# Interactive Media Course No. 10203 Credit: 1.0

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| **Student name:**  |  | **Graduation Date:** |  |

Pathways and CIP Codes: **Media Arts, Web, and Design (11.0801)**

Course Description: **Technical Level**: Interactive Media courses provide students with the knowledge and skills to create, design, and produce interactive media products and services. The courses may emphasize the development of digitally generated and/or computer-enhanced media. Course topics may include 3D animation, graphic media, web development, and virtual reality. Upon completion of these courses, students may be prepared for industry certification.

Directions:The following competencies are required for full approval of this course. Check the appropriate number to indicate the level of competency reached for learner evaluation.

**RATING SCALE:**

4. Exemplary Achievement: Student possesses outstanding knowledge, skills or professional attitude.

3. Proficient Achievement:Student demonstrates good knowledge, skills or professional attitude. Requires limited supervision.

2. Limited Achievement:Student demonstrates fragmented knowledge, skills or professional attitude. Requires close supervision.

1. Inadequate Achievement:Student lacks knowledge, skills or professional attitude.

0. No Instruction/Training:Student has not received instruction or training in this area.

## Benchmark 1: Animation Principles and the Design Process

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 1.1 | Explain the animation production process. |  |
| 1.2 | Demonstrate knowledge of industry standard software programs for creating graphics, video and motion graphics. |  |
| 1.3 | Demonstrate knowledge of current project management and collaborative tools. |  |
| 1.4 | Demonstrate knowledge of current web development environments (IDE). |  |
| 1.5 | Evaluate the visual appeal of animation projects. |  |
| 1.6 | Research and create a presentation focusing on careers related to animation and evaluate the purposes of different animated digital communication products. |  |
| 1.7 | Add class projects to the (JPS) Individual Plan of Study electronic portfolio. |  |

## Benchmark 2: Vector Illustration

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 2.1 | Demonstrate foundational knowledge of vector graphics, including concept paths and anchor points. |  |
| 2.2 | Explain how vector graphics differ from raster images. |  |
| 2.3 | Demonstrate proficiency with vector illustration tools, panels, and workspaces. |  |
| 2.4 | Creating basic shapes and paths with the pencil tool and/or pen tool. |  |
| 2.5 | Utilizing knowledge of the art elements to add aesthetically pleasing color, layers, artistic effects, patterns and/or textures to complex shapes. |  |
| 2.6 | Create a project manipulating texts integrating typography into illustrations. |  |
| 2.7 | Explain how to prepare vector images for animation, considering layers, grouping, and naming conventions for efficient animation workflows. |  |
| 2.8 | Create a character design, including character sketches, proportions, and poses. |  |
| 2.9 | Explain the different export options for vector illustrations and how the can be imported into animation software considering compatibility and file transfer considerations. |  |

## Benchmark 3: Bone Tool Proficiency

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 3.1 | Demonstrate how to create and manage layers. |  |
| 3.2 | Demonstrate an understanding to keyframes and setting keyframes at different points in time. |  |
| 3.3 | Demonstrate how to add bones to character. |  |
| 3.4 | Explore the process of rigging. |  |
| 3.5 | Explain how the Inverse Kinematics works with the bone tool to create a more natural and efficient animation. |  |
| 3.6 | Demonstrate how adjust timing, easing, and other parameters. |  |
| 3.7 | Identify the different export options and various publications of animations. |  |
| 3.8 | Create an advanced character rigs, and integrate sound. |  |

## Benchmark 4: ActionScript

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 4.1 | Explain the fundamentals of scripting languages, including variables, data types, and basic syntax. |  |
| 4.2 | Demonstrate proficiency using scripting languages to control and interact with MovieC!ips. |  |
| 4.3 | Explore techniques for controlling the time!ine using scripting languages (i.e. play, stop and footcandle). |  |
| 4.4 | Create an interactive storytelling project using scripting language to control animation and user interaction, enabling dynamic and responsive animations. |  |
| 4.5 | Create logic in animations by using conditional statements {if, else, switch). |  |
| 4.6 | Utilize loops {for, while) to create repetitive action for animations. |  |
| 4.7 | Define and use functions in scripting language, allowing for the organization and reuse of code. |  |
| 4.8 | Utilize tweenlng with scripting language to create smooth transitions with animations. |  |
| 4.9 | Demonstrate how to load external data (images, XML, JSON) into animations using scripting language. |  |
| 4.10 | Demonstrate how to integrate scipting language to create a web project. |  |

## Benchmark 5: Movie making

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 5.1 | Explore animation and movie making softwares understanding position, rotations, scale, transparency, and how to manipulate an animation. |  |
| 5.2 | Create and edit movie clips for a web based project. |  |
| 5.3 | Demonstrate an understanding to nesting movie clips with each other and create a hierarchical structure of animations. |  |
| 5.4 | Demonstrate an understanding to basic time!ine animation (keyframes, frames, frame labels and markers). |  |
| 5.5 | Demonstrate how to apply filters, looping, particle and blending modes to MovieC!ips to add visual effects and enhancements to an animation project. |  |
| 5.6 | Create content that utilize audio, hyper/inks, and text loaded from external files. |  |

## Benchmark 6: Video making

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 6.1 | Explain the different compatibility of MP4, Web, and Ogg with different browsers and services. |  |
| 6.2 | Demonstrate video compression techniques to optimize file sizes without compromising quality. |  |
| 6.3 | Demonstrate how to use embed videos into web pages using HTML. |  |
| 6.4 | Differentiate between different video codes and choose the appropriate one based on browser support and quality requirements. |  |
| 6.5 | Understand accessibility considerations for embedding videos, including captions, subtitles, and alternative text for users with disabilities. |  |
| 6.6 | Customize the appearance of embedded videos with CSS styling options such as size, position, and overlay effects. |  |
| 6.7 | Demonstrate different techniques for optimizing embedded videos for search engines, Including video sitemaps and metadata. |  |

I certify that the student has received training in the areas indicated.

Instructor Signature:

For more information, contact:

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