COLTON REDLANDS YUCAIPA
REGIONAL OCCUPATIONAL PROGRAM

2024-2025

Video Game Design 2

COURSE OUTLINE - UC

DESCRIPTION:

Video Game Design 2 is an all-inclusive video game production experience allowing students to gain deeper knowledge of video game design concepts through the mindset of game publishing and production. Students in Video Game Design 2 will actively perform as a member of a game development team to build an industry-standard video game. The development team will additionally work together to compose a game-development plan, game-building procedures and a marketing and publishing strategy. Students will explore concurrent video game industry practices while focusing on a real-life scenario of delivering their game through digital distribution.

INFORMATION:

PRE-REQUISITE:	Video Game Design 1
LENGTH:	One Year
SECTOR:	Arts, Media, and Entertainment
PATHWAY:	Game Design and Integration
ARTICULATED:	Yes
UC A-G APPROVAL:	Yes: College-Preparatory Elective (G) – Interdisciplinary Requirement

O*NET SOC CODES:

15-1132.00	Software Developers, Applications
15-1199.00	Video Game Designers
27-1014.00	Multi-Media Artists and Animators
27-1024.00	Graphic Designer

Video Game Design 2: Includes updates from 23/24 Advisory meeting.

Orientation

A. Introduce the course and facilities.
B. Discuss the syllabus and major objectives.
C. Explain applicable classroom management procedures, and any operational guidelines.
D. Review instructor/student expectations.
E. Explain attendance requirements and procedures.
F. Review grading and student evaluation procedures.
G. Discuss the work-based learning aspect of the program, if applicable.
H. Discuss the “next steps” related to additional education, training, and employment.
I. Review classroom safety, emergency and disaster procedures.

1. Communication Skills

A. Demonstrate positive verbal communication skills using appropriate vocabulary, demeanor, and vocal tone in the classroom and/or worksite.
B. Read and interpret written information and directions.
C. Practice various forms of written communication appropriate to the occupation.
D. Practice positive body language skills.
E. Practice professional verbal skills for resolving a conflict.
F. Demonstrate active listening skills including techniques for checking for understanding, and for obtaining clarification of directions.

2. Interpersonal Skills

A. Demonstrate positive teamwork skills by contributing to a group effort.
B. Practice the importance of diversity awareness and sensitivity in the workplace.
C. Define sexual harassment in the workplace and identify the employee’s role and responsibility.
D. Practice participation skills.
E. Identify different personality types and demonstrate flexibility and adaptability working with diverse individuals.
F. Practice business and social etiquette skills appropriate to the occupation.
G. Evaluate and discuss the role of business and personal ethics in decision making based on various job-related scenarios.
H. Demonstrate the use of time management skills.

3. Employability Skills

A. Demonstrate appropriate attendance and punctuality practices for the classroom (and worksite, if applicable).
B. Prepare a resume, cover letter, and job application.
C. Demonstrate interviewing techniques in seeking employment, using appropriate tone, body language and professional dress and grooming standards.
D. Identify strategies for employment retention.
E. Identify and analyze sources of job information, including electronic sources and the impact of social networking on employability.
F. Identify the need for continuing education, professional development, and professional growth in chosen field.
G. Identify appropriate procedures for leaving a job.
H. Review company policies and current trends in employee compatibility screening, drug screening, and background checks.

4. Leadership

A. Define leadership and identify the responsibilities, competencies, and behaviors of successful leaders.
B. Work with peers to promote divergent and creative perspectives.
C. Demonstrate how to organize and structure work, individually and in teams, for effective performance and the attainment of goals.
D. Explain multiple approaches to conflict resolution and their appropriateness for a variety of situations in the workplace.
E. Employ ethical behaviors and actions that positively influence others.
F. Analyze the short-term and long-term effects a leader's actions and attitudes can have on productivity, morale, and organizational culture.

5. Personal and Occupational Safety

A. Demonstrate procedures to be followed in case of emergencies.
B. Describe and discuss the procedure for reporting a work-related hazard or injury (worker's comp), including ways to report a potential safety hazard to a supervisor.
C. Identify and discuss cyber ethics, cyber safety, and cyber security.
D. Apply personal safety practices to and from the job.
E. Recognize the effects of substance abuse in the workplace.
F. Explain the importance of CAL-OSHA in the industry.

6. Project Development and Roles

A. Explain the concept of producing team developed projects.
B. Identify multiple departments within industry video game development teams.
C. Identify specific developmental roles based on multiple game compositions.
D. Identify methods of communication and telecommunication in an industry produced video game.
E. Identify scheduling timelines within an industry produced video game.

7. Market Analysis

A. Evaluate corporate developer trends for multiple game genres in the video game industry.
B. Evaluate independent developer trends for multiple game genres in the video game industry.
C. Explain copyright laws and how they are used to protect intellectual properties.
D. Describe the effects of the Children's Online Privacy Protection Act (COPPA) on the industry.
E. Identify target markets including multicultural and regional differences in game consumers.
F. Research and prepare a competitive pitch for a new video game.
G. Identify the channels of distribution and resources needed for the development of a new video game.

8. Design Concept

A. Explain the concepts of structure and documentation in video game design.
B. Evaluate industry standard Game Design Planning (GDP).
C. Develop scheduling timelines needed for the completion of a team developed video game.
D. Evaluate potential obstacles during the development process.
E. Explore planning and conceptualizing a video game from scratch.

9. Game Design Planning (GDP)

A. Develop the concepts for a full-length video game to be produced.
B. Design the game concept including genre, art style and target audience.
C. Design the gameplay progression including mission, challenge, or puzzle objectives.
D. Determine the gameplay mechanics including physics, movement or actions.
E. Determine the gameplay narrative including story, characters and game world.
F. Develop the characters including back story, personality, appearance, animations, abilities and relevance to story.
G. Determine the needed hardware for game development including game engine and supportive software.
H. Determine the timeline and developmental roles for game completion.

11. Publishing and Promotion

A. Evaluate and conduct research for game distribution practices.
B. Identify potential game publisher competition and determine best time of year for the game release.
C. Develop a marketing plan and strategy for promoting the game.
D. Define procedures for acquiring and communicating with consumers.
E. Identify and describe the differences between ethical and non-ethical promotional practices.

12. Portfolio

A. Develop personal marketing and computer skills by refining your digital portfolio for post-secondary and employment acceptance.
B. Compile best samples of original works and documents for a variety of purposes to show a progression in the acquisition of knowledge and/or skills.
C. Demonstrate knowledge of competencies through journaling or summary of selected works or documents.
D. Revise professional resume and cover letter to align with skills and objective statements of the relevant industry.
E. Dress professionally and practice interviewing techniques using portfolio materials.
F. Assemble industry and employability documents (resume, cover letter, certifications, recommendation letters, etc.).
G. Create a “leave behind” book or folder.
H. Display portfolio materials during a fair, community event, competition, or professional panel review.
I. Evaluate and utilize feedback to improve portfolio.

Key Assignments

Assignment	Competencies	Career Ready Practices	Anchor Standards	Pathway Standards	CCSS
1. Students will participate in mock interviews that represent current industry practices (e.g., skills demonstrations, resumes, applications, portfolios, personal websites, etc.).	1A, B, D 3B, C, D, I, J	2 3	2 3		LS 11-12.6 SLS 11-12.2
2. Students will create a game using techniques from Video Game Design I to be played by other students in the class.	1A-C, F 2D, F, J 9A-I 10A	1 10	4 5 10	D3.0	ETS1.A ETS1.C
3. Students will research corporate and independent game developer practices used to produce a marketable game. Students will create a detailed digital timeline based on their findings.	1A-C, F 2D, J 3I,J 4G 6A-E 7A-F 8C	11 12	4 10	D1.0 D2.0 D6.0	RSIT 11-12.1 RLST 11-12.7 WHSST 11-12.4
4. Working in groups students will design a plan for the classroom to become a working game studio including necessary roles, departments and structure to be presented to the class.	1A-C, F 2A, D, J 4C 6A-E	2 9 10	2 4 5 10	D3.0	ETS1.B ETS1.C
5. Students will analyze current market trends in the video game industry including game development costs, distribution channels and multicultural and regional differences in consumers then write a 750 word summary on their findings.	1A-D, F 2D, F, J 7A-F 11A,B,E	11 12	2 4 8	D1.0 D6.0	LS 11-12.1-3
6. Based on all industry information discovered in the class students will create a two-minute pitch for a new game identifying a specific target audience to be presented to the class.	1A-C, F 2D, J 9A,E	2 10 11	2 4 10	D2.0 D3.0	SLS 11-12.2 WS 11-12.7 WHSST 11-12.4

Assignment	Competencies	Career Ready Practices	Anchor Standards	Pathway Standards	CCSS
7. Students will reverse engineer a game given by the instructor and write a 2-3 page thesis about their finding.	1A-C, F 2D, J 8A,B 9A-I	1 2 5 10	4 5 10	D1.0 D6.0	LS 11-12.1 LS 11-12.2 RLST 11-12.7 SLS 11-12.2 SLS 11-12.1d WS 11-12.7 WHSST11-12.4
8. Working in a development team, students will create a Game Design Plan (GDP) in the cloud including game overview, assets and mechanics. GDP will include progressive documentation and a history of their revisions.	1A - F 2A, D, F, J 4B,C 8A-D 9A-J	2 5 10	2 4 5 7 9 10	D1.0 D2.0 D3.0 D4.0 D6.0	LS 11-12.1-3 WS 11-12.6 WS 11-12.7 WHSST 11-12.4 ETS1.A ETS1.B ETS1.C
9. Working in a development team, students will produce a marketable video game from concept to completion following their GDP utilizing all game design skills acquired.	1A - F 2A, D, F, J 4C,E 6A-E 8A-D 10A-K	1 2 4 5 9 10	2 4 5 7 9 10	D1.0 D2.0 D3.0 D4.0 D5.0 D6.0 D10.0	WS 11-12.6 ETS1.A ETS1.C
10. Working in a development team, students will create a marketing strategy to promote and distribute their game.	1A-C, F 2A,D, J 7A-F 11A-E	2 5 9	2 4 5 10	D1.0 D6.0	RLST 11-12.7 SLS 11-12.2
11. Working in a development team, students will showcase their game at an event or through digital distribution.	1A-F 2A,D, J 11C,D	2 7	2 4 5 9 10	D3.0 D4.0 D5.0 D10.0	ETS1.C

Assignment	Competencies	Career Ready Practices	Anchor Standards	Pathway Standards	CCSS
12. Students will create an e-portfolio highlighting their work for prospective employers/financiers. This electronic online learning record will help students develop the self-awareness required in the gaming industry as they reflect on their learning and skill development. It will be a collection of reflections, work samples, and extended learning experiences that best illustrate the student's preparedness for further education and employment. The online portfolios will be reviewed and scored at the end of the course, and will include: • Cover page • Letter of introduction • Table of contents • Resume • Work samples • Marketing plan to promote final project to prospective gaming company • Technical Student Association (TSA) participation http://www.tsaweb.org/	1A-F 2D-F, I, J 3B,E,G,I 12	2 3 8	2 3 9 10	D1.0 D3.0	LS 11-12.1-6 RSIT 11-12.7 WS 11-12.4 WS 11-12.6

Standards Assessed in this Program

Career Ready Practices

1. **Apply appropriate technical skills and academic knowledge.**
2. **Communicate clearly, effectively, and with reason.**
3. **Develop an education and career plan aligned to personal goals.**
4. **Apply technology to enhance productivity.**
5. **Utilize critical thinking to make sense of problems and persevere in solving them.**
6. **Practice personal health and understand financial well-being.**
7. **Act as a responsible citizen in the workplace and the community.**
8. **Model integrity, ethical leadership, and effective management.**
9. **Work productively in teams while integrating cultural/global competence.**
10. **Demonstrate creativity and innovation.**
11. **Employ valid and reliable research strategies.**
12. **Understand the environmental, social, and economic impacts of decisions.**

Anchor Standards

2.0 Communications

- Acquire and use accurately sector terminology and protocols at the career and college readiness level for communicating effectively in oral, written, and multimedia formats.

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.

4.0 Technology

- Use existing and emerging technology, to investigate, research, and produce products and services, including new information, as required in the 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 sector using critical and creative thinking, logical reasoning, analysis, inquiry, and problem-solving techniques.

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 sector workplace environment.

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 sector workplace environment and community settings.

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.

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.

10.0 Technical Knowledge and Skills

- Apply essential technical knowledge and skills common to all pathways in the sector following procedures when carrying out experiments or performing technical tasks.

Pathway Standards

Arts, Media, and Entertainment - Game Design and Integration Pathway

D1.0 Demonstrate understanding of current trends and the historical significance of both electronic and nonelectronic games. Students will analyze different game systems and identify how these systems have influenced consumer technology.
D2.0 Analyze the core tasks and challenges of video game design and explore the methods used to create and sustain player immersion.
D3.0 Acquire and apply appropriate game programming concepts and skills to develop a playable video game.
D4.0 Students will demonstrate mastery of game art and multimedia, including music, sound, art, and animation.
D5.0 Demonstrate an understanding of testing techniques used to evaluate, assess, rate, and review quality assurance of video games.
D6.0 Understand the general procedures, documentation, and requirements of large scale game design projects. Examine and categorize the significant processes in the production of games.
D10.0 Students will build a game that demonstrates teamwork and project management by creating a game design production plan that describes the game play, outcomes, controls, rewards, interface, and artistic style of a video game.

Common Core State Standards

ENGLISH LANGUAGE ARTS

Language Standards

LS 11-12.1: Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
LS 11-12.2: Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
LS 11-12.3: Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.
LS 11-12.4: Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades *11-12 reading and content,* choosing flexibly from a range of strategies.
LS 11-12.6: Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the (career and college) readiness level, demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Reading Standards for Information

RSIT 11-12.1: Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.

Reading Standards for Literacy in Science and Technical Subjects

RLST 11-12.5: Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.

RLST 11-12.7: Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.

Speaking and Listening Standards

SLS 11-12.2: Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions, and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.

SLS 9-10. 11-12.1: Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners, building on others ideas and expressing their own clearly and persuasively.

SLS 11-12.1d: Respond thoughtfully to diverse perspectives, synthesize comments, claims and evidence made on all sides of an issue, resolve contradictions when possible, and determine what additional information or research is required to deepen the investigation or complete the work.

Writing Standards

WS 11-12.6: Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback including new arguments and information.

WS 11-12.7: Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem, narrow or broaden the inquiry when appropriate, synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects

WHSST 11-12.4: Produce clear and coherent writing in which the development, organization, and style are appropriate tot task, purpose, and audience.

MATHEMATICS

Engineering, Technology, and the Applications of Science

ETS1.A: Defining and Delimiting an Engineering Problem

ETS1.B: Developing Possible Solutions

ETS1.C: Optimizing the Design Solution

ETS2.B: Influence of Engineering, Technology, and Science on Society and the Natural World