

3D MEDIA DESIGN

INDUSTRY SECTOR | Arts, Media and Entertainment PATHWAY | Visual and Media Arts

COURSE ESSENTIAL QUESTION:

Do you have what it takes to work in 3D graphics industry?

COURSE DESCRIPTION:

This course is designed to prepare students for internship or employment as a 2D/3D artist in various industries where 2D/3D graphic skills would be needed. This course includes instruction in important animation principles; basic drawing and storyboarding, enacting and movement, understanding of anatomy and proportion, characterization of non-animate objects, and visual simulation. Integrated throughout the course are Common Core State Standards and Career Technical Education Standards, which include safety, communication, technology, ethics, career planning and other employability skills.

INFORMATION:

- A. **Pre-requisite:** 16 years old or a 11th/12th grader
- B. **Abilities Required:** Basic math and reading comprehension
- C. **Dress Requirement and Grooming:** as required by Industry Standards
- D. **Students must master 70% of the certificate competencies to receive a certificate.**
- E. **Fee:** Free to High School.
- F. **Course Length:** 180 hours.
- G. **Textbook:** None
- H. **UC a-g Approved:** Yes
- I. **Industry Certification:** No
- J. **Sequencing to Include a Capstone:** Yes
- K. **Community College Articulation:** No
- L. **Common Core Alignment:** Yes
- M. **Community Classroom:** No
- N. **Career Technical Student Organization:** No
- O. **Work-Based Learning:** No

THEME: UNIT 1. DESIGN FUNDAMENTALS AND TRAINING

ENGAGING TITLE:

INSTRUCTIONAL HOURS: 30 HOURS

Common Core Unit Objective

This unit provides students with an overview of the 2D/3D artist profession. Students will also learn the basic design fundamentals and application through lecture notes and internet resources.

Key Assignments

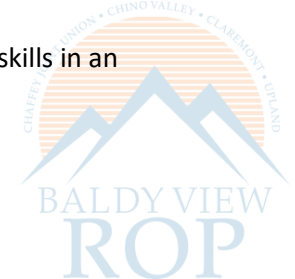
- Common elements, Companies and their styles, Various traditional drawing practices, Game analysis

Anchor 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.
- 2.5 Communicate information and ideas effectively to multiple audiences using a variety of media and formats.
- 5.0 **Problem Solving and Critical Thinking:** Conduct short as well as more sustained research to create alternative solutions to answer a question or solve a problem unique to the Arts, Media, and Entertainment sector, using critical and creative thinking, logical reasoning, analysis, inquiry, and problem-solving techniques.
- 5.6 Read, interpret, and extract information from documents.

Pathway Standards

- A1.0 Demonstrate ability to reorganize and integrate visual art elements across digital media and design applications.
- A1.3 Describe the use of the elements of art to express mood in digital or traditional artwork found in the commercial environment.
- A2.0 Apply artistic skills and processes to solve a variety of industry-relevant problems in a variety of traditional and electronic media.
- A2.5 Compile a portfolio of multiple original two- and three-dimensional works of art that reflect technical skills in an industry-relevant application.



Common Core Standards

- RIST 11-12.4. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of text.

RESOURCES:

Resources

1. Playing with Shapes to Develop a Character: graphicmama.com/blog/convoying – Characters – personality/
2. Character Design Tips: www.creativeblog.com/character-design/tips-5132643
3. Design Fundamentals – 1stwebdesigner.com/graphic-design-basics-elements/
4. 12 Principles of Animation (with examples): idearocketanimation.com/13721-12-principles-of-animation-gifs/



THEME: UNIT 2. PRE-VISUAL DEVELOPMENT

ENGAGING TITLE:

INSTRUCTIONAL HOURS: 90 HOURS

Common Core Unit Objective

Students will apply their understanding of design implementation process to create pre-visuals that will guide the overall look of the animation and the visual direction.

Certificate Competencies

- Be able to apply designs to stylize characters.
- Understand 12 principles of animation to character movements in the animation.
- Design and create various elements such as environment and props.
- Create visual elements that serve as guides for final animation assets.
- Develop pre-visuals that guide the direction of the animation style.

Key Assignments

- References collection, Plot/Script, Idea sketching, Character Development/Model Sheet, Character Expression, Environment Digital Painting, Prop/Weapon Design, Storyboarding, Sculpting, Character painting.

Anchor 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.
- 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.



Pathway Standards

- A1.0 Demonstrate ability to reorganize and integrate visual art elements across digital media and design applications.
- A1.1 View and respond to a variety of industry-related artistic products integrating industry appropriate vocabulary.
- A1.2 Identify and use the principles of design to discuss, analyze, and create projects and products across multiple industry applications.
- A1.3 Describe the use of the elements of art to express mood in digital or traditional art work found in the commercial environment.

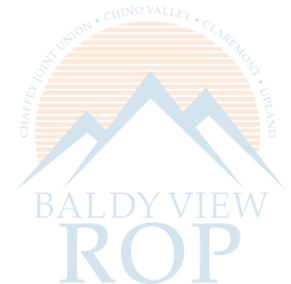
Common Core Standards

- RIST 11-12.4. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of text.

RESOURCES:

Resources

1. Applying Design Principles to Animation Creation (courtesy: PIXAR): [pixar-animation.weebly.com/character – design.html](http://pixar-animation.weebly.com/character-design.html)
2. What is Animation Designer? https://learn.org/articles/what_is_an_Animation_Designer.html



THEME: UNIT 3. ART ASSET CREATION

ENGAGING TITLE:

INSTRUCTIONAL HOURS: 90 HOURS

Common Core Unit Objective

Students will create art assets and animations that will be foundations of the core art.

Key Assignments

References collection, Plot/Script, Idea sketching, Character Development/Model Sheet, Character Expressions, Environment Digital Painting, Prop/Weapon Design, Storyboarding, Sculpting, Character painting.

Anchor Standards

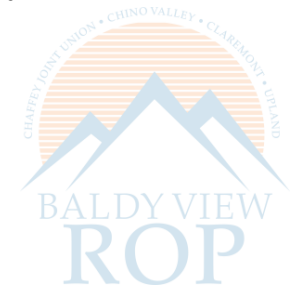
- A1.0 Demonstrate ability to reorganize and integrate visual art elements across digital media and design applications.
- A2.6 Create an artistic product that involves the effective use of the elements of art and the principles of design.

Pathway Standards

- A1.0 Demonstrate ability to reorganize and integrate visual art elements across digital media and design applications.
- A1.1 Identify and use the principles of design to discuss, analyze, and create projects and products across multiple industry applications.
- A1.3 Describe the use of the elements of art to express mood in digital or traditional artwork found in the commercial environment.

Performance Indicators

- A1.1 Identify and use the principles of design to discuss, analyze, and create projects and products across multiple industry applications.
- A1.3 Describe the use of the elements of art to express mood in digital or traditional artwork found in the commercial environment.



Common Core Standards

- RIST 11-12.4. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of text.

RESOURCES:

Resources

1. Previs – Vs. – Animatic: animatedstoryboards.com/previs-vs-animatic=whats=difference/
2. Previs Demo: www.youtube.com/watch?v=KMMeHPGV5VE
3. *Pre-viz (Understanding the purpose and what it is used for?)*
http://library.creativecow.net/article.php?author_folder=cline_gare&article_folder=previs_intro&page=1



THEME: UNIT 4. PRESENTATION/CRITIQUE/EVALUATION

ENGAGING TITLE:

INSTRUCTIONAL HOURS: 40 HOURS

Common Core Unit Objective

Students will be evaluating the animations and art products, addressing the quality and various aesthetic tangibles to improve the quality of the art.

Key Assignments

Evaluation/Feedback

Anchor Standards

2.5 Communicate information and ideas effectively to multiple audiences using a variety of media and formats.

Pathway Standards

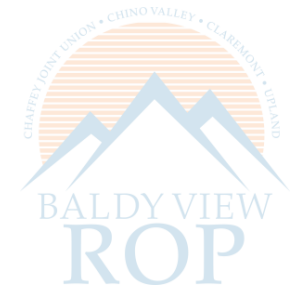
D4.0 Students will demonstrate mastery of game art and multimedia, including music, sound, art, and animation.

Performance Indicators

A4.6 Create an artistic product for a specific industry and modify that product to accommodate a different aesthetic perspective.

Common Core Standards

RIST 11-12.4. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of text.



RESOURCES:

Resources

1. 3D Game Asset Creation – <https://cgmasters.net/free-tutorials/what-to-know-when-creating-next-gen-assets/>
2. Nick Pettit (Advice from game art expert) – blog.teamtreehouse.com/asset-workflow-game-art-3d-modeling

