ARTD 150
Motion Graphics
3 Credits: (2 hours lecture, 3 hours lab)

Community College of Baltimore County
Common Course Outline

Description

ARTD 150 – Motion Graphics: is a course that teaches students to explore the application of software, concepts, and skills required to design and create both frame-based and time-based animation for use in graphic design, broadcasting, advertising, and social media. Topics include storyboarding, transitions, masks, typographic animation, and audio synchronization.

Pre-requisites: ARTD 116 or ARTD 140 or permission of program coordinator

Overall Course Objectives

Upon completion of this course, students will be able to:

1. differentiate between frame-by-frame and tweening;
2. create effective timing for mood, anticipation, staging, and realism;
3. design informative typographic animations;
4. utilize multiple assets and masks in animated sequences;
5. visualize data through transformational changes over time;
6. utilize camera movement to guide viewers;
7. produce motion assets for advertising packages;
8. develop broadcast graphics;
9. manipulate timelines;
10. output animations for a variety of delivery methods;
11. synchronize assets with an audio soundtrack; and
12. discuss the history, process, and methods of animation.

Major Topics

I. Frame and Time-based Animation
   a. Frame by frame techniques
   b. Onion skinning
   c. Frame rate
II. Keyframes
   a. Adding and removing keyframes
   b. Moving keyframes in time
   c. Using hold keyframes
   d. Determining the proper number of keyframes needed
III. Timeline Manipulation
   a. Editing duration
   b. Editing in and out points

c. Moving layers in time

IV. Primary Versus Secondary Animation
   a. Action and reaction
   b. Supporting action
   c. Background motion
   d. Nesting motions

V. Path-Based Motion
   a. Attaching to paths
   b. Orienting to paths

VI. Tweening
   a. Easing
   b. Speed
   c. Motion graph editing

VII. Transitions
   a. Fade
   b. Crossfade
   c. Swipe
   d. Reveal

VIII. Typographic Animation
   a. Timing and legibility
   b. Direction and legibility
   c. Credit sequences

IX. Masking
   a. Creating paths
   b. Shape masks
   c. Alpha masks
   d. Properties
   e. Track mattes
   f. Chroma keys

X. Motion Graphics History
   a. Birthplaces – Alva Lundin, Oskar Fischinger, and Norman McLaren
   b. Design revolution – Saul Bass and Pablo Ferro
   c. Contemporary impact – Kyle Cooper and Arisu Kashiwagi

XI. Audio Synchronization
   a. Normalizing audio
   b. Waveforms
   c. Converting audio to keyframes
   d. Expression basics

XII. Storyboarding
   a. Framing
   b. Using motion arrows
   c. Using camera arrows
   d. Story reels

XIII. Production Pipeline
   a. Pre-production – scripting, storyboards, exposure sheets
   b. Production – capture, asset development, animation, synchronization
   c. Post-production – output, compression, delivery

Course Requirements

Grading will be determined by the individual faculty member, but shall include the following, at minimum:

- four completed projects, one of which uses sound
- one final project based on a student's own personal concept

Written assignments and research projects: Students are required to use appropriate academic resources in their research and cite sources according to the style selected by their professor.

Other Course Information

This course is taught in a computerized environment. Individual faculty members may include additional course objectives, major topics, and other course requirements to the minimum expectations stated in the Common Course Outline.

Date Revised: 11/21/2023