

CompuScholar, Inc.
Alignment to North Carolina TS31
"Game Art and Design" Course Standards

North Carolina Course Details:

Course Name:	Game Art and Design
Primary Cluster:	Technology Engineering and Design
Course Code(s):	TS31
Credit:	1
Grade Level:	9th-12th
State Standards Link:	North Carolina CTE Standards NCCTE.TS31

CompuScholar Course Details:

Course Title:	Unity Game Programming
Course ISBN:	978-0-9887070-7-8
Course Year:	2019

Note 1: Citation(s) listed may represent a subset of the instances where objectives are met throughout the course.

Note 2: Citation(s) for a "Lesson" refer to the "Lesson Text" elements and associated "Activities" within the course, unless otherwise noted. The "Instructional Video" components are supplements designed to introduce or re-enforce the main lesson concepts, and the Lesson Text contains full details.

Course Description

This course introduces students video game design techniques and programming skills using the Unity IDE. Student learn basic input management, sprites, collision detection, 2D physics and many other gaming topics. The course covers C# scripting skills up to and including Object-Oriented Programming (OOP).

Course Standards

NCCTE.TS31.01.00 - Unit 1: Understand basic history of game design.	CITATION(S)
NCCTE.TS31.01.01 - Recall the general history and development of gaming, non-electronic and electronic.	Supplemental Chapter 2
NCCTE.TS31.01.02 - Explain how technology and ethics have affected game development.	Supplemental Chapter 1
NCCTE.TS31.01.03 - Summarize the current state and future trends in game development.	N/A

NCCTE.TS31.02.00 - Unit 2: Analyze job readiness in the game industry.	CITATION(S)
NCCTE.TS31.02.01 - Recognize the skills necessary to work in the game industry.	Chapters 14, 26 Suppl. Ch. 3, Lessons 5, 7

NCCTE.TS31.02.02 - Analyze team structure in game design.	Chapters 14, 26 Suppl. Ch. 3, Lessons 5, 7
NCCTE.TS31.02.03 - Execute the documents necessary to enter the game industry.	Chapters 13, 14, 26 Suppl. Ch. 3, Lessons 5, 7

NCCTE.TS31.03.00 - Unit 3: Apply game culture and game play.	CITATION(S)
NCCTE.TS31.03.01 - Recognize social game interaction.	N/A
NCCTE.TS31.03.02 - Summarize formal game elements.	Chapter 12
NCCTE.TS31.03.03 - Categorize game theory and genres.	Suppl. Chapter 2, Lesson 1
NCCTE.TS31.03.04 - Execute sample games from selected genres.	N/A

NCCTE.TS31.04.00 - Unit 4: Produce Game prototypes.	CITATION(S)
NCCTE.TS31.04.01 - Exemplify game conceptualization including brain storming, sketching, and storyboarding.	Chapter 13, Lessons 1 - 2 Chapters 14, 26
NCCTE.TS31.04.02 - Execute a game design document.	Chapter 13, Lesson 4 Chapters 14, 26
NCCTE.TS31.04.03 - Create an original board game.	Chapters 14, 26
NCCTE.TS31.04.04 - Evaluate the board game design using game design parameters.	N/A

NCCTE.TS31.05.00 - Unit 5: Create 3D assets used in games.	CITATION(S)
NCCTE.TS31.05.01 - Execute 3D modeling including polygonal modeling.	N/A
NCCTE.TS31.05.02 - Execute 3D textures and maps.	N/A
NCCTE.TS31.05.03 - Produce two related game levels and a 3D character.	N/A

NCCTE.TS31.06.00 - Unit 6: Apply 2D game design.	CITATION(S)
NCCTE.TS31.06.01 - Recognize a basic 2D game engine interface and correct terminology.	Chapters 3, 4, 5
NCCTE.TS31.06.02 - Illustrate 2D game sprites, actions, events, and sounds.	Chapters 3, 4, 5, 18

NCCTE.TS31.06.03 - Execute 2D games that represent different genres.	Multiple 2D projects throughout the course
NCCTE.TS31.06.04 - Illustrate 2D game levels.	Chapter 23

NCCTE.TS31.07.00 - Unit 7: Create 2D games.	CITATION(S)
NCCTE.TS31.07.01 - Summarize the development process of 2D game design.	Chapter 25
NCCTE.TS31.07.02 - Produce original 2D backgrounds and sprites.	Chapter 23
NCCTE.TS31.07.03 - Produce an original 2D game using existing game theory and design.	Multiple 2D projects throughout the course
NCCTE.TS31.07.04 - Critique 2D games.	N/A