

OTED 750

Trends and Issues: Modeling and Simulation in Training

Syllabus

Spring 2003

Description: This course is designed to explore the issues and trends in developing and implementing technology-based training with emphasis on modeling and simulation.

Objectives: The purpose of the course is to provide professional trainers with the foundation knowledge they should use when working as a team member with software and hardware designers to develop models and simulations that will be used in training. This course was specially designed to support the MS Degree in Modeling and Simulation. It is also appropriate for students in the MS degree in Occupational and Technical Studies.

Course Competencies: As a result of this course and its activities, the learner should be able to:

Explain the professional trainer's role in developing and implementing technology-based training.

Explain how media, computers, and the Internet can be used to support learning.

Use the instructional systems development process to plan technology-based training.

Determine the answers to questions that deal with cost, competencies, and tools required in developing technology-based training.

Outline the potential directions in which technology might take training in the future.

Explain the relational model of games and simulations.

Differentiate the design issues among tactical-decision simulations, diagnostic simulations, crisis-management simulations, data-management simulations, social-system simulations, language skills/communication simulations, and empathy/insight simulations.

Summarize the models of experiential learning.

Outline the planning considerations for post-simulation activities.

Mandatory Course Requirements: Students must do all of the following.

Presentations (20%)

Annotated Bibliography (10%)

Simulation Activity 1 (20%)

Training Design Project (40%)

Class Participation (10%)

Grading:

Excellent work A

Excellent work A-

Good work B+

Good work B

Fair work B-

Poor work C

Unsatisfactory work F

Attendance: Students are expected to exhibit professional standards in their approach to this class. Attendance, classroom participation, and quality work are expected. Because much can be learned in the give and take of classroom discussion, students who fail to attend class and participate may have difficulty. Students who miss class have the responsibility for making up the work by reviewing a video of the class and the notes of the lecture on the web site.

Office Hours: Office hours are posted on the office door. Generally students may see the instructor one-hour prior the scheduled class. Other hours may be arranged with the instructor by sending an email message to dnethert@odu.edu or calling 683-4305 and leaving a message.

Use of Technology: Students are required to have ready access to and the ability to use:

a computer with MS Word or WordPerfect

the World Wide Web via the Internet

an active E-Mail Account, including the ability to send and read attachments

Students are expected to regularly check their email accounts. Email is the primary means of communication outside of class. Students may apply on-line for an Old Dominion University email account. To get more information about the e-mail system, please go to the ODU Student E-Mail Webpage. Also, a special email address is activated for use in the course: oted750@odu.edu. Please use it for all questions and assignments pertaining to this course.

Study Resources: The primary resource that supports this course is the course website. It contains detailed class assignments, special reading assignments, links to other sites, and lecture notes. Lecture notes are usually posted before class, so students may have them available during the lecture.

Accommodations: Students requiring special accommodations should make their needs known to the instructor early in the semester so reasonable accommodation can be taken. While standards will remain the same, the instructor may modify the activities and processes to meet any student's reasonable special need.

Honor Pledge: By enrolling in a course through Old Dominion University, you have agreed to abide by and support the University Honor code. The honor code is:

"I pledge to support the honor system of Old Dominion University. I will refrain from any form of academic dishonesty or deception, such as cheating or plagiarism. I am aware that as a member of the academic community, it is my responsibility to turn in all suspected violators of the honor system. I will report to Honor Council hearings if summoned."

Text Book: Texts can be ordered from msbook.com

DIGITAL GAME-BASED LEARNING by Marc Prensky McGraw-Hill, ISBN: 0071363440, 2001

This book is a recent replacement and may not be in the book store before the term begins. It is available from Amazon.com both in new (\$29.95) and used (\$16.75) condition.

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Part Two: How Games Teach and Why They Work.

5. Fun, Play and Games: What Makes Games Engaging?.
6. Digital Game-Based Learning: Why and How It Works.
7. Digital Game-Based Learning for Kids and Students: Edutainment.
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9. Digital Game-Based Learning in Business: 41 Examples and Case Studies, from the Incredibly Simple to the Amazingly Complex.
10. True Believers: Digital Game-Based Learning in the Military.

Part Four: Implementation.

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12. The Roles of Teachers and Trainers in Digital Game-Based Learning: Digital Game-Based Instruction.
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14. Evaluating Effectiveness: Does It Work?.
15. So You Have an Idea...
16. The Future: Where Do We Go from Here?.

Last updated 12/16/02.

Instructor:
Dave Netherton
dnethert@odu.edu
757-683-4305

Course Email:
OTED750@odu.edu