

The Illinois Institute of Art-Chicago

Course Title:	GAD420 - Game Prototyping
Session/Year:	Winter 2008
Class times:	Tuesday and Thursday, 3:00 – 5:50 pm
Instructor:	Lindsay Grace
Contact info:	LGrace@aia.edu

Course description:

In this class students will create and produce a game prototype demonstrating game design principles acquired in preceding courses. The culmination of course work results in students fine tuning their design, production and collecting skills as well as scripting and storyboarding.

Course Length:	11 Weeks
Contact Hours:	66 (22 lecture and 44 lab)
Credit Value:	4 QHC
Prerequisites:	GAD408, MAA320

Competencies:

1. Create a game back story, character biographies and a concept bible.
2. Demonstrate critical thinking and creative writing skills in the production of a standardized document describing the game in detail (a game design document).
3. Exercise planning and organizational skills in the production of a written and oral description of the scope and sequence of the game development cycle.
4. Create and document marketing plan for an interactive concept and design.
5. Write proposal for the development of the game.
6. Critically evaluate video games.
7. Discuss and evaluate the strengths and weakness of various games and draw market relevant conclusions for the production of the student project.
8. Observe and document code errors in video games.
9. Identify program problem issues.
10. Create playable demo grade games
11. Produce a computer game prototype using appropriate interactive computer gaming or multimedia software.
12. Apply scripting and programming techniques for optimized play of the tool used
13. Analyze project art needs and control all files and assets.
14. Collect, create, synthesize and optimize audio, video and graphic elements for the production of the game.
15. Participate as a member of a team, collaborating with other artists and team members.
16. Develop characters that are appropriate for the game.

Methods of Instruction:	Lab and lecture
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Methods of assessment:**Participation:** 10%**Projects:**

Midterm Design and Document: 10%

Interim (early version) Design Project: 25%

Final Project: 40%

Exams and Quizzes:

Quizzes / Class Assignments / Homework: 15%

Grading System**Point Score range****Letter Grade**

93 and above

A

90-92

A-

87-89

B+

83-86

B

80-82

B-

77-79

C+

73-76

C

70-72

C-

67-69

D+

63-66

D

Below 63

F

Evaluation will be based on the following:

- Knowledge of Subject
- Originality/Creativity
- Presentation/Delivery
- Integration of competencies

Required Text:

No Required Text

Please review weekly reading and reference at <http://Aii.LGrace.com>**Suggested Reading:**Please review weekly reading and reference at <http://Aii.LGrace.com>**Supplemental materials:**Please review references at <http://Aii.LGrace.com>**Technology:**

PC Lab with NT operating system and Autodesk Maya Software.

Unreal (version to be determined)

Required Materials

- USB thumb drive or portable hard drive (for daily work)
- Recordable CDs for turning in digital assignments (3-4)
- Sketchbook, drawing pencils and drawing supplies
- Access to a PC formatted computer (no Macs)

Classroom policy and procedures:

Attendance: Professionals in the industry are expected to be on time and to meet all deadlines. With this in mind, attendance of all classes is mandatory. There are no excused absences; however, emergencies and illnesses documented may be taken into consideration. Roll will be taken at the beginning and end of each class. When late to class or missing a class, the student is responsible for getting missed information. Students with 32% accumulated absence (a total of 21 hours) will fail the course; tardiness counts toward accumulated absence.

All assignments are due at the beginning of the class unless otherwise indicated. Completed group assignments will be presented to the class and a printed copy of assignment (e.g. copy of presentation, lists, etc) will be provided to instructor. When the assignment involved source code, students will demonstrate code in front of the entire class, then provide an appropriately labeled set of files on the common drive.

Students should always keep a backup copy of their work.

No late assignments will be accepted. In this course, each assignment will build on the previous. Failure to complete the prior week's assignment will make each subsequent week harder. It is in your best interest to complete each assignment on time and to the best of your ability. Always hand in what you have, even if it does not work. **Partial credit is better than no credit at all.**

Cheating and Plagiarism will not be tolerated. Consult the school catalog for more info in the section on Academic Honesty on page 73.

Special accommodations:

The Illinois Institute of Art-Chicago special needs coordinator, Jamey DiVietro, organizes services for qualified students requiring reasonable accommodations. Notifying the Illinois Institute of Art-Chicago that you have a disability or special needs is optional and confidential. However, in order for the school to accommodate your needs, we need advance notice of the services you require. For more information please contact Jamey DiVietro at 312-777-8616.

Counseling: If during the semester you have problems with stress, just need to talk to someone or need a referral to alternative resources, contact Jamey DiVietro the school counselor. He can be reached in the Student Services offices, or by phone at the services you require. For more information please contact Jamey DiVietro at 312-777-8616 or by e-mail at divetrj@aii.edu.

Weekly Schedule

Week 01:

Course Overview

- Brainstorm ideas for final project, develop treatment
- Begin working on Game Prototype Proposal

Lecture: Intro to the use of Prototypes.
Review of effective games and prototypes.

Lab: Begin working on Production Timeline

- o Assignment1: Production Timeline
- o Assignment2: Environment, Character, and prop concept drawings.

Week 02:

Creative Design

Critique in class: All Drawings. Compromise an art style for the project.

In class: Development of game prototype ideas and initial design of game play.

Lecture:
-Creating the Design Document
-Digital Painting and the Use of drawing tablets

Lab: Begin work on Design Document and digital renders.

Assignment: Digital Paintings, Design Document Draft

Week 03:

Game Engines: Choosing and Critiquing

Lecture: Intro to game engines

Lab: Interface Design

Assignment: Interface Design

Assignment: Choose Engine

Week 04:

Check Point and Review: Design Documentation and Art Direction

Lecture: Present and review all documentation and art completed in weeks 1-3
Midterm

Lab: Begin Modeling and laying out Level Designs in Unreal.

Assignment: Level Designs and Model 1/2 assets

Present Game Design Document- (Checkpoint 1)
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Week 05:

Art Pipeline

Gather texture library: compose a texture style and color pallet.

Lab: Continue modeling (final ½ assets)

Assignment: Compile complete texture library

Week 06:

Textures and Models

Lab: Add texture to finished models.

Assignment: Completed Texturing and UV layouts for finished models

Week 07: Prototype Pipeline: Adding Art Assets
Lecture: The porting of Art Assets into your engine
In class: Begin porting Art assets into your Level(s)
Assignment: Port finished artwork into Unreal

Week 08:	Interim Review: Review Port - Checkpoint 2 Present Art-Pipeline
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Review: Finished Ports.

Lecture: Physics

Lab: begin working the addition of physics into the Unreal level.

Assignment: Add physics to your world

Week 09: The Environment: Lighting and other Visual Cues
Lab: Begin Adding environment cues to your game
Assignment: Complete lighting et al in your game

Week 10: Quality Assurance: Methodology
Lecture: QA testing
Lab: Play test the Unreal Level
Assignment: Fix any discovered problems

Week 11:	Prototype Completion – Checkpoint 3 Lab: complete prototype.
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This syllabus is subject to change with the needs of the course and at the discretion of the instructor.

Syllabus acceptance signature page

I have read the entire syllabus carefully and understand the attendance policies and class policies concerning assignments. I understand that the class runs for six hours each week and I am personally responsible to be present for each session from start to finish. I am now informed that both late arrivals and early exits are noted in the attendance log.

Name (Print) _____

Phone Number _____

Current email _____