

## **ARTD 117**

### **Four-Dimensional Design**

3 Credits: 2 hours lecture, 3 hours lab

Community College of Baltimore County  
Common Course Outline

#### **Description**

**ARTD 117 – Four-Dimensional Design:** introduces methods for the creation of time-based art and media. The course highlights significant historical events in time-based media, as well as current tools and careers in the field. Various forms of image, video, and audio capture are explored. Students are challenged with projects which make use of keyframes, timelines and non-linear editing. This course prepares students for intermediate-level visual arts courses in both transfer and career programs in art and design. It may also be taken for personal enrichment.

#### **Overall Course Objectives**

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

1. recognize historical milestones of time-based media in multiple cultures;
2. link visual production and critical thinking;
3. apply elements and principles of design to time-based media production;
4. storyboard coherent scenes;
5. interpret a timeline and time codes;
6. sequence scenes and shots to construct a visual narrative;
7. time transitions for effective visual communication;
8. compare keyframing and frame-by-frame techniques;
9. edit footage in a non-linear software environment;
10. animate objects using stop-motion techniques;
11. identify careers within time-based media;
12. chart project workflow through a typical production; and
13. incorporate sound into a time-based production.

#### **Major Topics**

- I. Historical Milestones in Time-Based Media
  - a. The persistence of vision
  - b. Invention of photography
  - c. Invention of sound recording
  - d. Invention of film recording
  - e. Cell animation
  - f. Digital animation
- II. Storyboarding
  - a. Defining shots
  - b. Framing scenes
  - c. Notations for movement and transition
- III. Capturing

The Common Course Outline (CCO) determines the essential nature of each course.

For more information, see your professor's syllabus.

- a. Cell phone cameras
- b. Digital cameras
- c. Resolution
- IV. Timelines and Frames
  - a. Duration
  - b. Time codes
  - c. Frames and keyframes
  - d. Interpolation and in-betweens
- V. Non-linear Editing
  - a. Gathering footage
  - b. Normalizing footage
- VI. Compositing
  - a. Layers
  - b. Keying
  - c. Post-production effects
- VII. Rendering and Distribution
  - a. Compression/decompression scheme
  - b. File formats
  - c. Display
- VIII. Sound
  - a. Capturing
  - b. Balancing and normalizing
  - c. Filtering
  - d. Exporting
- IX. Animation
  - a. Aesthetics and styles
  - b. 2D vs. 3D
  - c. Production pipeline
  - d. Twelve Principles of Animation
  - e. Careers and roles
- X. Motion Graphics
  - a. Aesthetics and styles
  - b. Production pipeline
  - c. Careers and roles
- XI. Performance
  - a. Body and space
  - b. Gesture
  - c. Movement producing artifacts

### **Course Requirements**

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

- three completed projects with storyboards and shots lists
- one class presentation on a specific artist working in time-based media
- one moving image samples collection containing a minimum of thirty samples

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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.

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