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

MASTER SYLLABUS

GAME 330 – Advanced Modeling and Texturing

CIP Code: 50.0411

Created by: Morgan Hastings
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School: School: Canino School of Engineering Technology
Department: GMMD
Implementation Semester/Year: FALL 2026

A. TITLE: Advanced Modeling & Texturing

B. COURSE NUMBER: GAME 330

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

# Credit Hours per Week	**3**
# Lecture Hours per Week	**3**
# Lab Hours per Week	
Other per Week	

D. WRITING INTENSIVE COURSE:

Yes	
No	X

E. GER CATEGORY:

Does course satisfy a GER category(ies)? If so, please select all that apply.

[1-2] Communication	
[3] Diversity: Equity, Inclusion & Social Justice	
[4] Mathematics & Quantitative Reasoning	
[5] Natural Science & Scientific Reasoning	
[6] Humanities	
[7] Social Sciences	
[8] Arts	
[9] US History & Civic Engagement	
[10] World History & Global Awareness	
[11] World Languages	

F. SEMESTER(S) OFFERED:

Fall	X
Spring	
Fall and Spring	

G. COURSE DESCRIPTION:

GAME 330 introduces modeling techniques not covered in GAME 240 and GAME 230, as well as bringing in practical work in the industry standard texturing program Substance Painter. Students work with “Hard Surface modeling” get more proficient at UVing and learn how to work within a seven week production schedule from prototyping to creating an internal “hallway system” in Maya and Unreal.

H. PRE-REQUISITES: GAME 230 and GAME 240
CO-REQUISITES:

I. STUDENT LEARNING OUTCOMES:

Course Student Learning Outcome [SLO]	Program Student Learning Outcome [PSLO]	GER	ISLO & Subsets
a. . Develop game assets using professional gaming software	**PSLO 8** Demonstrate an understanding of recent principles of game design, including, programming, narrative, character and level design.		5
b. Demonstrate proper testing and troubleshooting techniques.	**PSLO 4** Recognize the underlying principles guiding the relevantvisual, audio, interactive, and narrative aesthetics of an animation or a game		2 *[IA]*
c. Apply gaming principles of visual narrative dynamics and mechanics to a final project	**PSLO 8** Demonstrate an understanding of recent principles of game design, including, programming, narrative, character and level design		5
d.			
e.			

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

J. APPLIED LEARNING COMPONENT:

Yes	X
No	

If yes, select [X] one or more of the following categories:

Nonclinical Practicum	X	Community Service	
Internship		Civic Engagement	
Clinical Practicum		Creative Works/Senior Project	
Practicum		Research	
Service Learning		Entrepreneurship [program, class, project]	

K. TEXTS: None

L. REFERENCES: PDF handouts

M. EQUIPMENT:

PC Computers with Autodesk Maya, Substance painter, Photoshop, and Unreal editor

N. GRADING METHOD: A-F

O. SUGGESTED MEASUREMENT CRITERIA/METHODS:

- Assignments
- Projects
- Participation

P. DETAILED COURSE OUTLINE:

I. Mudbox and 3D Sculpting techniques
II. Hard surface modeling
   a. Subdivs
   b. Holding edges
   c. Modeler's toolkit and tricks
III. Substance painter
   a. Layers
   b. Materials
   c. Exporting
IV. Hallway systems
   a. Prototyping
   b. Working within a set schedule
   c. Setting up
   d. Modeling
   e. Exporting to unreal
   f. Piecing it together

Q. LABORATORY OUTLINE: NA