



Course Syllabus

Instructor	Mr. Gallery	E-mail	eric.gallery@cnusd.k12.ca.us
Room	E116	Phone	951 739-5600 x2409
Hours	Periods 1, 3, & 5		

Text(s)/Resource(s):

The Video Game Explosion: A History from Pong to PlayStation and Beyond

Mark J P Wolf
Greenwood, 2007

Replay: The History of Video Games

Tristan Donovan
Yellow Ant, 2010

Description:

This course is a comprehensive study of the evolution of video games throughout history including arcade games, console games, computer games, and mobile applications. Students will become acquainted with representative game designs through analyzing, creating, playing games, and reading and writing about games. The course content will give students a history of gaming that will prove useful in the study games and simulations development.

ARTICULATION - Completion of this course, with a 'B' grade or higher, will give students articulated credit with Riverside Community College District (RCCD) - Norco College, earning (3) college credits, pending the students completing the required application process.

Goals:

Upon successful completion of the course students should be able to:

- Diagram and describe the basic elements of video games from its beginning through the present.
- Understand the technical advancements of video games throughout time including but not limited to microprocessors, and desktop computers.
- Identify the representative video games throughout history that changed the course of the video game phenomenon.
- Evaluate historical events that influenced video game development in various cultures around the world.
- Compare and contrast various video games styles and genres throughout time.
- Define standard operational video game terminology.

Student Expectations:

- **Respect:** Please show respect always – to yourself, your fellow students, and all teachers and staff. It is important to respect the ideas of others, even when you don't agree. This includes not letting yourself be distracted during instructional time.
- **Attitude:** Please come to class with a positive attitude. *"Whether you think you can or think you can't, you are right"*.
- **Academic Honesty:** Please practice honesty and integrity in completing all of your assignments. Cheating is the most destructive action in the academic world, Cheating undermines the academic process, shatters student integrity, and destroys the trust necessary to teacher-student relationships. All students involved in cheating will be subject to lowered academic and citizenship grades.
- **Attendance:** Please come to class and on time! Excessive absences and tardiness (for any reason) will also lead to lowered academic and citizenship grades.
- **Assignments:** Successfully completing all classroom and homework assignments are critical to your success in this class.
- **Keep Your Work!** It is extremely important to save your files and keep all of your assignments until after the end of the school year.

Requirements:

Students will be required to complete the following types of assignments throughout the year:

- In-Class and Outside-of-Class Reading Assignments
- In-Class and Outside-of-Class Writing Assignments
- Various In-Class and Outside-of-Class Assignments

Resources:

- Mr. Gallery, Room E116, eric.gallery@cnusd.k12.ca.us
- Internet, Library
- Classmates

Evaluation:

Your grade will be based on the following components:

- Classwork (approx. 50%) – Individual & Group Projects & Activities, Written Reports
- Tests (approx. 15%) – Quizzes and Exams
- Final (approx. 10%) – Exam
- Participation (approx. 25%) – Attendance, Class Participation, Staying on Task

Between 2 and 6 participation points are earned each day depending on the length of the class period. To keep all the participation points for the day, students must be present, on time, and on task. A student who is tardy will lose points based on how late he or she is (*1 point during the first 20 minutes, another point during the next 20 minutes, etc.*) A student who is absent (excused or unexcused) will not earn participation points for the day (*exceptions may be made for absences due to school-related functions, chronic illness, or an emergency*).

Grading is done on a points-based system, where your total points earned are divided by the total points available. In general, exams and larger assignments are worth more points than other assignments. Students will have limited opportunity for extra credit throughout the school year.

A+	97.0 – 100%	B+	87.0 – 89.9%	C+	77.0 – 79.9%	D+	67.0 – 69.9%
A	93.0 – 96.9%	B	83.0 – 86.9%	C	73.0 – 76.9%	D	63.0 – 66.9%
A-	90.0 – 92.9%	B-	80.0 – 82.9%	C-	70.0 – 72.9%	D-	60.0 – 62.9%
						F	less than 60%

Class Rules:

Food and Drinks – No food or drinks are allowed in class (including water - *due to the electronic equipment in the room*)

Electronic Devices – Phones and other electronic devices are allowed in class if they do not become a distraction (texting, playing games, checking social media, web browsing, etc.). Students who are regularly off task or behind in their work, will have their phone privileges revoked. However, during instructional time, tests and quizzes, electronic devices are not to be used at all (unless directed to by the teacher).

Computer Use – The classroom computers and related devices are to be used for classwork only. Do not download any files or programs not related to your classwork. Do not change the Login screen background. Do not install any program without permission of the teacher. Do not run any unapproved programs (Minecraft, Call of Duty, Halo, etc.), even from a network or external drive. Do not view or download any images, videos, or sound files that are offensive, racist, promote violence or drug use, etc.

Failure to follow these rules will result in one or more of the following disciplinary actions: Loss of participation points, parent notification, after-school detention, Saturday School, loss of computer privileges.

COURSE OUTLINE:

Week(s):	Topic	CA State CTE Game & Anchor Standards
1, 2, & 3	Ancient Board Games Project: Presentation, Game Replica	D 1.1, 1.2, 1.3, 1.4, 2.1 AS 1.0, 2.0, 4.0, 5.0, 8.0, 10.0, 11.0
4 & 5	Modern Board Games Project: Presentation	D 1.1, 1.2, 1.3, 1.4, 1.8, 2.1 AS 1.0, 2.0, 4.0, 5.0, 8.0, 10.0, 11.0
6 & 7	Game Pioneers Project: Presentation, Asteroid Game	D 1.2, 1.9, 2.1, 3.3, 4.4, 5.2, 8.1 AS 1.0, 2.0, 4.0, 5.0, 8.0, 10.0, 11.0
8 & 9	Arcade Games Project: Presentation, Asteroid Game (cont.)	D 1.1, 1.2, 1.4, 1.8, 1.9, 2.7, 2.8, 3.3, 3.4, 4.4, 5.1, 5.2, 8.1 AS 1.0, 2.0, 4.0, 5.0, 8.0, 10.0, 11.0
10 & 11	Game Consoles Project: Presentation, Game Design	D 1.1, 1.2, 1.3, 1.9, 2.1, 2.5, 2.7, 2.8, 3.3, 4.3, 4.4, 4.7, 5.2, 8.1 AS 2.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0
12 & 13	Game Objectives, Rules and Procedures Project: Game Design (Cont.)	D 1.6, 1.7, 2.3, 2.4, 3.1, 4.1, 4.3, 4.5, 4.7 AS 2.0, 4.0, 5.0, 7.0, 8.0, 9.0, 10.0, 11.0
14 & 15	Job & Career Exploration Project: Presentation, Game Design (cont.)	D 1.5, 1.6, 1.9 AS 1.0, 3.0, 4.0, 5.0, 9.0, 10.0, 11.0
16 & 17	Morals, Ethics and Videogames Project: Game Design (Cont.)	D 1.8 AS 2.0, 5.0, 6.0, 7.0, 8.0, 10.0

*Timeline is an estimate. Other topics may be included.

CA State CTE Information & Communication Technologies Game Standards

Students in the Game and Simulation pathway learn relevant technical knowledge and skills to prepare for further education and careers. Game and simulation design requires that students have a solid foundational understanding of game design, hardware, graphics, and animation. Persons with expertise in game and simulation design have had practical experiences in game/simulation conceptualization, design, storyboarding, development methodologies, essential programming techniques, working with a team, and implementation issues.

- D1.0 Identify and describe critical game and simulation studies, the resulting societal impact, and the management, industry, and career requirements.*
 - D1.1 Categorize the different gaming genres and gaming systems.
 - D1.2 Describe the historical significance of electronic and nonelectronic games.
 - D1.3 Describe the role of play in human culture.
 - D1.4 Describe the psychological impact of games on individuals and groups.
 - D1.5 Describe the business model commonly used in the game development industry.
 - D1.6 Examine and categorize the significant processes in the production of interactive games.
 - D1.7 Identify the core tasks and challenges that face a game or simulation design team.
 - D1.8 Describe legal issues that affect games, developers and players.
 - D1.9 Describe the impact of the game and simulation industry on the economy.

- D2.0 Demonstrate an understanding of game and simulation analysis, design, standard documentation, and development tools.*
 - 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.
 - D2.2 Describe the game development life cycle.
 - D2.3 Develop a game design document or blueprint.
 - D2.4 Understand the general principles of storytelling and the use of storyboarding in game design.
 - D2.5 Know how to use tools and software commonly used in game/simulation development and become familiar with popular game tools and different gaming engines.
 - D2.6 Demonstrate an understanding of the techniques used to evaluate game mechanics, game play, flow, and game design.
 - D2.7 Describe the complex interaction between games and players and the role it plays in the popularity of a game.
 - D2.8 Experience the methods used to create and sustain player immersion.
 - D2.9 Demonstrate an understanding of interface design, hardware constraints on games, including processors and I/O devices, and nonhardware constraints.
 - 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.

- D3.0 Create a working game or simulation individually or as part of a team.*
 - 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.

- D4.0 *Identify, describe, and implement standard game/simulation strategy and rules of play.*
 - D4.1 Understand strategic outlining in game designs.
 - D4.2 Know elements of puzzle design.
 - D4.3 Use key strategic considerations in game design.
 - D4.4 Understand the process of creating and designing player actions.
 - D4.5 Create and design the game flow as it relates to story and plot.
 - D4.6 Assess common principles and procedures in game flow design.
 - D4.7 Describe rule creation elements of player challenge.

- D5.0 *Integrate music, sound, art, and animation as it applies to the environmental design of the game/simulation.*
 - D5.1 Understand the methodologies for integrating digital media into a game or simulation.
 - D5.2 Identify commonly used art and animation production tools in the game design industry.
 - D5.3 Understand the general concepts of environmental design.
 - D5.4 Describe how environmental design is used in conjunction with game level design.

- D6.0 *Explain the role and principles of event modeling and interface design and apply those principles in a game/simulation design and project.*
 - D6.1 Define the meaning of simulation and pertinent issues facing game designers.
 - D6.2 Describe applied event modeling as it relates to game design.
 - D6.3 Identify and describe the basic Human Computer Interface (HCI) design principles.
 - D6.4 Apply the “eight golden rules” of interface design.
 - D6.5 Understand the use of inventory systems in game design.

- D7.0 *Acquire and apply appropriate programming skills for rendering a single player or multiuser game or simulation project, including program control, conditional branching, memory management, scorekeeping, timed event strategies, and implementation issues.*
 - D7.1 Identify functions of information processing and describe basic network terminology and network security and demonstrate an understanding of operating systems, environments, and platforms.
 - 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.
 - D7.5 Implement enhanced program structures.
 - D7.6 Implement multimedia programming.

- D8.0 *Acquire and apply appropriate artificial intelligence (AI) techniques used by the game development industry.*
 - D8.1 Describe AI and how it relates to game and simulation design and development.
 - D8.2 Design, program, and implement intelligent agents for action games.
 - D8.3 Use AI techniques, like finite state machines, to produce the illusion of intelligence in the behavior of nonplayer characters (NPCs).
 - D8.4 Create intelligently designed games that would educate as well as engage the players.

CA State CTE Information & Communication Technologies Anchor Standards

1.0 Academics

Analyze and apply appropriate academic standards required for successful industry sector pathway completion leading to postsecondary education and employment. Refer to the Information and Communication Technologies academic alignment matrix for identification of standards.

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. (Direct alignment with LS 9-10, 11-12.6)

3.0 Career Planning and Management

Integrate multiple sources of career information from diverse formats to make informed career decisions, solve problems, and manage personal career plans. (Direct alignment with SLS 11-12.2)

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. (Direct alignment with WS 11-12.6)

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. (Direct alignment with WS 11-12.7)

6.0 Health and Safety

Demonstrate health and safety procedures, regulations, and personal health practices and determine the meaning of symbols, key terms, and domain-specific words and phrases as related to the Information and Communication Technologies sector workplace environment. (Direct alignment with RSTS 9-10, 11-12.4)

7.0 Responsibility and Flexibility

Initiate, and participate in, a range of collaborations demonstrating behaviors that reflect personal and professional responsibility, flexibility, and respect in the Information and Communication Technologies sector workplace environment and community settings. (Direct alignment with SLS 9-10, 11-12.1)

8.0 Ethics and Legal Responsibilities

Practice professional, ethical, and legal behavior, responding thoughtfully to diverse perspectives and resolving contradictions when possible, consistent with applicable laws, regulations, and organizational norms. (Direct alignment with SLS 11-12.1d)

9.0 Leadership and Teamwork

Work with peers to promote divergent and creative perspectives, effective leadership, group dynamics, team and individual decision making, benefits of workforce diversity, and conflict resolution such as those practiced in the Future Business Leaders of America and SkillsUSA career technical student organization. (Direct alignment with SLS 11-12.1b)

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. (Direct alignment with WS 11-12.6)

11.0 Demonstration and Application

Demonstrate and apply the knowledge and skills contained in the Information and Communication Technologies anchor standards, pathway standards, and performance indicators in classroom, laboratory, and workplace settings, and through career technical student organizations such as Future Business Leaders of America and SkillsUSA.