

**Newport-Mesa Unified School District
Office of Career Technical Education
High School Course of Study**

Course Title	<i>Intro to Animation</i>	Course Code	<i>CT395/CT396</i>
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Transcript Title:	IntroAnimationA/ IntroAnimationB		Grades Levels:	9-12	Board Adoption Date:	Spring 2023 (non-CTE)
Content Area:	CTE		GPA Scale:	4.0	Date Course Submitted:	6/4/24
Credential Required:	CTE	Graduation Subject Areas:		Elective	CALPADS Code:	7214
UC/CSU “A-G” Area Approvals:		F		School Site/person that wrote and submitted the course:		Vanessa Valdes
Recommend Skills:	Basic computer skills, grade level reading/writing, grade level art standards					
Next course(s):	Animation 2					
Textbook to be used:	Animation software					

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Intro to Animation (Re-Write)

DATE: June 11, 2024

INDUSTRY SECTOR: Arts, Media, and Entertainment Career Technical Education (AME-CTE)

PATHWAY: Design, Visual, and Media Arts Pathway (Pathway 111)

CALPADS TITLE: Intermediate Animation (Concentrator)

CALPADS CODE: 7214

HOURS:

Total	Classroom	Laboratory/CC/CVE
180	90	90

JOB TITLE	ONET CODES
Special Effects Artists & Animators	27-1014.00

COURSE DESCRIPTION:

Intro to Animation takes an interdisciplinary approach to developing students' artistic skills and technical experience by engaging students in storytelling, storyboarding, illustration, life drawing, stop motion, visual and media effects, layout design, 2D traditional animation, 2D digital animation, and 3D digital animation supplemented with a history of animation, its pipeline, and its connections with history, culture, as well as other disciplines and art forms.

Students will develop their skills and knowledge of storytelling and narrative structure, demonstrate more proficient abilities in drawing and design, build an understanding of principles of design and animation, understand how visual and media arts skills are applicable across a range of creative areas, use learning resources to identify practical approaches to problem solving, and communicate through animated content more proficiently with appropriate verbal, written, and visual skills, etc. Students will be inspired to create art and have the tools to develop innovative ways of connecting, communicating, and problem solving with people.

PREREQUISITES:

High School Name:	Site Prerequisite:
Corona del Mar HS	MS Art Teacher Recommendation

A – G APPROVAL: Yes, F or “Fine Arts”

ARTICULATION: None

High School Name:	College Name:	College Course Title:
NA		

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LEVEL: Concentrator

CERTIFICATION: Toon Boom Storyboard/Harmony or Adobe Photoshop

High School Name:	Embedded/Leads to:	Description:
NA		

METHOD OF STUDENT EVALUATION:

- ✓ Pre and Post Assessments
- ✓ Student Projects
- ✓ Group Production
- ✓ Written work
- ✓ Student Digital Portfolios & Demo Reels
- ✓ Informal observation of student performance
- ✓ Completion of assignments & assessments via Schoology

METHOD OF INSTRUCTION:

- ✓ Small & Whole group instruction
- ✓ Demonstrations & Workshops
- ✓ Field Trips
- ✓ Guest Speakers
- ✓ Mentorship
- ✓ Project-based learning
- ✓ Choice-based learning
- ✓ Inquiry-based learning
- ✓ UDL learning

RECOMMENDED TEXTS OR SOFTWARE:

Computer Software:

- Toon Boom (Storyboard + Harmony)
- Blender
- Adobe Photoshop, Premiere, Illustrator, and After Effects
- Twinmotion
- Zbrush
- iMovie
- Garageband
- Dragonframe

Mobile/iPad Software (Optional)

- Stop Motion Studio
- Capcut
- Procreate

Curricular Network:

- Pixar in a Box (<https://www.khanacademy.org/computing/pixar>)
- *Character Animation Crash Course* (Goldberg, 2008)

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MODEL CTE PATHWAY:

Grade:	Fall Semester:	Spring Semester:
9 – 11	Intro to Animation (A)	Intro to Animation (B)
10 – 12	Animation II (A)	Animation II (B)

CALIFORNIA CAREER TECHNICAL EDUCATION MODEL CURRICULUM STANDARDS

California Department of Education CTE Standards website: <http://www.cde.ca.gov/ci/ct/sf/ctemcstandards.asp>

**INDUSTRY SECTOR
KNOWLEDGE AND PERFORMANCE 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 Arts, Media, and Entertainment academic alignment matrix for identification of standards.

2.0 Communications

Acquire and accurately use Arts, Media, and Entertainment 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)

2.1 Recognize the elements of communication using a sender–receiver model.

2.2 Identify barriers to accurate and appropriate communication.

2.3 Interpret verbal and nonverbal communications and respond appropriately.

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.

2.6 Advocate and practice safe, legal, and responsible use of digital media information and communications technologies.

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)

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.

3.3 Explore how information and communication technologies are used in career planning and decision making.

3.4 Research the scope of career opportunities available and the requirements for education, training, certification, and licensure.

3.5 Integrate changing employment trends, societal needs, and economic conditions into career planning.

3.6 Recognize the role and function of professional organizations, industry associations, and organized labor in a productive society.

3.7 Recognize the importance of small business in the California and global economies.

3.8 Understand how digital media are used by potential employers and postsecondary agencies to evaluate candidates.

3.9 Develop a career plan that reflects career interests, pathways, and postsecondary options.

4.0 Technology

Use existing and emerging technology to investigate, research, and produce products and services, including new information, as required in the Arts, Media, and Entertainment sector workplace environment. (Direct alignment with WS 11-12.6)

4.1 Use electronic reference materials to gather information and produce products and services.

4.2 Employ Web-based communications responsibly and effectively to explore complex systems and issues.

4.3 Use information and communication technologies to synthesize, summarize, compare, and contrast information from multiple sources.

4.4 Discern the quality and value of information collected using digital technologies and recognize bias and intent of the associated sources.

4.5 Research past, present, and projected technological advances as they impact a particular pathway.

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4.6 Assess the value of various information and communication technologies to interact with constituent populations as part of a search of the current literature or in relation to the information task.

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 Arts, Media, and Entertainment sector, using critical and creative thinking, logical reasoning, analysis, inquiry, and problem-solving techniques. (Direct alignment with WS 11-12.7)

5.1 Identify and ask significant questions that clarify various points of view to solve problems.

5.2 Solve predictable and unpredictable work-related problems using various types of reasoning (inductive, deductive) as appropriate.

5.3 Use systems thinking to analyze how various components interact with each other to produce outcomes in a complex work environment.

5.4 Interpret information and draw conclusions, based on the best analysis, to make informed decisions.

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 Arts, Media, and Entertainment sector workplace environment. (Direct alignment with RSTS 9-10, 11-12.4)

6.1 Locate, and adhere to, Material Safety Data Sheet (MSDS) instructions.

6.2 Interpret policies, procedures, and regulations for the workplace environment, including employer and employee responsibilities.

6.3 Use health and safety practices for storing, cleaning, and maintaining tools, equipment, and supplies.

6.4 Practice personal safety when lifting, bending, or moving equipment and supplies.

6.5 Demonstrate how to prevent and respond to work-related accidents or injuries; this includes demonstrating an understanding of ergonomics.

6.6 Maintain a safe and healthy working environment.

6.7 Be informed of laws/acts pertaining to the Occupational Safety and Health Administration (OSHA).

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 Arts, Media, and Entertainment sector workplace environment and community settings. (Direct alignment with SLS 9-10, 11-12.1)

7.1 Recognize how financial management impacts the economy, workforce, and community.

7.2 Explain the importance of accountability and responsibility in fulfilling personal, community, and workplace roles.

7.3 Understand the need to adapt to changing and varied roles and responsibilities.

7.4 Practice time management and efficiency to fulfill responsibilities.

7.5 Apply high-quality techniques to product or presentation design and development.

7.6 Demonstrate knowledge and practice of responsible financial management.

7.7 Demonstrate the qualities and behaviors that constitute a positive and professional work demeanor, including appropriate attire for the profession.

7.8 Explore issues of global significance and document the impact on the Arts, Media, and Entertainment sector.

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)

8.1 Access, analyze, and implement quality assurance standards of practice.

8.2 Identify local, district, state, and federal regulatory agencies, entities, laws, and regulations related to the Arts, Media, and Entertainment industry sector.

8.3 Demonstrate ethical and legal practices consistent with Arts, Media, and Entertainment sector workplace standards.

8.4 Explain the importance of personal integrity, confidentiality, and ethical behavior in the workplace.

8.5 Analyze organizational culture and practices within the workplace environment.

8.6 Adhere to copyright and intellectual property laws and regulations and use and appropriately cite proprietary information.

8.7 Conform to rules and regulations regarding sharing of confidential information, as determined by Arts, Media, and Entertainment sector laws and practices.

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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 as practiced in the SkillsUSA career technical student organizations. (Direct alignment with SLS 11-12.1b)

9.1 Define leadership and identify the responsibilities, competencies, and behaviors of successful leaders.

9.2 Identify the characteristics of successful teams, including leadership, cooperation, collaboration, and effective decision-making skills as applied in groups, teams, and career technical student organization activities.

9.3 Understand the characteristics and benefits of teamwork, leadership, and citizenship in the school, community, and workplace setting.

9.4 Explain how professional associations and organizations and associated leadership development and competitive career development activities enhance academic preparation, promote career choices, and contribute to employment opportunities.

9.5 Understand that the modern world is an international community and requires an expanded global view.

9.6 Respect individual and cultural differences and recognize the importance of diversity in the workplace.

9.7 Participate in interactive teamwork to solve real Arts, Media, and Entertainment sector issues and problems.

10.0 Technical Knowledge and Skills

Apply essential technical knowledge and skills common to all pathways in the Arts, Media, and Entertainment sector, following procedures when carrying out experiments or performing technical tasks. (Direct alignment with WS 11-12.6)

10.1 Interpret and explain terminology and practices specific to the Arts, Media, and Entertainment sector.

10.2 Comply with the rules, regulations, and expectations of all aspects of the Arts, Media, and Entertainment sector.

10.3 Construct projects and products specific to the Arts, Media, and Entertainment sector requirements and expectations.

10.4 Collaborate with industry experts for specific technical knowledge and skills.

11.0 Demonstration and Application

Demonstrate and apply the knowledge and skills contained in the Arts, Media, and Entertainment anchor standards, pathway standards, and performance indicators in classroom, laboratory, and workplace settings, and through the SkillsUSA career technical student organizations.

11.1 Utilize work-based/workplace learning experiences to demonstrate and expand upon knowledge and skills gained during classroom instruction and laboratory practices specific to the Arts, Media, and Entertainment sector program of study.

11.2 Demonstrate proficiency in a career technical pathway that leads to certification, licensure, and/or continued learning at the postsecondary level.

11.3 Demonstrate entrepreneurship skills and knowledge of self-employment options and innovative ventures.

11.4 Employ entrepreneurial practices and behaviors appropriate to Arts, Media, and Entertainment sector opportunities.

11.5 Create a portfolio, or similar collection of work, that offers evidence through assessment and evaluation of skills and knowledge competency as contained in the anchor standards, pathway standards, and performance indicators.

CR = Classroom Hours LAB/CC = Laboratory/Shop/Community Classroom Hours

I.	Early Animation and Storytelling	CR	LAB/CC	STANDARDS
	Unit 1 introduces students to early animation on a journey through the history of animation, from its inception to the late 20 th century. Students will explore early animation techniques hands-on, such as the zoetrope, flip-books, light-boxes, and cel animation. They will also learn foundations of visual storytelling and animated film production, engaging in pre-production and pipeline role-playing activities, such as storyboarding, character design,	12	8	Academic: A.PS1.A A.LS1.4 CTE Anchor: 1.0 3.0 6.0 10.0 (2023) 1.0

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	<p>budgeting, and 3D modeling. Students will preview the 12 Principles of Animation and design principles for film, which they will learn and develop confidence with over the course of the year. Finally, students learn their way around the animation studio, with an introduction to both their traditional studio and digital resources, such as the display screen tablet, computer, and class iPads.</p> <p><u>Sample assignments:</u></p> <p>Pre-production and Pipeline role playing! Understanding roles in an animation studio</p> <p>Thumbnail drawings. Intro to the fundamentals of drawing for animation</p> <p>Storyboard creation: Foundation of Storytelling activity (Storyboarding)</p> <p>Zoetrope and flip-book creation. Understanding the fundamentals of early animation to the digital age. Light box animation included.</p> <p>Pendulum and Choice-Based learning animation (slow in, slow out animation), intro the 12-Principles of animation.</p>			<p>4.0 6.0 8.0 9.0 10.0</p> <p>Interdisciplinary: 15.0 16.0</p> <p>Pathway: A1.0 A3.0 A4.0 A5.0 A8.0</p> <p>(2023) AVG.17 AVG.18 AVG.19</p>
II.	Life Drawing	CR	LAB/CC	STANDARDS
	<p>In Unit 2, students engage in traditional studio practice by drawing from life, enhancing their observational skills and grounding their animations in reality to develop character appeal and relatability. Students draw human and animal figures, from anatomical studies to gesture and figure drawings, capturing the essentials of movement, expression, and personality. By exploring the seven elements of art—focusing on line, shape, form, and value—and the nine principles of design, students apply these concepts to their animation and film projects. Drawing from life also prompts students to observe the basic physics of movement and weight, helping students move toward a fundamental</p>	12	8	<p>Academic: A.LS1.A A.G-MG A.SEP.2 A.PS1.A A.PS2.A</p> <p>CTE Anchor: 1.0 2.0 4.0 5.0 7.0 8.0 10.0</p> <p>(2023) 1.0 3.0</p>

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	<p>understanding of arc, timing, secondary action, and solid drawing. All the while, students familiarize themselves with digital tools, including the Wacom Cintiq, Adobe Photoshop and Illustrator, and Toon Boom Storyboard Pro.</p> <p><u>Sample Assignments:</u></p> <p>Professional workshop on drawing from live models (humans and animals, static and dynamic)</p> <p>Gesture Drawings of athletes and actors on campus</p> <p>Anatomical study of humans and animals</p> <p>Drawing from nature (environment and natural elements)</p> <p>Visit to San Diego Zoo for wildlife drawing study project; students turn their life drawings into cartoon characters later</p> <p>Students draw their desk set up at home using different mark-making for value (hatching, cross hatching, etc.) and practice with perspective</p> <p>Students complete a mini assignment on keyframes vs in-betweens</p> <p>Students refine the Pendulum animation and begin bouncing ball animation</p> <p>Students create a digital portfolio for now and future drawing submissions to be recorded</p>			<p>4.0 5.0 10.0</p> <p>Interdisciplinary: 14.0 15.0</p> <p>Pathway: A1.0 A2.0 A8.0</p> <p>(2023) AVG.17</p>
III.	Character Development and Expression	CR	LAB/CC	STANDARDS
	<p>In Unit 3, students infuse their drawings with animation, personality, and appeal, crafting dynamic characters with relatability. Students learn the fundamentals of exaggeration and expression, transforming live figure drawings into unique, exaggerated characters. Collaborative sessions with</p>	10	8	<p>Academic: A.LS.11-12.5 A.RSL.11-12.4 A.RSIT.11-12.3 A.RSIT.11-12.7 A.SEP.2</p>

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	<p>illustrators, theater actors, and designers bolster their grasp of design principles, character creation, and costume design. By partnering to act out scenes, students gain insights into timing and spacing within animated sequences. Foundational animation techniques, such as squash and stretch, are taught through professional demonstrations, culminating in the student creation of short film animation exercises that exhibit a sampler of the principles of animation.</p> <p><u>Sample Assignments:</u></p> <p>Complete the bouncing ball animation and "light" object drop animation to demonstrate squash and stretch, as well as other principles of animation learned so far</p> <p>Exaggeration / expression demo and workshop with a professional animator. Students exaggerate multiple expression drawings.</p> <p>Turn a live model figure drawing (animal or human) into a cartoon character using exaggeration and appeal</p> <p>Character/Costume Design session with theater class</p> <p>Character expression drawing of situation in which character reacts to a surprise turn in events</p> <p>Act out a scene together with a partner</p>			<p>CTE Anchor: 1.0 2.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0</p> <p>(2023) 1.0 2.0 4.0 5.0 6.0 8.0 9.0 10.0 11.0 12.0</p> <p>Interdisciplinary: 13.0 14.0 15.0</p> <p>Pathway: A1.0 A2.0 A3.0 A4.0 A5.0 A6.0 A7.0</p> <p>(2023) AVG.17 AVG.19</p>
IV.	Layout Design	CR	LAB/CC	STANDARDS
	<p>In Unit 4, Students learn how layouts and staging allows them to create more visually compelling and emotionally resonant storytelling experiences, enhance their technical and creative skills, and increase their employability within the animation industry. Students will apply Principles of Design to establish mood and atmosphere, as well as emphasis on key elements of a scene, reinforcing their narrative.</p>	8	10	<p>Academic: A.G-MG A.PS1.A A.PS2.B A.LS4.D</p> <p>CTE Anchor: 1.0 4.0 5.0 7.0</p>

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	<p>Layouts require intense study of various environments, which will engage students in deeper reflection on the natural world, diverse global environments, as well as their local environments. They also require a fundamental understanding of perspective drawing, lighting, camera moves and shots, as well as the element of space. Layouts, scenes, backgrounds, and set design are an integral part of the animation pipeline. Students also engage in an immersive storytelling field trip with Disney at Disney Imagination Campus to help them to understand all of the factors that go into orchestrating a multisensory and appealing environment in visual storytelling.</p> <p><u>Sample Assignments:</u></p> <p>Perspective drawing</p> <p>Assemble inspiration board for layouts (traditional studio and digital drawings)</p> <p>Create layout thumbnail sketches</p> <p>Create a small watercolor landscape using traditional studio materials.</p> <p>Create a digital watercolor landscape using Adobe Illustrator or Photoshop</p> <p>Conduct research on a specific time, place, culture, atmosphere in a particular place in time and history. Sketch three different scenes.</p> <p>Complete their "heavy" object drop animation</p> <p>Create layout renderings using traditional studio and digital drawings</p> <p>Engage in peer critiques and feedback on projects</p>			<p>8.0 10.0 (2023) 1.0 4.0 5.0 8.0 10.0 12.0</p> <p>Interdisciplinary: 14.0 15.0 16.0</p> <p>Pathway: A1.0 A2.0 A3.0 A4.0 A8.0</p> <p>(2023) AVG.17 AVG.18 AVG.19</p>
V.	Storyboarding & Staging	CR	LAB/CC	STANDARDS
	In Unit 5, students delve into the essentials of storyboarding and staging,	10	8	<p>Academic: A.LS.11-12.1-3, 5</p>

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	<p>starting with a study of basic story structure and progressing to both traditional and digital visual storytelling activities. Students engage in demonstrations and workshops in storyboarding with industry professionals, working toward a more robust storyboard that they can build collaboratively in groups toward an animatic. Additionally, students explore fundamentals of film design and layouts through exercises that include demonstrating 1 and 2-point perspectives as well utilizing a variety of camera shots (angles), scenes, and transitions for each frame. Students use a combination of illustration and animation software to create storyboards, layouts, short animations that take place within and interact with a layout or environment, involving visual and sound effects. Students work in groups to produce an simple animatic and clean up their digital portfolio, refining all of their animation projects so far, for their Sem 1 final project.</p> <p><u>Sample Assignments:</u></p> <p>Students create storyboards through a workshop series with professional: 1 panel, 3, 6, 12 panel activities</p> <p>Students create storyboards using a variety of camera shots, sequences, and scenes with notes (in preparation for a simple animatic project)</p> <p>Students create a 30-45 second animatic</p> <p>Students create a draft demo reel and finalize their portfolio for Semester 1.</p> <p>Students add a visual effect to their "heavy" drop animation from previous unit, refining their animation work (e.g., splashing water, splattering mud, dust cloud, etc.)</p>			<p>A.WS.11.12.5</p> <p>CTE Anchor:</p> <p>1.0 2.0 3.0 4.0 5.0 7.0 8.0 9.0 10.0</p> <p>(2023)</p> <p>1.0 2.0 3.0 4.0 5.0 7.0 8.0 9.0 10.0 11.0 12.0</p> <p>Interdisciplinary:</p> <p>13.0 14.0 15.0 16.0</p> <p>Pathway:</p> <p>A1.0 A2.0 A3.0 A4.0 A5.0 A6.0 A8.0</p> <p>(2023)</p> <p>AVG.17 AVG.18 AVG.19</p>
VI.	Stop Motion Animation & Audio	CR	LAB/CC	STANDARDS
	In Unit 6, students master the art of stop motion animation, creating short	7	12	<p>Academic:</p> <p>A.LS.11</p>

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<p>films using techniques like Claymation and cutouts, enhanced with motion capture and SFX. They analyze exemplary studio and film sequences of notable stop motion works within the last 30 years. Studying and learning about scriptwriting fundamentals, students craft original scripts with dialogue and sound effects while learning about audio copyright and public domain resources. This unit promotes coordination, collaboration, and creative expression, encouraging students to produce original music and audio in partnership with the site's music department. Industry professionals demonstrate character modeling with polymer clay and wire figures, guiding students in developing their own stop motion stories, characters, and environments. Collaboratively, students assign roles within their pre-production and pipeline teams, covering tasks such as storyboarding, sound editing, video editing, budgeting, and scheduling. Using Canon cameras and mastering stop motion software such as Dragonframe and Stop Motion Studio, students produce stop motion films from concept to completion, culminating in a peer screening, in which students write and receive constructive critiques.</p> <p><u>Sample Assignments:</u></p> <p>Professional demo and workshop with character model in polymer clay. Students create a character using polymer clay.</p> <p>Create a script with basic sound effects and dialogue following script writing workshop</p> <p>Students record their own sound effects and dialogue.</p> <p>Students work together collaboratively in production and artistic roles to create stop motion films in small groups, experiencing the production process from start to finish, including a peer audience screening</p>		<p>A.WS.11.12.1-5, 9-10 A.RSL.11-12.3 A.RSIT.11-12.3 A.RSIT.11-12.7 A.SEP.1-2 A.CC.1 A.PS1-2 A.LS.2 A.ETS.1</p> <p>CTE Anchor: 1.0 2.0 3.0 5.0 6.0 7.0 9.0 10.0</p> <p>(2023) 1.0 7.0 10.0 11.0 12.0</p> <p>Interdisciplinary: 16.0</p> <p>Pathway: A1.0 A2.0 A3.0 A5.0 A7.0 A8.0</p> <p>(2023) AVG.17 AVG.18 AVG.19 AVG.20</p>
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	Students write critiques and feedback for classmates' films			
VII.	Rigging	CR	LAB/CC	STANDARDS
	<p>In Unit 7, students learn how to “rig” characters and objects, which is an essential role in the animation pipeline, contributing to the motion of forms as well as nuance and relatability. Students expand their understanding of the animation software and develop greater control and quality in their animations. Students engage in problem solving and a more robust study of anatomy and movement by rigging characters and objects to bestow them with life. The most fundamental project in this unit includes the character walk cycle, involving a more robust training and understanding of the animation software, such as Toon Boom, Blender, and Maya. Students also learn to create nuance for characters through the animation of character’s facial expressions, gesture, and even natural elements.</p> <p><u>Sample Assignments:</u></p> <p>Build a full character in Toon Boom for rigging</p> <p>Rig a basic skeleton figure</p> <p>Build a cohesive rig for your character's body, understanding the joint hierarchy and how to parent different parts of a rigged figure</p> <p>Create control curves for a character's limbs and facial figures</p> <p>Rig a character's body and face, creating a facial rig system</p> <p>Animate a character's facial expressions reacting to something</p> <p>Create a simple character walk cycle or action sequence loop (more advanced: create a character jumping loop)</p>	8	8	<p>Academic: A.SEP.5</p> <p>CTE Anchor: 1.0 5.0 10.0</p> <p>(2023) 1.0 4.0 5.0 10.0</p> <p>Interdisciplinary: 14.0 15.0</p> <p>Pathway: A2.0</p> <p>(2023) AVG.17 AVG.18 AVG.19</p>

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VIII.	Visual & Media Effects	CR	LAC/CC	
	<p>In Unit 8, students explore the fundamentals of visual effects (VFX), sound effects (SFX), and broader essential media effects in animation. Visual effects augment animation by introducing realism, depth, and dynamic elements that elevate the overall narrative impact. Students gain an introduction to industry standard effects with particle effects, fluid simulation, lighting, compositing, rotoscoping, set extensions, etc. Students learn to balance realism with artistic style according to the project's needs, understanding how to exaggerate or stylize effects for creative purposes while maintaining believability. Sound effects, along with sound editing, music, and dialogue, significantly contribute to establishing timing, emotion, and pacing, enhancing elements like rhythm, comedic timing, mood, and tension. As students create their own audio for their films, they refine their software editing skills and recording techniques, deepening their understanding of sound mixing principles and the role of sound in visual storytelling. Students are introduced to 3D tools for more advanced students. Productions are tailored to either 2D or 3D formats based on skill level or preference.</p> <p><u>Sample Assignments:</u></p> <p>Students create their own color wheel</p> <p>Record sound effects for a scene ((rain drops, horse hooves prancing, water splashing, bubbles popping)</p> <p>Students plan an animated sequence by plugging a former character of theirs into a desired setting; they must add visual/media effects that enhance the scene and turn it into a short animation.</p> <p>Students write a self-reflection on their short, animated scene and animatic projects</p>	6	10	<p>Academic: A.LS.11-12.1-3, 5 A.RSL.11-12.4</p> <p>CTE Anchor: 1.0 2.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 (2023) 1.0 2.0 4.0 5.0 7.0 9.0 10.0 12.0</p> <p>Interdisciplinary: 14.0 15.0 16.0</p> <p>Pathway: A2.0 A6.0 A7.0 A8.0 (2023) AVG.17 AVG.18 AVG.19 AVG.20</p>

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	<p>Create a natural element visual effect: natural elements / special effects (water, rain, explosions, splashes, earthquakes, gears, smoke, fire, snow, etc.)</p> <p>Work collaboratively to create a finalized animatic involving a character's interaction with visual effects and elements</p> <p>Students write feedback and critiques on other animatic projects</p> <p>Students refine animatic project following feedback</p>			
IX.	3D Sculpting and Rendering	CR	LAB/CC	
	<p>In Unit 9, students learn the basics of building characters and environmental elements in 3D. Students will focus on sculpting/building a simple character and/or environment, with the potential for creating a short sequence of that character interacting with a natural element and having a special effect take place, such as a character step into water, or a snowflake land on a character's face. Students will engage in 3D software demos and tutorials, including Z brush sculpting for character design and Blender or Twin motion for 3D environment rendering. Practical experience is enhanced through a 3D rendering workshop led by a 3D sculpting studio professional. Students explore coloring, pattern building, creating and applying textures, shading, and enhancing the visual quality of 3D models. Students will work collaboratively at times to help each other construct different components in 3D software, even helping to "train" each other and problem solve. Students learn how visual effects in the 3D realm involve particles, caustics, and natural element simulations (e.g., water, smoke, fire), and they will have the option of creating a brief simulation to add to their portfolios. Key vocabulary and concepts such as value, texture, arcs, CGI, particles, and springs will be integrated throughout the unit, ensuring a comprehensive understanding of</p>	10	8	<p>Academic: A.G-MG A.SEP.1-2 A.SEP.5 A.PS1.A</p> <p>CTE Anchor: 1.0 5.0 10.0 (2023) 4.0 5.0 7.0 8.0 10.0</p> <p>Interdisciplinary: 15.0</p> <p>Pathway: A2.0 (2023) AVG.17 AVG.18 AVG.19 AVG.20</p>

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	<p>animation principles and techniques in 3D animation.</p> <p><u>Sample Assignments:</u></p> <p>Render a previously designed 2D character in 3D form in Z brush / Blender</p> <p>Render a character with costume and props in 3D form</p> <p>Animate a character model interacting with natural elements (water, rain, dust, snow, etc.)</p> <p>Build a 3D environment detail, such as a houseplant, an animal, your student desk at home (advanced students can animate it)</p> <p>Build a 3D environment using Twin motion or Blender</p> <p>Enhance animation from Unit 8, if needed.</p> <p>Design character models in preparation for Unit 10 pitch packet: Create your character model sheet in 3/4 perspective, profile, frontal perspectives with action poses</p>			
X.	Portfolio & Pitch Packet	CR	LAB/CC	STANDARDS
	<p>In Unit 10, students will prepare for employment by building a professional portfolio and producing a “pitch packet” with a sample animated scene. Students will reflect on their learning experiences, considering the next steps for where they will apply their learning, and refine their digital animation portfolios for potential application to internships or work. Students will create an animation demo reel based on their course animations. They will also work in teams to compile a brief pitch packet that contains layout designs, character model sheets, an animatic, and brief animated scene to present for their final project, as well as collaborative critique and feedback. Additionally, students will research career opportunities, create</p>	7	10	<p>Academic: A.LS.11-12.1-2, 6 A.WS.11-12.4-5</p> <p>CTE Anchor: 1.0 2.0 3.0 4.0 5.0 7.0 8.0 9.0 10.0 11.0</p> <p>(2023) 1.0 2.0</p>

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	<p>resumes using tools such as Canva or Word, and participate in mock interviews. By the end of the unit, the student will have material ready to submit for a potential job or internship application.</p> <p><u>Sample Assignments:</u></p> <p>Complete digital animation portfolios</p> <p>Create a resume (Canva, Word, etc.)</p> <p>Create an animation demo reel</p> <p>Collaboratively create a pitch packet: sample animated scene or animatic, layout designs (at least 3), character model sheets, and story summary</p> <p>Research career opportunities and write up a reflection on your next potential position in the AME pathway / industry</p> <p>Write critiques and feedback on classmates' work</p> <p>Refine personal work for screening of final projects.</p>			<p>3.0 4.0 7.0 8.0 9.0 11.0</p> <p>Interdisciplinary: 13.0 14.0 15.0 16.0</p> <p>Pathway: A2.0 A5.0 A8.0</p> <p>(2023) AVG.17 AVG.18 AVG.19</p>
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