

Digital Animation

Course Code: 10205

Rationale Statement:

Since the beginnings of time, human beings have tried to capture a sense of motion in their art. Today, animation is used in various forms. Animation is seen in advertisements on television, on your computer screen, or on many things that pop up from the net. Also, animation is used in movie films, such as, “The Matrix,” “Titanic,” and “Who Framed Roger Rabbit?” When you get down to the cartoon style of digital animation, you will see animation in “Toy Story,” “Shrek,” and “A Bug’s Life.” Animation can be seen in many aspects of our life.

Suggested Grade Level: 9-12

Topics Covered:

- Legal and ethical issues
- Career opportunities
- Use of animations
- Animation development process
- Animation software tools
- Basic animation techniques
- Interactivity in animation
- Publishing animated movies

Core Technical Standards & Examples:

Indicator #1 Understand professional practices in careers and opportunities	
Bloom’s Taxonomy Level	Standard & Examples
Understanding	<p>DA1.1 Explain career opportunities in the area of animation</p> <p>Examples:</p> <ul style="list-style-type: none"> • Research opportunities for employment in the area of animation • Interview a professional working in the area of animation • Research the requirements, skills, wages, education, and geographic opportunities in the area of animation
Understanding	<p>DA1.2 Summarize the use of animation in production</p> <p>Examples:</p> <ul style="list-style-type: none"> • Select at least three websites that integrate animation and evaluate the effectiveness of the animation • Develop a collection of examples for a variety of professionally

	<p>designed animations</p> <ul style="list-style-type: none"> • Differentiate between 2D and 3D • Explore animation styles in film
Understanding	<p>DA1.3 Explain legal and ethical issues related to digital animation</p> <p>Examples:</p> <ul style="list-style-type: none"> • Complete a web quest on legal issues related to digital animation • Research instructions and forms for registration of an animation product with Copyright office • Obtain formal permission for use of an art form, design, or photograph in an animation publication
Indicator #2: Apply digital animation fundamentals	
Bloom's Taxonomy Level	Standard & Examples
Understanding	<p>DA2.1 Understand the animation development process</p> <p>Examples:</p> <ul style="list-style-type: none"> • Develop a chart that explains each step of the animation development process • Determine the number of drawings needed to animate a given situation • Create drawings to illustrate the animation of a given situation, such as picking up a pencil, taking a drink of water, lifting a weight • Explain the construction of a 3D scale model
Applying	<p>DA2.2 Use animation software tools</p> <p>Examples:</p> <ul style="list-style-type: none"> • Identify the tools available in the animation software • Create and modify objects • Change the color, size and shape of objects • Use the pen tool to draw an object
Applying	<p>DA2.3 Implement preproduction plan</p> <p>Examples:</p> <ul style="list-style-type: none"> • Plan a theme premise and storyboard • Create objects • Creating scenes • Create a skeletal structure • Selecting textures

Indicator #3: Create animations	
Bloom's Taxonomy Level	Standard & Examples
Applying	<p>DA3.1 Produce basic animation</p> <p>Examples:</p> <ul style="list-style-type: none"> • Use objects in animations • Using a Venn diagram compare a frame-by-frame animation vs. a tweened animation • Create a frame-by-frame animation • Animate text • Using a Venn diagram, compare shape tweening vs. motion tweening. • Create movement, that incorporates a motion guide • Create a movie that incorporates at least three scenes •
Creating	<p>DA3.2 Generate sound in animations</p> <p>Examples:</p> <ul style="list-style-type: none"> • Select at least two animated movies and analyze the effectiveness of the use of sound in the movies • Add a sound to a symbol and/or movie that you created • Create an animated greeting card that includes instances of a symbol, tweening, a motion guide, and sound
Creating	<p>DA3.3 Construct interactivity in animations</p> <p>Examples:</p> <ul style="list-style-type: none"> • Compare the use of rollover and invisible buttons in animations • Create a button symbol that can be used in an animated movie • Use scripting to stop a movie from continuous looping • Create a movie that incorporates action scripting to encourage viewer interactivity • Use complex light and camera controls
Evaluating	<p>DA3.4 Check animations for publication and analysis</p> <p>Examples:</p> <ul style="list-style-type: none"> • Research the publishing formats available for your animated movie • Evaluate the publishing format for a specified end use of an animated movie • Publish animation to external device

