

CompuScholar, Inc.

Alignment to Florida "Game & Simulation Foundations" Course Standards

Florida Course Details:

Course Name:	Game & Simulation Foundations (2020-2021)
Course Code(s):	8208110
Credit:	1
State Standards Link:	http://www.fldoe.org/core/fileparse.php/19869/urlt/8208300-2021.rtf

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 is designed to provide an introduction to game and simulation concepts and careers, the impact game and simulation has on society and industry, and basic game/simulation design concepts such as rule design, play mechanics, and media integration. This course compares and contrasts games and simulations, key development methodologies and tools, careers, and industry-related information. This course also covers strategies, processes, and methods for conceptualizing a game or simulation application; storyboarding techniques; and development tools.

Course Standards

15.0 - Identify commonly used art and animation production tools in the game design industry.– The student will be able to:	CITATION(S)
15.01 Identify, categorize and discuss art and animation tools commonly used in game design.	Chapter 17 Chapter 23

16.0 - Understand intellectual property rights, copyright laws and plagiarism as it applies to creative assets.– The student will be able to:	CITATION(S)
16.01 Understand the use of "Fair Use and Fair Dealing".	Supplemental Chapter 1, Lesson 2
16.02 Understand the transfer and licensing of creative works.	Supplemental Chapter 1, Lesson 2
16.03 Understand the use of "exclusive rights" to intellectual creations.	Supplemental Chapter 1, Lesson 2

16.04 Demonstrate the use of digital watermarking.	N/A
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17.0 - Explain the importance of employability skill and entrepreneurship skills as it relates to game/simulation development.– The student will be able to:	CITATION(S)
17.01 Identify and demonstrate positive work behaviors needed to be employable.	Chapter 25, Lesson 3
17.02 Maintain a career portfolio to document knowledge, skills, and experience.	Students will create multiple game projects
17.03 Evaluate and compare employment opportunities that match career goals.	Supplemental Chapter 3, Lesson 5
17.04 Identify and exhibit traits for retaining employment.	Supplemental Chapter 3, Lesson 5

18.0 - Identify tools and software commonly used in game development.– The student will be able to:	CITATION(S)
18.01 Identify and discuss the popular game development tools currently used in the industry.	Chapter 1, Lessons 1 - 2
18.02 Identify and discuss popular gaming engines.	Chapter 1, Lesson 1
18.03 Identify and discuss popular world building tools.	Chapter 1, Lessons 1 - 3

19.0 - Investigate career opportunities in the game industry.– The student will be able to:	CITATION(S)
19.01 Describe job requirements for a variety of occupations within the game development industry.	Supplemental Chapter 3, Lesson 5
19.02 Identify current employment trends and career opportunities in the game industry.	Supplemental Chapter 3, Lesson 5

20.0 - Demonstrate research and information fluency.– The student will be able to:	CITATION(S)
20.01 Play games to research and collect game play data.	N/A
20.02 Evaluate, analyze and document game styles and playability.	Chapter 13, Lessons 1 - 3
20.03 Determine the dramatic elements in games, including kinds of fun, player types and nonlinear storytelling.	Chapter 13, Lessons 1 - 3

21.0 - Demonstrate an understanding of the techniques used to evaluate game mechanics, game play, flow, and game design.– The student will be able to:	CITATION(S)
21.01 Test and analyze games to determine the quality of rules, interfaces, navigation, performance, play, artistry and longevity in design and structure.	Chapter 13, Lessons 1 - 3
21.02 Research and evaluate the game analysis techniques used by the video game industry.	N/A
21.03 Identify the key elements in a game and make intelligent judgments about whether the game succeeded or failed in its objectives.	Chapter 13, Lessons 1 - 3
21.04 Evaluate professional reviews and write a critical analysis of a current video game.	N/A

22.0 - Explore the methods used to create and sustain player immersion.– The student will be able to:	CITATION(S)
22.01 Research and define the term “player immersion”.	Chapter 13, Lesson 3
22.02 Explore and explain the factors that create player immersion in a game.	Chapter 13, Lesson 3
22.03 Examine popular games and explain the methods each game uses to increase player immersion.	N/A

23.0 - Describe the game development life cycle.– The student will be able to:	CITATION(S)
23.01 Identify steps in the pre-production process including the proof of concept and market research.	Chapter 13, Lessons 1 - 2 Chapter 25, Lesson 1
23.02 Describe the iterative prototyping process – Alpha, Beta, RTM.	Chapter 25, Lesson 1
23.03 Determine platform, technology and scripting requirements.	Chapter 13, Lesson 4
23.04 Implement techniques of scenario development, levels, and missions.	Chapter 13, Lessons 1 - 3 Chapter 20
23.05 Discuss game testing requirements and methods.	Chapter 11
23.06 Identify and describe maintenance, upgrade and sequel issues.	Chapter 25, Lesson 1

24.0 - Demonstrate the professional level of written and oral communication required in the game development industry.– The student will be able to:	CITATION(S)
24.01 Use listening, speaking, telecommunication and nonverbal skills and strategies to communicate effectively with supervisors, co-workers, and customers.	Chapters 14 and 26 Chapter 25, Lessons 2 - 3

24.02 Organize ideas and communicate oral and written messages appropriate for the game development industry environment.	Chapter 13, Lesson 4 Chapters 14 and 26 Chapter 25, Lessons 2 - 3
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25.0 - Understand the core tasks and challenges that face a video game design team.– The student will be able to:	CITATION(S)
25.01 Identify and define the roles and responsibilities of team members on a video game design team.	Chapter 25, Lesson 3 Supplemental Chapter 3, Lesson 1
25.02 Explore and discuss methods of communications and scheduling for design teams.	Chapter 25, Lesson 1 Supplemental Chapter 3, Lesson 1

26.0 - Demonstrate leadership and teamwork skills needed, as it relates to game/simulation development, to accomplish team goals and objectives.– The student will be able to:	CITATION(S)
26.01 Employ leadership skills to accomplish organizational goals and objectives.	Chapters 14 and 26
26.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks.	Chapters 14 and 26
26.03 Conduct and participate in meetings to accomplish work tasks.	Chapters 14 and 26
26.04 Employ mentoring skills to inspire and teach others.	Chapters 14 and 26