



## Multiplatform Animation Using Adobe Animate CC (2019)

Adobe conducted research to identify the foundational skills students need to effectively communicate using digital media tools. Based on feedback from educators, design professionals, businesses, and educational institutions around the world, the objectives cover entry-level skill expectations for creating and designing dynamic animation. An individual earning this certification has approximately 150 hours of instruction and hands-on experience with the product, and is familiar with product features and capabilities, as well as relevant career concepts.

Individuals who have earned an Adobe Certified Associate certification have demonstrated mastery of the following skills. Detailed exam objectives are available on the Adobe Education Exchange.

### 1 Working in the Animation Industry

*This objective covers critical concepts related to working with colleagues and clients as well as legal, technical, and design related crucial knowledge.*

#### 1.1 Identify the purpose, audience, and audience needs for preparing content.

1.1a Determine whether content is relevant to the purpose, the audience, and audience need.

- i Key Terms: client goals, target audience, demographics, accessibility, etc.

#### 1.2 Communicate with colleagues and clients about design plans.

1.2 a Demonstrate knowledge of techniques for communicating ideas about design plans with peers and clients.

- i Key Terms: sketches, storyboards, specifications, wireframes, prototypes, iterations, drafts, feedback loop, project scope, scope creep, etc.

1.2 b Demonstrate knowledge of basic project management concepts

#### 1.3 Determine the type of copyright, permissions, and licensing required to use specific content.

1.3 a Identify legal and ethical considerations for using third-party content such as copyright, permissions, and licensing.

- i Key Terms: Creative Commons, public domain, intellectual property, derivative work, commercial use, attribution, work for hire, fair use/fair dealing, etc.

**1.3b** Demonstrate knowledge of interactive media.

- i Key Terms: events, listeners, variables, dynamic text, JavaScript, ActionScript, methods, functions, classes, etc.

**1.3c** Understand and use key terms related to multiplatform animation.

- i Key Terms: Apple iOS, Google Android, Microsoft Windows, Apple macOS, HTML5 Canvas, Adobe AIR, Adobe Flash Player, WebGL, Animated GIF, video, Sprite sheets, etc.

**1.4 Demonstrate knowledge of basic design principles and best practices employed in industry.**

**1.4 a** Communicate visually using the elements and principles of design and common design techniques.

- i Key Terms: space, line, shape, form, color, texture, emphasis/focal point, unity/harmony, variety, balance, alignment, proximity, repetition, rhythm, scale, movement, negative space, gestalt, contrast, etc.

**1.4 b** Identify and use common typographic adjustments to create contrast, hierarchy, and enhanced readability.

- i Key Terms: font, size, style, color, alignment, kerning, tracking and leading, horizontal and vertical scale, line length, etc.

**1.5 Demonstrate knowledge of animation and interactive media principles.**

**1.5a** Communicate visually using the elements and principles of design and common design techniques.

- i Key Terms: space, line, shape, form, color, texture, emphasis/focal point, unity/harmony, variety, balance, alignment, proximity, repetition, rhythm, scale, movement, negative space, gestalt, contrast, etc.

**1.5b** Identify and use common typographic adjustments to create contrast, hierarchy, and enhanced readability.

- i Key Terms: font, size, style, color, alignment, kerning, tracking and leading, horizontal and vertical scale, line length, etc.

**1.6 Demonstrate knowledge of animation and interactive media principles.**

**1.6a** Demonstrate knowledge of common animation principles.

- i Key Terms: 12 basic principles of animation (squash and stretch, anticipation, staging, straight ahead action and pose to pose, follow through and overlapping action, slow in and slow out, arc, secondary action, timing, exaggeration, solid drawing, and timely appeal), etc.

**1.6b** Demonstrate knowledge of interactive media principles.

- i Key Terms: user experience, user interface, user interaction, aesthetics, functionality, hierarchy, consistency, user accessibility, discoverability in UI, etc.

## 2 Project Setup and Interface

*This objective covers the interface setup and program settings that assist in an efficient and effective workflow, as well as knowledge about incorporating digital assets for a project. .*

### 2.1 Create a document with the appropriate settings for multimedia projects.

2.1 a Set appropriate document settings for a new project.

- i Key Concepts: document type, width and height, frame rate, background color, etc.

2.1 b Create a new document template for specific project needs.

- i Key Concepts: name, description, category, etc.

### 2.2 Customize the application workspace and use visual aids for layout.

2.2 a Identify and manipulate elements of the Animate interface.

- i Key Concepts: menus, Tools, Timeline, Stage, Pasteboard, Properties panel, Library panel, other panels, etc.

2.2b Organize and customize the workspace.

- i Key Concepts: Using/switching default workspaces, show, hide, group, and dock panels; use the workspace switcher and the Window menu; customize, save, and reset workspaces; etc.

2.2c Configure application preferences.

- i Key Concepts: General, Sync Settings, Drawing

2.2d Navigate a document.

- i Key Concepts: pan, zoom, play, pause, keyboard/mouse shortcuts, spacebar, Rotation tool, Time Scrub tool, etc.

2.2e Use timeline tools.

- i Key Concepts: onion skin, loop, labels, frames, markers and marker range, keyframe navigation options, timeline zoom, etc.

2.2 f Use guides and grids.

- i Key Concepts: motion paths, classic motion guides; add, remove, and lock/unlock guides; set color; show and hide guides, grids and rulers; use snap or align options, etc.

### 2.3 Import into and manage assets in a project.

2.3a Import media from various sources.

- i Key Concepts: importing layers in .psd or .ai files, image files, audio files, video files, CC libraries, importing using menus or drag and drop, etc.

2.3b Manage assets in an Animate project.

- i Key Concepts: using the Library panel (rename, delete, move, duplicate, search and preview assets); updating and importing files; selecting unused items; creating new symbols and folders; working with multiple libraries; differentiating between Graphic symbols, Button symbols, and Movie Clip symbols, etc.

2.3c Load external media.

- i Key Concepts: XML, JSON, audio, video, images
- ii Writer's note: Keep this at a fundamental level

## 2.4 Manage colors, swatches, gradients, brushes, filter presets, and motion presets.

2.4a Set the active fill and stroke color.

- i Key Concepts: color picker, Color panel, eyedropper, hexadecimal value, alpha, Bitmap fill, etc.

2.4b Create and customize a gradient.

- i Key Concepts: Color panel, editing color and transparency stops, radial and linear gradients, Gradient Transform tool, etc.

2.4c Create, manage, and edit swatches.

- i Key Concepts: Swatches panel, swatch types (tagged, solid, bitmap, and gradient), color sets, etc.

2.4d Create brushes, filter presets, and motion presets.

- i Key Concepts: brushes (stroke, fill, types, width tool), filters (blur, glow, drop shadow, etc.), and motion presets (save previous motion tween settings as a preset), etc.

2.4e Edit brushes, filter presets, and motion presets.

- i Key Concepts: existing and custom brushes and presets

## 3 Organization Of Documents

*This objective covers document structure such as layers and managing document structure for efficient workflow.*

### 3.1 Manage layers.

- i Key Concepts: add, delete, lock/unlock, duplicate, selecting, name/ rename layers, toggle visibility, toggle outline mode, layer height, etc.

3.1b Manage multiple layers.

- i Key Concepts: creating, naming, deleting, and rearranging layer folders, keeping the Layers panel organized, Advanced Layers Mode, etc.

3.1c Recognize the different types of layers in the Layers panel.

- i Key Concepts: Normal, Mask, Masked, Folder, and Guide

3.1d Manage content over time.

- i Key Concepts: frames, frame span, keyframes.

### 3.2 Modify layer visibility using transparency and masks.

3.2a Adjust a layer's visibility and transparency.

- i Key Concepts: hide/show individual layers or groups and adjust transparency

3.2b Create, apply, and manipulate masks.

- i Key Concepts: Mask layer, nesting masked layers, animate mask layer, etc.

## 4 Create and Modify Multimedia Elements

*This objective covers core tools and functionality of the application, as well as tools that affect the presentation of document elements.*

### 4.1 Use core tools and features to create and modify visual elements.

4.1a Create vector graphics using a variety of tools.

- i Key Tools: Drawing tools: Pen tool, Pencil tool, Paint Brush tool, Brush tool, Paint Bucket tool, primitive tools, shape tools, etc.
- ii Key Concepts: Fill and stroke, object drawing mode
- iii Note: Tool help can be found at <https://helpx.adobe.com/animate/using/basic-tools.html>

4.1b Modify and edit vector graphics using a variety of vector tools.

- i Key Tools: Free Transform tool, Gradient Transform tool, Width tool, Add Anchor Point tool, Delete Anchor Point tool, Convert Anchor Point tool, Pen tool, selection tools, etc.

### 4.2 Add and manipulate text using appropriate settings.

4.2a Use type tools to add typography to a project.

- i Key Tools: Text Tool, point vs. area type, Static Text vs Dynamic Text vs Input Text, etc.
- ii Key Concepts: Difference between area type, point type, and static vs dynamic text must be understood.

4.2b Adjust character settings.

- i Key Settings: font, size, style, alignment, line spacing and indentation, horizontal and vertical type, anti-aliasing settings, etc.

4.2c Adjust paragraph settings.

- i Key Settings: Indention, alignment, paragraph spacing, etc.

4.2d Convert text to graphics.

- i Key Concept: Convert text to vector using break apart, convert to bitmaps, benefits/disadvantages, etc.

4.2e Configure Dynamic Text and Input Text areas.

- i Key Concepts: instance name, font selection, embedding type characters, etc.

### 4.3 Make, manage, and manipulate selections.

4.3a Make selections using a variety of tools.

- i Key Tools: Selection tool, Subselection tool, Lasso tool, Magic Wand tool, Polygon tool, etc.

4.3b Modify and refine selections using various methods.

- i Key Concepts: Keyboard modifiers, selecting multiple objects with selection tools or timeline, moving and grouping objects, Regular Selection tool vs Subselection tool, etc.

4.3c Group or ungroup selections.

- i Key Concepts: grouping/ungrouping selections, modifying grouped objects, entering a group, etc.

#### **4.4 Use basic techniques to manipulate digital graphics and media within an animation.**

**4.4a** Modify the document settings.

- i Key Properties: width and height, units, stage color, frame rate, accessibility (ActionScript 3.0 only), etc.
- ii Key Concepts: understanding how frame rate impacts timing and pacing, preparing documents at the proper size for intended use, etc.

**4.4 b** Rotate, flip, and transform objects, selections, groups, symbols, or graphical elements.

- i Key Concepts: transform, align, distribute, and spacing, skew and rotate, 3D Translation and 3D Rotation (ActionScript 3.0 only), etc.

**4.4c** Use the camera to modify the view of the document.

- i Key concepts: add/remove camera, rotate, pan, zoom, tint/color adjustments (ActionScript 3.0 only), etc.

**4.4d** Apply basic auto-correction methods and tools.

- i Key Tools: optimizing, smoothing, straightening, etc.

**4.4e** Modify and edit vector graphics using a variety of vector tools.

- i Key Tools: Eraser tool, converting lines to fill, expanding fill, combining objects with union, intersect, punch, and crop, etc.

**4.4f** Adjust appearance of objects and selections using various tools.

- i Key Concepts: Fill and Stroke properties, variable width strokes, opacity, Eyedropper tool, vector and pattern brushes, etc.

**4.4g** Convert between bitmaps and vectors

- i Key Concepts: Tracing bitmaps, converting vectors to bitmaps, setting color threshold, minimum area, corner threshold, curve fit, etc.

#### **4.5 Modify appearance of design elements using effects and graphic styles.**

**4.5a** Use Effects to modify symbols.

- i Key concepts: Apply/remove filters, color effects, blending modes, etc.

**4.5b** Create, edit, and manage filter presets.

- i Key Concepts: Add, remove, create, delete, and edit filter presets, etc.

#### **4.6 Create and modify animations.**

**4.6a** Apply and adjust transformations using keyframes.

- i Key concepts: types of keyframes, adjusting properties using keyframes such as position, scale, rotation, skew, color, filter, etc.

**4.6b** Animate objects using frame-by-frame and tween techniques.

- i Key concepts: keyframes, shape, motion, and classic, inverse kinematic (IK) tweens, onion-skinning, morphing, easing, armature, pose, motion editor, motion path, nesting, etc.

**4.6c** Use the proper symbol types for the intended purpose.

- i Key concepts: movie clips, graphic, understanding when to use different symbol types, looping options, Frame Picker, etc.

- ii Must include: understanding that different symbol types have different internal timelines; understanding the relationship between symbol timeline and parent timeline, both dependently and independently

#### **4.7 Add interactive or dynamic content to a document.**

##### **4.7a** Add and modify interactive elements to your document.

- i Key Concepts: buttons, using movie clips for interactivity, and dynamic text; instance naming rules and conventions, etc.

##### **4.7b** Manipulate interactive text elements using code.

- i Key Concepts: input text, dynamic text

##### **4.7c** Add and modify code

- i Key Concepts: using the Actions panel, using ActionScript or JavaScript depending on document type, button states, Actions Wizard, Code Snippets panel, debugging code, referencing external content

#### **4.8 Control and configure audio and video in a project.**

##### **4.8a** Incorporate audio into a project.

- i Key concepts: Audio Sync Options (Start, Event, Stream), mono, stereo, Left/Right Channel, Fade In/Out, Fade Left to Right/Right to Left, Compression, MP3, Speech, ADPCM, RAW

##### **4.8b** Incorporate video into a project.

- i Key concepts: FLV, F4V, MPEG-4, Adobe Media Encoder, encoding video, bitrate, Sorenson Spark, On2 VP6, FLVPlayback component (ActionScript 3.0), Video component (HTML 5), Video Import wizard

## **Publishing Digital Media**

*This objective covers saving and exporting documents or assets within individual layers or selections.*

## **5**

### **5.1 Prepare content for export to web, screen, and other digital devices.**

#### **5.1a** Check document for errors and project specifications.

- i Key concepts: Debugging the project, testing movies, accessibility options, hidden layers, animation timing, testing multiple devices, project size in bytes, proofreading text, project dimensions, etc.

### **5.2 Export assets from an Animate document.**

#### **5.2a** Save in native file formats for Animate (.fla or .xml).

- i Save vs Save as..., file name and location, saving to CC library, Animate template, etc.

#### **5.2b** Export assets from an Animate document.

- i Key concepts: video, animated gif, image sequence,svg, etc.

#### **5.2c** Publish final documents.

- i Key Concepts: document publish settings appropriate for the platform including file location and other settings specific to the platform, SWF, APP, EXE, AIR, HTML5, JS, APK, WebGL, publishing profiles.