - "Gamasutra."
<http://www.gamasutra.com/> (accessed January 09, 2007).
 - "Chronology of the History of Videogames."
<http://www.thocp.net/software/games/games.htm> (accessed January 09, 2007).
 - Kennerly, David. "Game Interface Design."
<http://finegamedesign.com/ui> (accessed January 09, 2007).

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
Quizzes	10%
Participation	5%
Assignments	15%
Lab Assignments	25%
Project Part 1	5%
Project Part 2	5%
Project Part 3	5%
Project Part 4	15%
Final Exam	15%
Total	100%

Grade Conversion Table

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

Grade	Percentage	Credit
A	90-100%	4.0
B+	85-89%	3.5

Grade	Percentage	Credit
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