

**STATE UNIVERSITY OF NEW YORK
COLLEGE OF TECHNOLOGY
CANTON, NEW YORK**



MASTER SYLLABUS

GAME 110 – FUNDAMENTALS OF GAME DESIGN AND DEVELOPMENT

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Updated by: Kathleen Mahoney**

**CANINO SCHOOL OF ENGINEERING TECHNOLOGY
DECISION SYSTEMS
SPRING 2018**

- A. **TITLE:** Fundamentals of Game Design
- B. **COURSE NUMBER:** GAME 110
- C. **CREDIT HOURS:** (Hours of Lecture, Laboratory, Recitation, Tutorial, Activity)
- # Credit Hours: 3
 # Lecture Hours: 3 per week
 # Lab Hours: per week
 Other: per week
- Course Length: 15 Weeks
- D. **WRITING INTENSIVE COURSE:** No
- E. **GER CATEGORY:**
- F. **SEMESTER(S) OFFERED:** Fall and Spring
- G. **COURSE DESCRIPTION:**

This course is a comprehensive examination of design processes and addresses the social implications, interactions and usability of game design. The course focuses on the principles and design decisions game designers make. The course also discusses the societal and cultural impact of gaming. Students learn the processes of game design from concept to completion.

H. **PRE-REQUISITES/CO-REQUISITES:** None

I. **STUDENT LEARNING OUTCOMES:**

II.

<u>Course Student Learning Outcome [SLO]</u>	<u>PSLO</u>	<u>GER</u>	<u>ISLO</u>
a. Introduce the design process.	PSLO 1 Present working prototypes and listen to, analyze and evaluate work and respond critically to the work of others.		1 [O] [W]
b. Examine the design process to improve an existing game, utilizing thumbnail, storyboard, proposal to go beyond the obvious and predefined.	PSOL 6 Students use the design process: Concept, Design, Prototype, Production, Testing and Revision to evaluate, and implement strategies to find a solution to a problem.		2 [CA][IA] [PS]
c. Evaluate methods of designing and producing games from concept to completion.	PSLO 3 Students will explore, evaluate, and analyze assigned projects through group critique.		4[T]
d. Research game designers and current trends in game design	PSLO 2 Research, organize, evaluate, and document gathered information for a comprehensive examination of the design process and manage a professional game design, development, and production workflow, including development roles and the specific skill sets required by each role, in order to develop a successful career path.		1 [W]
e. Apply gaming principles of narrative, dynamics and mechanics to a final project.	PSLO 7 Students understand the ethical values of teamwork, copyright infringement and plagiarism.		4[ER]

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KEY	<u>Institutional Student Learning Outcomes [ISLO 1 – 5]</u>
ISLO #	ISLO & Subsets
1	Communication Skills Oral [O], Written [W]
2	Critical Thinking <i>Critical Analysis [CA], Inquiry & Analysis [IA], Problem Solving [PS]</i>
3	Foundational Skills <i>Information Management [IM], Quantitative Lit./Reasoning [QTR]</i>
4	Social Responsibility <i>Ethical Reasoning [ER], Global Learning [GL], Intercultural Knowledge [IK], Teamwork [T]</i>
5	Industry, Professional, Discipline Specific Knowledge and Skills

J. **APPLIED LEARNING COMPONENT:** Yes X No _____

K. **TEXTS:**

Fundamentals of Game Design (3rd Edition) by Ernest Adams
 JSBN-13: 978-0321929679 ISBN-JO: 0321929675

L. **REFERENCES:**

M. **EQUIPMENT:**

PC and Macintosh Computer Lab with Microsoft Office, Unity and Adobe Creative Suite installed.

N. **GRADING METHOD:** A-F

O. **SUGGESTED MEASUREMENT CRITERIA/METHODS:**

- Projects as Assigned
- Final Project
- Exams
- Paper
- Tutorials
- Progress

- Participation

P. DETAILED COURSE OUTLINE:

1. Introduction and Syllabus, Ethics, Plagiarism and Copyright
2. Game Analysis
 - a. Game Analysis Techniques
 - b. Gameplay
 - c. Narrative
3. Game Dynamics and Mechanics
 - a. Game Mechanics Analysis
 - b. Level Design
 - c. Obstacles
 - d. Game Dynamics
 - e. Challenges
4. GUI (Graphic User Interface)
 - a. 3D Modeling
 - b. Characters
5. Reward Systems Analysis
6. Interface/Input Analysis
7. Advanced Game Systems
8. Document Recreation
9. The Business of Marketing Games
10. Testing
 - a. Game Prototyping
 - b. Game Demos
11. Final Project Presentation

Q. LABORATORY OUTLINE: None