

ITT Technical Institute
GD300
Introduction to Gaming Technology
Onsite Course

SYLLABUS

Credit hours: 4

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

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

None.

Course Description:

This course offers an introduction to game theory. Topics of study include the history of various types of games, survey of computer game categories and platforms, major game components, and an overview of the game development process.

SYLLABUS: Introduction to Gaming Technology

Instructor: _____

Office hours: _____

Class hours: _____

Major Instructional Areas

1. Unit 1: Evolution of Video and Computer Games.
2. Unit 2: Game Genres and Playing Perspectives
3. Unit 3: Game Genres Part 1
4. Unit 4: Game Genres Part 2
5. Unit 5: Game Design Part 1
6. Unit 6: Game Design Part 2
7. Unit 7: Game Development Part 1
8. Unit 8: Game Development Part 2
9. Unit 9: Game Release
10. Unit 10: So You Want To Be a Game Designer

Course Objectives

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

1. Describe the major events from the history of games.
2. Describe various gaming platforms.
3. Identify the elements of a successful game.
4. Identify various game genres.
5. Identify the design, visual, and technical components of a game.
6. Explain industry-accepted stages of game development.
7. Classify specific disciplines of the game development industry.

Related SCANS Objectives

1. Communicate gaming skills giving concrete examples.
2. Communicate thoughts, ideas, information, and messages.
3. Suggest modifications to existing gaming systems.
4. Develop new or alternative systems to improve performance in gaming.
5. Explain the trends in technological change and deduce how the change will impact the status quo in gaming.
6. Demonstrate creative thinking processes by generating new or original combination of gaming ideas.
7. Implement a devised plan of action to resolve any discrepancy between what is and what should or could be after identifying possible reasons for the discrepancy.
8. Evaluate and monitor gaming progress, and revise plan as indicated by the findings.
9. Determine the most effective and efficient method of learning or teaching games after assessing learning styles.
10. Demonstrate critical thinking skills in gaming through detailed analysis and the use of sound logic.

11. Specify the goals and constraints in gaming and generate alternatives, considering risks and choosing the best alternative.

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

Saltzman, M. (2008). *Game Creation and Careers: Insider Secrets from Industry Experts* (Custom 1st ed.). Boston, MA: Pearson Custom

References and Resources

ITT Tech Virtual Library

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

■ General References

• Books

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

- Books24x7 > Bethke, Erik. *Game Development and Production*, Plano, Texas: Wordware Publishing, 2003
- Books24x7 > Fullerton, Tracy, Christopher Swain, and Steven Hoffman. *Game Design Workshop – Designing, Prototyping, and Playtesting Games*, San Francisco, CA: CMP Books, 2004
- Books24x7 > Pedersen, Roger. *Game Design Foundations*, Plano, Texas: Wordware Publishing, 2003
- Books24x7 > Rouse III, Richard (2005) *Game Design – Theory & Practice, Second Edition*, Plano, Texas: Wordware Publishing
- Books24x7 > Salen, K. & Zimmerman, E. (2004). *Rules of Play: Game Design Fundamentals* Cambridge, Massachusetts: The MIT Press

• Periodicals

- Periodicals>EbscoHost

■ Other Resources

- www.Gamasutra.com
- <http://www.theesa.com/>
- http://www.gamasutra.com/features/20010530/foreman_01.htm
- http://www.gamasutra.com/features/20030808/carless_pfv.htm
- www.BeyondStructure.com
- www.DanielGreenburg.com
- www.FinalDraft.com
- www.idSoftwar.com
- www.DonBluth.com

- www.GameDev.net/dict
- msdn.Microsoft.com/vstudio
- www.GameAI.com/blackandwhite.html
- www.HugeSound.com
- www.VGMusic.com
- www.GamingForce.com
- simcity.ea.com/play/classic
- www.cs.ubc.ca/spider/forsey/448/Primers/09_GameTestingMethodology.doc
- www.cs.ubc.ca/spider/forsey/448/Primers/09_GameTestingPrimer.doc
- www.cs.ubc.ca/spider/forsey/448/Primers/09_TestDesignGuideline.doc
- http://en.wikipedia.org/wiki/Game_testing
- www.cs.ubc.ca/spider/forsey/448/Primers/09_GameTestingPrimer.doc
- www.cs.ubc.ca/spider/forsey/448/Primers/09_GameTestingMethodology.doc
- www.cs.ubc.ca/spider/forsey/448/Primers/09_TestDesignGuideline.doc
- http://en.wikipedia.org/wiki/Game_testing

All links to web references outside of the virtual library are always subject to change without prior notice

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
Writing Assignments	15%
Quizzes	15%
Labs	20%
Participation	10%
Project	15%
Final Exam	25%
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

Readings:

- **For all units, except unit 1:** It is recommended that you complete the readings before attending the class.
- **Unit 1:** All the concepts will be covered in the class; therefore, the specified readings are merely for your reference.

Wk	Lsn	Lesson Title	Reading	Activity Type				
				Writing Assignment	Quiz	Discussion	Project	Lab
1	1	What is a Game?	VL, TB, Chapter 24	X		X		X
2	1	Evolution of Video and Computer Games	TB, Chapter 1	X		X		X
3	1	Game Genres Part 1	TB, Chapter 2-3	X	X	X	X	X
4	1	Game Genres Part 2	TB, Chapter 4-5	X		X		X
5	1	Game Design Part 1	TB, Chapter 6-7	X		X	X	X
6	1	Game Design Part 2	TB, Chapter 8-10	X	X	X		X
7	1	Game Development Part 1	TB, Chapter 11-13	X		X	X	X

8	1	Game Development Part 2	TB, Chapter 14-16	X		X		X
9	1	Game Release	TB, Chapter 17-19	X	X	X	X	X
10	1	So You Want To Be a Game Designer	VL, TB, Chapter 20-22	X		X	X	X

Intent/Interface

Using the advice of many experts in the game development field, this course offers an introduction to game theory. Through discussions in the class during the theory sections of the course, the students will cover such topics as the history of games, analysis of the major game genres, and an overview of the game development process. In the lab sections, students will have opportunities to explore the gameplay of many different games.