Perris Union High School District
Course of Study

A. COURSE INFORMATION

Course Title:
(limited to 34 characters with spaces in Infinite Campus)

RCOE Advanced Game Scripting

☑ New
☐ Revised

If revised, the previous course name if there was a change

Transcript Course Code/Number:

(To be assigned by Educational Services if it's a new course)

CREDIT TYPE EARNED:	CALPADS CODE:
VAPA or Elective	8142

Subject Area:
☐ Social Science
☐ English
☐ Mathematics
☐ Laboratory Science
☐ World Languages
☑ Visual or Performing Arts
☐ College Prep Elective
☐ Other

Is this classified as a Career Technical Education course?
☑ Yes
☐ No

If yes, which pathway does this course align to?
Pathway Name:

Games & Simulation

CTE CDE Code: 175 Capstone

Grade Level(s)
☐ MS
☐ HS
☐ 5
☐ 6
☐ 7
☐ 8
☐ 9
☐ 10
☐ 11
☑ 12

Was this course *previously approved by UC* for **PUHSD?**
☐ Yes
☑ No
(Will be verified by Ed Services)

Which A-G Requirement does/will this course meet?

F - Elective (Pending)

Credential Required to teach this course:
To be completed by Human Resources only.

CTE: Information and Communication Technologies
Single Subject: Business, Industrial and Technology Education

Signature	Date
	1/22/2024

Submitted by: Dian Martin
Site: Student Services Center
Date: 1/18/2024
Email: dian.martin@puhsd.org

Unit Value/Length of Course:
☐ 0.5 (half-year or semester equivalent)
☑ 1.0 (one-year equivalent)
☐ 2.0 (two-year equivalent)
☐ Other:

Approvals	Name/Signature	Date
Director of Curriculum & Instruction		1/24/2024
Asst. Superintendent of Educational Services		
Governing Board		

Course Instruction Plan (CIP)
Development Template

Course Title	RCOE Advanced Game Scripting		
Engaging Title	A Final Journey into Multimedia, Design Patterns, and Efficiency		
Essential Question	How can advanced game scripting concepts enhance the creation, efficiency, and immersive experience of digital games?		
Pathway Title	Information and Communication Technologies (ICT) - Games and Simulation	**CALPADS Pathway Code**	175 - Games and Simulations
CALPADS Course Sequence Code	8142 Advanced Games & Simulation (Capstone)	**Course Level**	☐ Intro ☐ Con ☒ Cap ☐ App Con
Pathway Duration	☐ 2-Yr ☐ 3-Yr ☒ 4-Yr	**Grade Level**	☐ 9 ☐ 10 ☐ 11 ☒ 12
Total Hours 165	**Classroom** 165	**CC/CVE**	N/A
RCOE Course Code	INF-175-04-03	**Transcript Abbrev.**	INF-175-04-03
A-G	F *(Pending)*	**Date Approved**	
Articulated	☐ Yes ☐ No	**Institution**	RCC Norco
Articulated Course Title	GAM-4B : Advanced Game Scripting Discipline: Multimedia (Game Development) Cross-listed Discipline: Computer Information Systems		

Course of Study/Pathway

Introduction	Systems Programming I: Fundamentals of Programming *(separate pathway; prerequisite)*
Concentrator	Intermediate Game Scripting *(Articulated with GAM-4A Game Scripting)*
Capstone	Advanced Game Scripting
Applied Concentrator	Systems Programming II: Python Programming *(separate pathway; recommended)*

O*Net Codes

Code	15-1253.00 ⚙	Title	Software Quality Assurance Analysts and Testers
Code	15-1251.00	**Title**	Computer Programmer
Code	15-1252.00 ⚙	**Title**	Software Developer
Code	15-1255.01 ⚙	**Title**	Video Game Designers
Code	11-1021.00	**Title**	General and Operations Manager
Code	11-1011.00	**Title**	Chief Executives

Course Description

RCOE Advanced Game Scripting allows students to work in teams to develop games or simulations. Students will learn skills such as storyboarding, plot, flow, and using functions. Learning how to implement standard game/simulation strategy and rules of play as well as integrating mixed media appropriate to the game design/simulation will be included. Other topics include design specifications, delivery, rules of play, navigation functionality, scoring, and other special features.

Course Overview/Narrative

Throughout this course students will work in teams, channeling their creativity to master the art of storytelling, storyboarding, plot construction, and narrative flow. Proficiency in scripting techniques, with a focus on using functions to enhance interactivity, will be a cornerstone of this course. Students will explore the implementation of standard game design, emphasizing the creation and application of rules of play for an optimal user experience. The integration of mixed media elements will be emphasized to add depth and richness to game design. Design specifications, encompassing aesthetics, functionality, and user engagement, will be thoroughly addressed. The course will also cover effective delivery mechanisms, navigation functionality, scoring systems, and the incorporation of special features to elevate the overall gaming experience. Students will also be able to put their computer programming knowledge towards business, science, and mathematics.

Course Theme

Crafting immersive games through collaborative creativity, advanced scripting, and strategic design.

Textbooks

Textbooks			
Title # 1	Unity 3D Game Development by Example Beginner's Guide	**Edition/Year**	2011
Author(s)	Creighton, Ryan Henson	**Publisher**	Packt Publishing
Website	http://shadowfun.de/unity/tutorials/unity3d_game_dev_beginners_guide.pdf		
Title # 2	Introduction to Game Design, Prototyping and Development	**Edition/Year**	2017
Author(s)	Gibson, Jeremy	**Publisher**	2nd Addison-Wesley,
Website	Pearson Publishing		

Methods of Instruction:

Methods of instruction used to achieve student learning outcomes may include, but are not limited to, the following activities:

- Lecture covering concepts in game engine scripting and middleware usage.
- Demonstrations of hands on application of lecture topics centered around project oriented programming tasks.
- Student oral, visual presentation and demonstration of projects that are in progress or have reached completion.
- Critical analysis and deconstruction of existing digital games which employ game engine scripting techniques.
- Lectures/presentations/demonstrations which both disseminate information and pose problems in game design.
- Guest speakers/lecturers - invited to class to discuss topics in the field of simulation and computer game development.
- Discussion, presentation and detailed examination of successful games including genres, strategies, storytelling, level design, gameplay, user interface design and related business aspects.
- Showing films or demonstrating video and online games, distributing handouts, and/or using electronic or computer-based media in order to reinforce understanding of concepts related to simulation and computer game development.
- Cooperative/collaborative learning tasks and activities designed to assist students in activating, simulating, and acting upon theoretical and applied concepts in game design.
- Individual conferences in order to evaluate and advise students on original gaming projects.
- Computer-assisted and/or web-enhanced instruction which reinforces the course content.

Methods of Evaluation:

Students will be evaluated for progress in and/or mastery of student learning outcomes using methods of evaluation which may include, but are not limited to, the following activities:

- Presentation consisting of oral presentation, written proposal and playable level or game demonstration.
- Final project consisting of oral presentation, final documentation and complete game demonstration.
- Critical analysis of various reviews pertaining to game engine scripting and core components of game engine development.
- Submission of code created and required as homework and classwork.
- Midterm and Final Examinations to assess overall skill and proficiency in fundamental game engine scripting concepts.
- Quizzes/examinations designed to assess students' ability to recall, critically analyze and apply key concepts and course content.
- Extensive research and writing assignments related to specific genres of computer games and presentation of findings to the class.
- Critical analysis of various digital and non-digital games.
- Presentation of oral reports or preparation of written reports on a specific game's design.
- Student teams working on the original design and development of a Pitch Document and prototyping processes.
- Participation and regular attendance as required by the instructor to ensure progress in mastering the course content and participation in collaborative learning projects.

- Oral presentations or written reports on current events in the video game industry.
- Final examination designed to assess students' mastery of the essential concepts explored in the course.

Units of Instruction

Unit 1 Title	Scripting in Game Development
Unit 1 Engaging Title	Scripting Symphony: Crafting Game Experiences through Engine Mastery
Unit 1 Essential Question	How does mastery of game engine scripting lay the foundation for crafting immersive gaming experiences, and how do the elements of workflow, architecture, and design principles harmonize in this creative process?
Unit 1 Description (3-5 Sentences)	This unit lays the groundwork for game development, covering fundamental concepts in workflow, engine architecture, and design patterns. Students will understand the importance of an efficient development pipeline and learn to establish strong relationships between assets and scripts, and explore in-depth how a game engine operates.
Unit 1 Overview/Narrative	Exploration into the heart of game development, focusing on the intricacies of game engine scripting. Students journey through the foundations of scripting languages, understanding syntax, and semantics. The unit offers a panoramic view of game engines, introducing incorporated frameworks and the essential role of an Integrated Development Environment. Discussions on gameplay and analysis of game development platforms pave the way for students to appreciate the seamless relationship between workflow, architecture, and design principles.
Unit 1 Theme	Crafting Interactive Narratives
Unit 1 Key Assignment	Task: Engage in a critical analysis and deconstruction of an existing digital game that prominently employs game engine scripting techniques. The objective is to dissect the core components of game engine development within the chosen game. This analysis should encompass an in-depth examination of scripting choices, design patterns, and the integration of essential game engine features. - Game Selection: Students should choose a digital game that has gained recognition for its innovative use of game engine scripting. Students should consider factors such as player engagement, industry impact, and critical acclaim. - Analysis Framework: Develop a structured framework for the analysis, focusing on key aspects such as scripting methodologies, design patterns, and the utilization of game engine features. Students should consider how the game's scripting contributes to its overall experience. - Deconstruction: Students should systematically deconstruct the chosen game, breaking down its components to unveil the role, and impact of game engine scripting. Students should investigate how the scripting enhances gameplay mechanics, contributes to the narrative, and influences user interaction. - Comparative Analysis: Students should compare their findings with industry standards and best practices in game engine scripting. Students should evaluate the effectiveness of the chosen game's approach and identify areas of innovation or improvement. - Documentation: In a well-documented report, students should present their critical analysis. Students should include visual aids, code snippets, and relevant examples to illustrate their observations.

	Students should clearly articulate the strengths and weaknesses of the game's scripting implementation.
Unit 1 Pathway Standard(s)	**D1.0** Identify and describe critical game and simulation studies, the resulting societal impact, and the management, industry, and career requirements. **D2.0** Demonstrate an understanding of game and simulation analysis, design, standard documentation, and development tools.
Unit 1 Pathway – Performance Indicator(s)	**D1.5** Describe the business model commonly used in the game development industry. **D2.1** Demonstrate an understanding of the vocabulary for discussing games and play by listing and describing the general procedure and requirements of game and simulation design. **D2.4** Understand the general principles of storytelling and the use of storyboarding in game design.
Unit 1 Anchor Standard(s)	**2.0 Communications** Acquire and accurately use Information and Communication Technologies sector terminology and protocols at the career and college readiness level for communicating effectively in oral, written, and multimedia formats. **4.0 Technology** Use existing and emerging technology, to investigate, research, and produce products and services,including new information, as required in the Information and Communication Technologies sector workplace environment. **5.0 Problem Solving and Critical Thinking** Conduct short, as well as more sustained, research to create alternative solutions to answer a question or solve a problem unique to the Information and Communication Technologies sector using critical and creative thinking, logical reasoning, analysis, inquiry, and problem-solving techniques.
Unit 1 Anchor – Performance Indicators	**2.5** Communicate information and ideas effectively to multiple audiences using a variety of media and formats. **2.6** Advocate and practice safe, legal, and responsible use of digital media information and communications technologies. **4.2** Employ technology-based communications responsibly and effectively to explore complex systems and issues. **5.4** Interpret information and draw conclusions, based on the best analysis, to make informed decisions. **5.5** Use a logical and structured approach to isolate and identify the source of problems and to resolve problems.
Unit 1 Curricular Resources	PART I Game Design and Paper Prototyping - Chapter 1 Thinking Like a Designer (Introduction to Game Design, Prototyping, and Development, 3rd edition)

Unit 1 Total Hours	20	**Classroom**	20	**CC/CVE**	0

Unit 2 Title	Spatial Mastering in Game Scripting
Unit 2 Engaging Title	Spatial Dynamics Unleashed: Crafting Immersive Game Worlds
Unit 2 Essential Question	How can mastering spatial mathematics & coordinates elevate the immersive quality and realism of virtual game environments?
Unit 2 Description (3-5 Sentences)	Unit 2 delves into the spatial aspects of game scripting, emphasizing Transforms, Coordinate Systems, Vectors, Quaternions, and Physics. Students will explore the mathematical foundations crucial for creating immersive and dynamic game environments. The unit focuses on understanding how to manipulate and transform objects within a game space, ensuring a solid grasp of the spatial principles that underlie sophisticated game mechanics using C# scripting.
Unit 2 Overview/Narrative	From mastering the intricacies of coordinate systems to harnessing the power of vectors for precise calculations, students will unlock the secrets of transforming virtual worlds. The exploration of quaternions introduces students to advanced techniques for handling rotations, while the integration of physics principles adds a layer of realism to game dynamics.
Unit 2 Theme	Spatial Manipulation and Control
Unit 2 Key Assignment	Students will design and implement a 3D game environment that leverages the spatial concepts covered in the unit. This could involve creating a dynamic scene with moving objects, implementing realistic physics-based interactions, and demonstrating a deep understanding of coordinate transformations.
Unit 2 Pathway Standard(s)	**D2.0** Demonstrate an understanding of game and simulation analysis, design, standard documentation, and development tools. **D7.0** Acquire and apply appropriate programming skills for rendering a single player or multi user game or simulation project, including program control, conditional branching, memory management, scorekeeping, timed event strategies, and implementation issues.
Unit 2 Pathway – Performance Indicator(s)	**D2.10** Make informed decisions about game physics: how the game world works, how the players interact with the game world, and how the players interact with one another. **D7.2** Plan program design and evaluate assigned game programming tasks. **D7.3** Code and test programs. **D7.6** Implement multimedia programming.
Unit 2 Anchor Standard(s)	**5.0 Problem Solving and Critical Thinking** Conduct short, as well as more sustained, research to create alternative solutions to answer a question or solve a problem unique to the Information and Communication Technologies sector using critical and creative thinking, logical reasoning, analysis, inquiry, and problem-solving techniques. **10.0 Technical Knowledge and Skills** Apply essential technical knowledge and skills common to all pathways in the Information and Communication Technologies sector, following procedures when carrying out experiments or performing technical tasks.
Unit 2 Anchor – Performance Indicators	**5.1** Identify and ask significant questions that clarify various spatial points of view to solve problems. **5.11** Apply spatial concepts, including vectors and quaternions, to deconstruct and solve complex problems in game scripting. **10.10** Manage files in a hierarchical system.

	10.11 Know multiple ways in which to transfer information and resources (e.g., text, data, sound, video, still images) between software programs and systems.				
Unit 2 Curricular Resources	Unity 3D Game Development by Example Beginner's Guide				
Unit 2 Total Hours	20	**Classroom**	20	**CC/CVE**	0

Unit 3 Title	Deep Dive into Collision
Unit 3 Engaging Title	Collisions Unveiled: Crafting Interactive Game Worlds
Unit 3 Essential Question	How can mastering collision detection and event handling enhance the interactivity and responsiveness of virtual game environments?
Unit 3 Description (3-5 Sentences)	Embark on a captivating exploration of collision detection, collision volumes, triggers, and event handling in the dynamic world of game development. In this unit, students dive into the intricacies of crafting immersive virtual environments where collisions shape the very essence of gameplay. Through hands-on projects, students apply theoretical knowledge to design scenarios that leverage collision detection techniques and event handling mechanisms, gaining a profound understanding of how these elements contribute to responsive and interactive gaming experiences. This unit empowers students to unlock the full potential of their game worlds, fostering creativity and proficiency in game scripting.
Unit 3 Overview/Narrative	Unit 3 delves into the intricacies of collision detection, collision volumes, triggers, and event handling. Students will explore the fundamental concepts that govern interactions within virtual spaces, gaining a deep understanding of how these elements contribute to immersive gameplay experiences.
Unit 3 Theme	Dynamic game worlds where collisions are not just obstacles but integral elements shaping user experiences.
Unit 3 Key Assignment	Students will design and implement a game scene that leverages collision detection, collision volumes, triggers, and event handling to enhance user interactivity and responsiveness. This hands-on project will allow students to apply theoretical knowledge to practical, engaging gameplay.
Unit 3 Pathway Standard(s)	**D5.0** Integrate music, sound, art, and animation as it applies to the environmental design of the game/simulation.
Unit 3 Pathway – Performance Indicator(s)	**D5.1** Understand the methodologies for integrating digital media into a game or simulation. **D5.3** Understand the general concepts of environmental design. **D5.4** Describe how environmental design is used in conjunction with game level design.
Unit 3 Anchor Standard(s)	**4.0 Technology** Use existing and emerging technology, to investigate, research, and produce products and services, including new information, as required in the Information and Communication Technologies sector workplace environment. **5.0 Problem Solving and Critical Thinking** Conduct short, as well as more sustained, research to create alternative solutions to answer a question or solve a problem unique to the Information and Communication Technologies sector using critical and creative thinking, logical reasoning, analysis, inquiry, and problem-solving techniques.
Unit 3 Anchor – Performance Indicators	**4.3** Use information and communication technologies to synthesize, summarize, compare, and contrast collision and event handling techniques. **5.11** Apply collision detection and event handling concepts to deconstruct and solve complex problems in game scripting.
Unit 3 Curricular Resources	Unity 3D Game Development by Example Beginner's Guide

Unit 3 Total Hours	20	**Classroom**	20	**CC/CVE**	0

Unit 4 Title	Game Management and Design
Unit 4 Engaging Title	Mastering the Game: Strategies in Management and Design
Unit 4 Essential Question	How can strategic decisions in game management, scoring, and victory conditions elevate the player experience and contribute to the overall success of a game?
Unit 4 Description (3-5 Sentences)	Students delve into the complexities of game management, scoring systems, level transitions, and determining victory conditions. This unit provides a comprehensive exploration of the nuanced decisions that define a game's structure, challenging students to master the intricacies of effective game design.
Unit 4 Overview/Narrative	From seamlessly transitioning between levels to implementing scoring systems that captivate players, students will delve into the strategic choices that underpin successful game design. The unit culminates in a quest to determine victory conditions, providing students with a holistic understanding of the game development process.
Unit 4 Theme	Strategic Mastery in Game Design
Unit 4 Key Assignment	Students will create a comprehensive game design document outlining rules, scoring mechanisms, level transitions, and victory conditions for a unique game concept. Students will then create a demo prototype reflecting their premise outlined in their document.
Unit 4 Pathway Standard(s)	**D3.0** Create a working game or simulation individually or as part of a team. **D7.0** Acquire and apply appropriate programming skills for rendering a single player or multi user game or simulation project, including program control, conditional branching, memory management, scorekeeping, timed event strategies, and implementation issues.
Unit 4 Pathway – Performance Indicator(s)	**D3.1** Create a storyboard describing the essential elements, plot, flow, and functions of the game/simulation. **D3.2** Create a design specification document to include interface and delivery choices, rules of play, navigation functionality, scoring, media choices, start and end of play, special features, and development team credits. **D3.3** Using simple game development tools, create a game or simulation. **D3.4** Present the game or simulation. **D7.2** Plan program design and evaluate assigned game programming tasks. **D7.3** Code and test programs. **D7.4** Create and maintain documentation and perform program maintenance.
Unit 4 Anchor Standard(s)	**4.0 Technology** Use existing and emerging technology, to investigate, research, and produce products and services, including new information, as required in the Information and Communication Technologies sector workplace environment. **5.0 Problem Solving and Critical Thinking** Conduct short, as well as more sustained, research to create alternative solutions to answer a question or solve a problem unique to the Information and Communication Technologies sector using critical and creative thinking, logical reasoning, analysis, inquiry, and problem-solving techniques.

Unit 4 Anchor – Performance Indicators	**4.3** Use information and communication technologies to synthesize, summarize, compare, and contrast information from multiple sources. **5.4** Interpret information and draw conclusions, based on the best analysis, to make informed decisions. **5.5** Use a logical and structured approach to isolate and identify the source of problems and to resolve problems. **5.6** Know the available resources for identifying and resolving problems.				
Unit 4 Curricular Resources	Introduction to Game Design, Prototyping, and Development, 3rd edition Unity 3D Game Development by Example Beginner's Guide				
Unit 4 Total Hours	30	**Classroom**	30	**CC/CVE**	0

Unit 5 Title	The Final Project
Unit 5 Engaging Title	Crafting a Masterpiece
Unit 5 Essential Question	How can a cohesive team leverage their collective skills to create an immersive and innovative game or simulation?
Unit 5 Description (3-5 Sentences)	As the final challenge of the course, students will form teams and immerse themselves in the complete game development lifecycle. Students will navigate the complexities of integrating scripting,with all that was previously taught and explore advanced systems in place for scripting in-engine such as raycasts, navigation meshes, state machines, and version control. Emphasis will be placed on the adoption of source control practices and team communication using industry standard practices, ensuring a smooth collaborative workflow.
Unit 5 Overview/Narrative	Game Development Project from scratch
Unit 5 Theme	Crafting Collaborative Virtual Realms
Unit 5 Key Assignment	Teams will present their fully developed game or simulation, showcasing how they applied the principles learned throughout the course. The presentation should highlight scripting techniques, strategic game management, innovative design, and the seamless integration of source control for effective collaboration. The final will include the process of planning, documentation, design, development, testing, implementation, analysis, and maintenance. The final product will be a playable game or simulation utilizing all topics covered in class units, and demonstrates flow control which would provide the end-user with a pleasurable gaming experience. Students will then add this project to an industry-standard portfolio (*Github, Itch.io, portfolio website*).
Unit 5 Pathway Standard(s)	**D2.0** Demonstrate an understanding of game and simulation analysis, design, standard documenta-tion, and development tools. **D3.0** Create a working game or simulation individually or as part of a team. **D8.0** Acquire and apply appropriate artificial intelligence (AI) techniques used by the game development industry
Unit 5 Pathway – Performance Indicator(s)	**D2.2** Describe the game development life cycle. **D2.3** Develop a game design document or blueprint. **D3.2** Create a design specification document to include interface and delivery choices, rules of play, navigation functionality, scoring, media choices, start and end of play, special features, and development team credits. **D3.3** Using simple game development tools, create a game or simulation. **D8.4** Create intelligently designed games that would educate as well as engage the players.
Unit 5 Anchor Standard(s)	**2.0 Communications** Acquire and accurately use Information and Communication Technologies sector terminology and protocols at the career and college readiness level for communicating effectively in oral, written, and multimedia formats. **5.0 Problem Solving and Critical Thinking**

	Conduct short, as well as more sustained, research to create alternative solutions to answer a question or solve a problem unique to the Information and Communication **11.0 Demonstration and Application** Technologies sector using critical and creative thinking, logical reasoning, analysis, inquiry, and problem-solving techniques.
Unit 5 Anchor – Performance Indicators	**2.4** Demonstrate elements of written and electronic communication such as accurate spelling, grammar, and format. **2.5** Communicate information and ideas effectively to multiple audiences using a variety of media and formats. **5.2** Solve predictable and unpredictable work-related problems using various types of reasoning. **5.7** Work out problems iteratively and recursively. **5.8** Create and use algorithms and solve problems. **11.5** Create a portfolio or similar collection of work that offers evidence through assessment and evaluation of skills and knowledge competency.
Unit 5 Curricular Resources	Introduction to Game Design, Prototyping, and Development, 3rd edition Unity 3D Game Development by Example Beginner's Guide

Unit 5 Total Hours	60	**Classroom**	60	**CC/CVE**	0

College and Career Transition Plan (CCTP) Unit

Unit 6 Title	RCOE College and Career Transition Plan (CCTP)
Unit 6 Engaging Title	Dude, where's my job?
Unit 6 Essential Question	Where will my decisions lead me to in life?
Unit 6 Description (3-5 Sentences)	This unit of instruction links student interests to potential careers through exploration and research. Students will develop a post-secondary career plan that identifies and maps out a course of action which incorporates college and career opportunities. Within the twelve (12) topics, students will complete interest surveys, career related documents (i.e., applications, resumes, letters of introduction, letters of recommendation), and mock interviews with the express goal of preparing students to graduate from high school academically and socially prepared for college, the workforce, and civic responsibility. Additionally, students will analyze the importance of financial literacy through topics such as credit, creating a budget, and saving and investing. **Lessons:** • Work, Job, and Career • The Career Plan • Job Applications (Portfolios – Part 1) • The Letter of Introduction (Portfolios – Part 2) • Resume (Portfolios – Part 3) • Letters of Recommendation (Portfolios – Part 4) • Interviewing • Career Research and Reflection • Financial Literacy (Part 1 – The Basics) • Financial Literacy (Part 2 – Credit) • Financial Literacy (Part 3 – Creating a Budget) • Financial Literacy (Part 4 – Saving and Investing)
Unit 6 Overview/Narrative	As a result of successfully completing this unit of instruction, students will be able to take part in complete important job search documentations such as an application, letter of introduction, resume, and letters of recommendations. Students will learn many job interview questions as well as what employers look for in answers and appearance. Lastly, students will become familiar with financial literacy and how it is applied to many life decisions such as how to read a pay stub, establishing credit, borrowing money, budgeting, saving, and investing.
Unit 6 Theme	To prepare for life after high school by mapping out each step needed to achieve college and career goals.
Unit 6 Key Assignment	1) **RCOE College and Career Transition Guide**: This project will incorporate the development of a 5-10 year career plan, preparing a portfolio (letter of introduction, resume, and letters of recommendation), and practicing job applications and mock interviews. 2) **Financial Literacy**: This project will include identifying elements and deduction on a paycheck, research loan options based on credit worthiness, creating a budget, and planning for retirement.

Unit 6 Pathway Standard(s)	**D1.0** Identify and describe critical game and simulation studies, the resulting societal impact, and the management, industry, and career requirements. **D2.0** Demonstrate an understanding of game and simulation analysis, design, standard documenta-tion, and development tools.
Unit 6 Pathway – Performance Indicator(s)	**D1.3** Describe the role of play in human culture. **D1.5** Describe the business model commonly used in the game development industry. **D2.4** Understand the general principles of storytelling and the use of storyboarding in game design.
Unit 6 Anchor Standard(s)	**3.0 Career Planning and Management**
Unit 6 Anchor – Performance Indicators	3.1 Identify personal interests, aptitudes, information, and skills necessary for informed career decision making. 3.2 Evaluate personal character traits, such as trust, respect, and responsibility, and understand the impact they can have on career success. 3.4 Research the scope of career opportunities available and the requirements for education, training, certification, and licensure. 3.9 Develop a career plan that reflects career interests, pathways, and postsecondary options.
Unit 6 - Curricular Resources	*The Job Hunting Handbook* (Dalstrom)

Unit 6 - Total Hours	15	**Classroom**	15	**CC/CVE**	0

Course Assessments

1st Semester Common Assessment	
Narrative	Presentation consisting of oral presentation, written proposal and playable level or game demonstration. Students will present their collaborative projects in a comprehensive manner, combining oral communication, written documentation, and a playable demonstration. The oral presentation will involve each team member articulating their role, contributions, and challenges faced during the project. The written proposal will provide an in-depth overview of the game or simulation, detailing its concept, design principles, and technical aspects. The highlight of the presentation is the playable level or game demonstration, where teams showcase their creation, emphasizing the integration of scripting, transformations, collision detection, and game management. This multifaceted presentation ensures a thorough and engaging evaluation of each team's project.

Final Common Assessment	
Narrative	Students in teams will Design and Create an original polished game or simulation consisting of oral presentation, final documentation and complete game demonstration. Students will be using the Software Development Life Cycle, which includes: planning, analysis, design, development, testing, implementation, and maintenance. Students will also have a concept design document, a team contract (including solo projects), and present milestones biweekly of their progress. The final product will be a playable game or simulation utilizing all topics covered in class units, and demonstrates flow control which would provide the end-user with a pleasurable gaming experience. Students will then add this project to an industry-standard portfolio *(Github, Itch.io, portfolio website)*.