

PELLISSIPPI STATE COMMUNITY COLLEGE
MASTER SYLLABUS

**GAME & SIMULATION DESIGN I
MDT 1620**

Class Hours: 3.0

Credit Hours: 3.0

Laboratory Hours: 0.0

Revised: Spring 08

Catalog Course Description:

Workshop oriented introduction to the field of game design theory and fundamental game/simulation design and construction tools. Project planning, management and workflow will be covered and employed. Students will create visual and aural assets to explore how to design the “look and feel” of a videogame. Assets will be created using basic 2D and 3D animation tools, and sound production and video editing tools. Individual students will design and produce basic games or simulations which will compete for consideration for further development based on their potential for commercial viability.

Entry Level Standards:

College level reading and writing, plus adequate planning and logic expectations are expected. Students will be required to read handouts and online material and be ready to discuss the material in class. In addition, students will be expected to apply research knowledge to solve practical design problems.

Prerequisites:

MDT 1600

Textbook(s) and Other Course Materials:

“Game Development Essentials”, by Jeannie Novak. Published by Thomson ISBN 1-4018-6271-3. May be purchased online. Some online tutorials, handouts, in-class presentations and virtual world resources will be provided.

I. Week/Unit/Topic Basis:

Web site material will be used to supplement this course.

Week	Topic
1	Pre-planning the project; analyzing the mission; the tools; concept design.
2	The role of the Art Director and the Game Art Bible. Storyboarding and branched design. The production team and where you fit in. You are not alone!
3	Overview of asset types and where they come from.
4-5	Basic art and sound tools for a simple project. Creating a sonic atmosphere.
6-7	Designing the interface. Employing good storytelling as a design requirement.

- 8-11 Create elements of basic project and basic scripting/programming.
- 12-13 More about development; Alpha, Beta, Gold. Isolate and begin debugging process.
- 14 Loose ends and final testing of the new game.
- 15 Peer review and critiques of completed games and simulations.

II. Course Objectives*:

- A. Discuss the need for preplanning and employ standard techniques for preparing a project for production, including the establishment of an Art Bible or project motif. I
- B. Demonstrate understanding of the effects on game play and simulations by the utilization of animated 2D motion. II
- C. Demonstrate understanding of the effect of game play and simulations by the utilization of animated 3D motion. II
- D. Identify industry recognized asset tools for creation of artistic and aural elements. III
- E. Demonstrate ability to create and combine all assets into a game or simulation. I, II, III
- F. Include in the design of a game or simulation a compelling storyline and or logical user experience. I, III
- G. Employ simple element design tools to create backgrounds, 2D and 3D elements, music and sound effects. I, II, III, IV
- H. Combine all elements into a game or simulation and debug the product. I, II, III, IV

*Roman numerals after course objectives reference goals of the Media Technologies program.

III. Instructional Processes*:

Students will:

1. Conceptualize, organize, and produce all elements of a simple game or simulation; test and debug the final product. (*Active Learning Strategies, Communications Outcome, Technological Literacy Outcome*)
2. Work to deadlines and schedules, and develop collaborative skills necessary to contribute to the realization of a team based, problem solving, creative environment. (*Active Learning Strategies*)
3. Learn and apply game and simulation design techniques and strategies. Apply these skills to novel problem situations, and participate in a team project and individual projects. (*Active Learning Strategies, Social/Behavioral Sciences Outcome*)
4. Learn about the software used by industry to design visual and sound elements for game and simulation creation. (*Technological Literacy Outcome*)
5. Effectively utilize the resources provided and identify and investigate industry standard resources to create game elements and structure. (*Technological Literacy Outcome*)

*Strategies and outcomes listed after instructional processes reference TBR's goals for strengthening general education knowledge and skills, connecting course work to experiences beyond the classroom, and

encouraging students to take active and responsible roles in the educational process.

IV. Expectations for Student Performance*:

Upon successful completion of this course, the student should be able to:

1. Demonstrate knowledge of project conceptualization and preplanning (A)
2. Discuss how 2D and 3D elements affect game and simulation user interaction. (B, C,)
3. Explain the function of the Art Bible. (A)
4. Generate visual elements of the game or simulation suitable to the “look and feel” of the overall design. (A, E, F, G)
5. Create aural elements that contribute to the planned for “look and feel” of the overall design. (A, D, G)
6. Create a compelling and/or logical storyline or simulation experience. (A ,F)
7. Employ industry approach to testing product (B, C, D, E)
8. Refine and debug product. (H)

*Letters after performance expectations reference the course objectives listed above.

V. Evaluation:

A. Testing Procedures:

Students are evaluated primarily on the basis of attendance, assignments, homework and projects. Each instructor must provide full details the first week of class via a syllabus supplement.

How grades are determined:

Students will be evaluated based on Quizzes, 10% of final grade; Tests (2), 20% of final grade; assignments (as specified by instructor),10% of final grade; online and homework expectations, 10% of final grade and projects, 50 % of final grade. Quizzes and Tests will cover material presented in class, handouts and online resources as given. Tests (midterm and final) are not to be missed without a valid excuse.

B. Laboratory Expectations:

Lab is a major part of this lecture/lab course and attendance is required. Assignments and projects must be completed and handed on or before the designated due date. Failure to meet deadlines will result in reduction of total points earned for the assignment or project. Final grade will be influenced by attendance.

C. Field Work:

Some photography, videography and sound recording may be required.

D. Other Evaluation Methods:

Class participation and online activities/homework will also be weighed in the evaluation of the final grade for the course.

E. Grading Scale:

90 – 100	A
85 – 89	B+
80 – 84	B
76 – 79	C+
70 – 75	C
65 – 69	D
Below 65	F

VI. Policies:

A. Attendance Policy:

Pellissippi State expects students to attend all scheduled instructional activities. As a minimum, students in all courses (excluding distance learning courses) must be present for at least 75 percent of their scheduled class and laboratory meetings in order to receive credit for the course. Individual departments/programs/disciplines, with the approval of the vice president of Learning, may have requirements that are more stringent. In very specific circumstances, an appeal of the policy may be addressed to the head of the department in which the course was taken. If further action is warranted, the appeal may be addressed to the vice president of Learning.

B. Academic Dishonesty:

Plagiarism, cheating, and other forms of academic dishonesty are prohibited. Students guilty of academic misconduct, either directly or indirectly through participation or assistance, are immediately responsible to the instructor of the class. In addition to other possible disciplinary sanctions which may be imposed through the regular Pellissippi State procedures as a result of academic misconduct, the instructor has the authority to assign an F or a zero for the exercise or examination or to assign an F in the course. (*Pellissippi State Online Catalog*)

C. Accommodations for disabilities:

Students who need accommodations because of a disability, have emergency medical information to share, or need special arrangements in case the building must be evacuated should inform the instructor immediately, privately after class or in her or his office. Students must present a current accommodation plan from a staff member in Services for Students with Disabilities (SSWD) in order to receive accommodations in this course. Services for Students with Disabilities may be contacted by going to Goins 127, 132, 134, 135, 131 or by phone: 539-7153 or TTY 694-6429. More information is available at www.pstcc.edu/departments/swd/.

D. Other Policies:

Use of Equipment:

Any act of misuse, vandalism, malicious or unwarranted damage or destruction, defacing, disfiguring, or unauthorized use of property/equipment belonging to Pellissippi State is subject to disciplinary sanction.