

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



MASTER SYLLABUS

GAME 470 Emerging Gaming Applications

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**CANINO SCHOOL OF ENGINEERING TECHNOLOGY
GAME DESIGN AND DEVELOPMENT
FALL 2018**

A. **TITLE:** Emerging Gaming Applications

B. % **COURSE NUMBER:** GAME 470

C. % **CREDIT HOURS:** (Hours of Lecture, Laboratory, Recitation, Tutorial, Activity)

Credit Hours: 3

Lecture Hours: 2 per week

Lab Hours: per week

Other: (1) two-hour recitation per week

Course Length: 15 Weeks

D. **WRITING INTENSIVE COURSE:** No

E. **GER CATEGORY:**

F. **SEMESTER(S) OFFERED:** Spring

G. **COURSE DESCRIPTION:**

This course explores features of the future of gaming, such as immersive gaming, virtual reality, computer graphics, real-time visualization, secondary screens for gaming, smart-glass, cross-play, open-source gaming, game development, augmented reality, as well as mobile gaming and cloud gaming. Through learning the course, the students will have a big picture of the features of the future gaming and the trend of gaming industry development.

H. **PRE-REQUISITES/CO-REQUISITES:**

a. Pre-requisite(s): Junior/Senior level in GAME Design Program

b. Co-requisite(s):

c. Pre- or co-requisite(s):

I. **STUDENT LEARNING OUTCOMES:**

II. <u>Course Student Learning Outcome [SLO]</u>	<u>PSLO</u>	<u>GER</u>	<u>ISLO</u>
a. Demonstrate knowledge of new digital technology development in the gaming industry.	PSLO 5 Synthesize trends, theories, movements and advancements in technology in the development of new ideas. PSLO 4 Recognize the underlying principles guiding the relevant visual, audio, interactive, and narrative aesthetics of an animation or a game		2[IA]
b. Create new gaming features, such as immersive gaming, smart-glass and cloud gaming	PSLO 8 Demonstrate an understanding of recent principles of game design, including, programming, narrative, character and level design.		5
c. Apply advanced technologies of future gaming development	PSLO 8 Demonstrate an understanding of recent principles of game design, including, programming, narrative, character and level design.		5

KEY	<u>Institutional Student Learning Outcomes [ISLO 1 – 5]</u>
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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:** None

L. **REFERENCES:**

M. **EQUIPMENT:**

L. Mac or PC Computer Lab with Microsoft Office, Unity, Visual Studio, and NVidia graphics hardware installed.

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

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

- Assignments
- Projects
- Quizzes
- Participation

P. **DETAILED COURSE OUTLINE:**

1. ! Introduction
 - a. ! Introduction to the high-level overview of future gaming as well as related hardware and software
 - b. ! Introduction to the Computer Lab and related computer graphics support equipment
 - c. ! Syllabus
2. ! Introduce the speedy advancement of digital technology, especially in gaming industry
3. ! Explore features of the future of gaming
4. ! Immersive gaming and virtual reality
5. ! Secondary screens for gaming
6. ! Smart-glass
7. ! Cross-play
8. ! Open-source gaming
9. ! Game development
10. Augmented reality
11. Cloud gaming
12. The features of the future gaming

13. Trends of gaming industry development
14. Gaming software package review
15. Final Project Due

Q. LABORATORY OUTLINE:
None