

Art of Animation 2

COURSE OUTLINE - UC

DESCRIPTION:

Art of Animation 2 is an all-inclusive animation production experience allowing students to gain more in-depth exposure of the animation process through the production of an animated film. Students in Art of Animation 2 will increase their animation skills and collaborate to produce short stories, storyboards, audio tracks, special effects, and character and background animations. Art of Animation 2 will further analyze the animation industry and help students grow as a developer of animated productions.

INFORMATION:

PRE-REQUISITE:	Art of Animation
LENGTH:	One Year
SECTOR:	Arts, Media, and Entertainment
PATHWAY:	Design, Visual, and Media Arts
ARTICULATED:	Yes
UC A-G APPROVAL:	Yes: Visual & Performing Arts (F) – Visual Arts Requirement

O*NET SOC CODES:

27-1014.00	Multi-media Artists and Animators
27-1024.00	Graphic Designers

Orientation
<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> 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. Use a variety of means to positively impact the direction and actions of a team or organization. G. 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
<ul style="list-style-type: none"> 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. G. Define and discuss ergonomics in relationship to a working environment. H. Discuss the electrical hazards of working with electronic equipment.

6. Career in Animation
<ul style="list-style-type: none"> A. Identify character traits and personal aptitudes necessary for a career in animation. B. Research jobs and employment trends in the animation field. C. Discuss career opportunities in cross-disciplinary fields. D. Examine education and training requirements for a career in animation. E. Describe various forms of small business ownership in this field. F. Recognize the risks and benefits of entrepreneurship and independent contractor work.
7. Project Development Roles
<ul style="list-style-type: none"> A. Describe the importance of project and time management skills in the industry. B. Analyze the methods of producing team developed animated videos. C. Analyze the production roles and order of operations within an animation studio. D. Assign production roles for a team-produced animated video. E. Define order of operations for a team-produced animated video. F. Practice methods of collaboration within a team-produced animated video.
8. Industry Analysis
<ul style="list-style-type: none"> A. Analyze multiple types of animation including animated features for film, TV, web, ads, and social media. B. Analyze multiple animation techniques including procedural and motion/performance capture. C. Analyze corporate and independent animated films in the animation industry. D. Implement a strategy for marketing an animated video. E. Evaluate corporate production trends of animated videos. F. Understand copyright laws and how they are used to protect intellectual properties.
9. Pre-Production: Story Development
<ul style="list-style-type: none"> A. Analyze narrative stories from diverse animated film genres. B. Discuss fundamentals of cinematic rules including camera shots, placements, angles, and jump cuts. C. Author a short story and screen play to be shared with the class. D. Develop a short story into a treatment.
10. Pre-Production: Visual Development
<ul style="list-style-type: none"> A. Define an animation style from a short story.

- B. Develop a treatment into a storyboard with multiple cinematic angles.
- C. Develop concept art for characters and environments.
- D. Compile a visual library of all assets including characters and environments.
- E. Develop an animatic to an audio track.
- F. Create background environments and scene layouts for an animated video.
- G. Implement a UV unwrapping process in an animated video.

11. Pre-Production: Audio Development

- A. Record audio voiceovers of a treatment.
- B. Edit voiceover and sound effects for an animated video.
- C. Conduct a table read of a treatment.
- D. Record foley sound effects needed for an animated video.

12. Production: Animation

- A. Animate character facial expressions utilizing emotion references.
- B. Animate character dialogue to a voiceover audio track.
- C. Animate supplementary animations including props and character effects.
- D. Animate character body movements utilizing principles of animation.
- E. Animate environmental backgrounds for an animated video.

13. Post-Production

- A. Implement background music and master audio track in an animated video.
- B. Determine proper lighting effects for an animated video.
- C. Determine proper color and texture effects for an animated video.
- D. Determine best practices for rendering an animation.
- E. Render frames and compile images as a video file.
- F. Edit an animated film utilizing special effects and transitions according to a storyboard.
- G. Export final video to a digital shareable format.
- H. Perform final editing adjustments including color correction, light balance and audio levels.

14. Publishing and Promotion

- A. Evaluate and conduct research for film distribution processes.
- B. Develop a marketing plan and strategy for promoting an animated video.
- C. Define procedures for acquiring and communicating with consumers.
- D. Identify and describe the differences between ethical and non-ethical promotional practices.

15. Portfolio Design

- 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, which shows 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 6A-F 15A-I	1 2 3 10	2 3 10		LS 11-12.6 SLS 11-12.2
2. Students will create an animated short video using techniques from Art of Animation 1 to be viewed by the class then students will critique the animated film.	1A 2D, J 4C 12A,C-E 14A-D	1 4 7 10	2 4 7 10	A2.0 A7.0	RSIT 11-12.7 RHSS 11-12.7 SLS 11-12.2
3. Students will research multiple production roles they are interested in pursuing as a career then develop a presentation including position criteria, how to apply and an organizational graphic of studio positions.	1A,C,D 3E,G,I 7A-F	2 3 11	2 3 10	A3.0 A5.0 C3.0 C4.0	RSIT 11-12.7 RHSS 11-12.7 WS 11-12.4,7
4. Students will research and analyze an animated film then create a commentary.	1A,B 8A-F 9A-D 13A-D	2 5 10 11	2 4 5 10	A1.0 A3.0 A4.0 A5.0 A6.0 A7.0 A8.0 C2.0 C7.0	LS 11-12.1,4 RSIT 11-12.7 RHSS 11-12.2 WS 11-12.4,9

Assignment	Competencies	Career Ready Practices	Anchor Standards	Pathway Standards	CCSS
5. Students will author a short story to be shared with the class then develop a treatment based on a short story.	1A-F 7A-F 10A,B	2 4 5 10	2 4 5 10	A2.0 A4.0 A7.0 C6.0 C7.0	LS 11-12.1-5 RSIT 11-12.7 WS 11-12.4-10
6. Working in a production team, students will create a storyboard and visual library based on a treatment including all assets, characters and environments.	1A-F 2A,D,F-J 3B,C,E 7A-F	1 2 4 5 9 10	2 4 5 7 9 10	A1.0 A2.0 A3.0 A4.0 A5.0 A6.0 A7.0 A8.0 C1.0 C3.0 C7.0	LS 11-12.1-6 RSIT 11-12.7 SLS 11-12.2 WS 11-12.4-9
7. Following a script, students will produce an audio track including all music, voiceovers and sound effects.	1A-D 2A,D-G,I 4B 9A-D 11A-D	1 2 4 10	2 4 7 10	A1.0 A4.0 A7.0 C3.0 C7.0	LS 11-12.1 RHSS 11-12.2 SLS 11-12.1 WS 11-12.4,7,9

Assignment	Competencies	Career Ready Practices	Anchor Standards	Pathway Standards	CCSS
8. Following a storyboard and audio track students will develop an animated video.	1A-D,F 9A-D 10A-G 11A-D 12A-E 13A-H	1 2 4 5 8 10	2 4 5 7 8 10	A1.0 A2.0 A3.0 A4.0 A5.0 A6.0 A7.0 A8.0 C1.0 C2.0 C3.0 C4.0 C5.0 C6.0 C7.0	LS 11-12.1-6 RHSS 11-12.7 SLS 11-12.1 C-MG 1,3
9. Students will render an animated video finalizing all effects, music and animation to a digital shareable format.	1A-D,F 13A-H	1 2 4 10	2 4 10	A1.0 A2.0 A3.0 A4.0 A5.0 A6.0 A7.0 A8.0	LS 11-12.1-6 RLST 11-12.7 C-MS 1,3
10. Students will implement a marketing campaign to advertise their animated video.	1A-D,F 2A,D 8E	1 2 4 7 10	2 4 7 10	A1.0 A2.0 A3.0 A4.0 A5.0 A6.0	LS 11-12.1-6 RSIT 11-12.7 RLST 11-12.7 SLS 11-12.2,1,1.d WS 11-12.4-9

Assignment	Competencies	Career Ready Practices	Anchor Standards	Pathway Standards	CCSS
				A7.0 A8.0 C1.0 C2.0 C3.0 C4.0 C5.0 C6.0 C7.0	
11. Students will showcase their animated film to the public.	1A-D,F 2A,D 4A-C,E 8E 13G 14A-F	1 2 4 7 10	2 4 7 10	A1.0 A2.0 A3.0 A4.0 A5.0 A6.0 A7.0 A8.0 C1.0 C2.0 C3.0 C4.0 C5.0 C6.0 C7.0	LS 11-12.1-6 RSIT 11-12.7 RLST 11-12.7 SLS 11-12.2,1 WS 11-12.4-9

Assignment	Competencies	Career Ready Practices	Anchor Standards	Pathway Standards	CCSS
<p>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 include:</p> <ul style="list-style-type: none"> • Cover page • Letter of introduction • Table of contents • Resume • Work samples • Marketing plan to promote final project to prospective animation studios 	<p>1A-D,F 2A,D 4A-C,E 8E 13G 14C 15A,B</p>	<p>1 2 4 7 10</p>	<p>2 4 7 10</p>	<p>A1-8 C1.0 C2.0 C3.0 C4.0 C5.0 C6.0 C7.0</p>	<p>LS 11-12.1-6 RSIT 11-12.7 RLST 11-12.7 SLS 11-12.2,1 WS 11-12.4-9</p>

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 - Design, Visual, and Media Arts Pathway

A1.0 Demonstrate ability to reorganize and integrate visual art elements across digital media and design applications.

A2.0 Apply artistic skills and processes to solve a variety of industry relevant problems in a variety of traditional and electronic media.

A3.0 Analyze and assess the impact of history and culture on the development of professional arts and media products.

A4.0 Analyze, assess and identify effectiveness of artistic products based on elements of art, the principles of design, and professional industry standards.

A5.0 Identify essential industry competencies, explore commercial applications and develop a career specific personal plan.

A6.0 Analyze characteristics of subgenres (e.g., satire, parody, allegory, pastoral) that are used in poetry, prose, plays, novels, short stories, essays, and other basic genres.

A7.0 Demonstrate an understanding of the elements of discourse (e.g., purpose, speaker, audience, form) when completing narrative, expository, persuasive, or descriptive writing assignments.

A8.0 Understand the key technical and technological requirements applicable to various segments of the Media and Design Arts Pathway.

Arts, Media, and Entertainment – Production and Managerial Arts Pathway

C1.0 Demonstrate knowledge of industry safety standards and practices in all areas of technical production.

C2.0 Understand the technical support functions and artistic competencies in film, video and live production.

C3.0 Analyze and differentiate the function of the various members of a production team.

C4.0 Demonstrate key skills and an understanding of the complexities of production planning.

C5.0 Apply knowledge of services, equipment capabilities, the workflow process, data acquisition, and technology to a timely completion of projects.

C6.0 Understand the key elements of developing and promoting a production from creation to distribution.

C7.0 Know various media production, communication, and dissemination techniques and methods, including written, oral, visual, and electronic media.

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 11-12.5: Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.

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 11-12.7: Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.

Reading Standards for Literacy in History/Social Studies

RHSS 11-12.2: Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among the key details and ideas.

RHSS 11-12.7: Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.

Reading Standards for Literacy in Science and Technical Subjects;

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

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.'

WS 11-12.9: Draw evidence from literary or informational texts to support analysis, reflection, and research.

WS 11-12.10: Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or

two) for range of tasks, purposes, and audiences.

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

WHSST 11-12.8: Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.

WHSST 11-12.9: Draw evidence from informational texts to support analysis, reflection, and research.

WHSST 11-12.10: Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes and audiences.

MATHEMATICS

Geometry

G-CO 1: Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, and distance along a line, and distance around a circular arc.

G-CO 2: Represent transformations in the plane using, e.g., transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch).

G-CO 4: Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments.

Geometry – Modeling with Geometry

C-MG 1: Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).

C-MG 3: Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios).

SCIENCE

Crosscutting Concept

CC 1: Patterns

Scientific and Engineering Practices

SEP 1: Asking questions (for science) and defining problems (for engineering).

SEP 4: Analyzing and interpreting data.

SEP 5: Using mathematics and computational thinking.

SEP 8: Obtaining, evaluating, and communicating information.

Physical Science

PS 2.c: Stability and Instability in Physical Systems.

HISTORY/ SOCIAL SCIENCE

Principles of American Democracy and Economics

AD 12.8: Students evaluate and take and defend positions on the influence of the media on American political life.