

DIGITAL ART

- COURSE OUTLINES & STANDARDS

*Digital Art standard taught / Computer Science standard taught /
Summative assignment/ York Technical College - Dual Credit*

Note: This is a tentative outline. This outline will be modified and adjusted, as needed.

Week 1

Class Orientation/Expectations

1. Student / Teacher Expectations,
2. School Safety Instructions,
3. Review the syllabus, class introductions, safety practices and procedures and class expectations, classroom emergencies, Ergonomics.

uses of software, hardware, and mobile devices in the work environment).

HS1.IC.2.3, HS2.IC.2.3

5. Discuss legal issues and the terms of use related to copyright laws, fair use laws, and ethics pertaining to downloading of images, photographs, documents, video, sounds, music, trademarks, and other elements for personal use.

HS3.IC.2.3

Week 2

Intro to Computer Systems in Industry

1. Demonstrate proficiency and skills associated with the use of technologies that are common to this specific occupation.
2. Identify proper netiquette when using e-mail, social media, and other technologies for communication purposes.
**HS1.IC.2.1 HS2.IC.2.1
HS4.IC.2.1**
3. Identify potential abuse and unethical uses of laptops, tablets, computers, and/or networks.
4. Explain the consequences of social, illegal, and unethical uses of technology (e.g., piracy; cyberbullying; illegal downloading; licensing infringement; inappropriate

6. Describe ethical and legal practices of safeguarding the confidentiality of business-related information.

**HS1.NI.2.1, HS2.NI.2.1,
HS3.NI.2.1**

7. Describe possible threats to a laptop, tablet, computer, and/or network and methods of avoiding attacks.

Computers in Industry Research and Presentation

Week 3

Computer Usage in the Animation Industry

1. Compare basic computer platforms and operating systems between various computing devices. **N1
HS1.CS.1.3, HS4.CS.1.3,
HS3.CS.1.2, HS4.CS.1.2**

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2. Demonstrate troubleshooting skills and procedures. **N2**
HS1.CS.2.1, HS2.CS.2.13.
3. Create and manage files and folders. **HS1.NI.1.1**
4. Understand and describe local and network drives, remote, and shared storage.
N4
HS1.NI.1.1, HS1.CS.1.2, HS2.CS.1.2, HS4.CS.1.2,
5. Save, retrieve, load, format, import data into, and export a variety of electronic documents (word processing, spreadsheet, database, design software, etc.). **N5**
HS1.DA.1.2, HS2.DA.1.2,
6. Demonstrate desktop and online file management services to store, share, and backup files. **N6** **HS1.CS.1.2**
7. Demonstrate the proper use of a variety of external peripherals and how they connect to a computer. **N7**
HS2.CS.2.13.
8. Demonstrate the understanding of file sharing, file permissions, security, and transferring information. **N8**
HS4.CS.1.2,

Computer Usage Quiz

Week 4

History Of Animation

1. Explore the history of animation
2. Describe trends in animation.
3. Compare current animation technologies with historical technologies.
4. Identify emerging and innovative animation technologies and software.
5. Describe the importance of animation's influence on society.

Create Thaumatrope Animation
Define animation and its relationship to time.

Week 5 Concept, Storytelling and Storyboarding

1. Practice brainstorming and ideation to develop a concept
HS1.AP .1.1
2. Identify the purpose, audience, and audience needs for interactive media content
HS1.AP .4.1
3. Incorporate cultural sensitivity and diversity awareness into the design process.
HS1.AP .4.1

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4. Develop an appropriate design process to create and modify solutions to problems.
HS1.AP.3.1
 5. Incorporate writing strategies and activities as individuals and groups to develop ideas in the story process.
 6. Demonstrate how to write visually descriptive stories with effective dialogue.
 7. Create a character and develop character traits to give character purpose
 8. Develop a plan to create a background that helps tell a story **HS2.CS.2.13**
 9. Identify how the background interacts with characters
 10. Order and connect ideas into a coherent narrative or sequence in a script that demonstrates continuity
HS1.AP.4.2
 11. Create a series of stick figures in a variety of poses, actions, and sequences
Visually communicate concepts/ideas utilizing a storyboard.
Create a Concept, Script and Storyboard
- Week 6**
Animation Character Renderings
1. Define vector graphics. **M1**
 2. Compare and contrast differences and appropriate applications of vector-based and bitmap images. **M2**
HS2.DA.3.2
 3. Use typography as a design element. **M3** **HS2.AP.1.1**
 4. Set type on a path and within a shape. **M4** **HS3.AP.2.1**
 5. Define and create outlines from text. **M6** **HS3.DA.3.2**
 6. Apply patterns, textures, and gradients. **M6** **HS3.DA.3.2**
 7. Apply layer management techniques. **M7** **HS3.AP.2.1**
 8. Apply proper settings when saving or importing/exporting graphics. **M8**
 9. Create or trace drawings/photographs with pen or live trace. **M9**
HS3.AP.4.4
 10. Create basic shapes using drawing or pen tool such as triangles, boxes, circles, etc.
M10 **HS3.DA.3.2**
 11. Demonstrate assigning fill and stroke to objects. **M11**
HS3.DA.3.2

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12. Demonstrate proficiency in transforming objects. **M12**
HS2.AP.2.1

Demonstrate knowledge and use of the library panel.
HS1.AP.3.1

13. Apply attributes, styles, and effects. **M13**

Character Illustration and Pre-Rig using Layers

Create a layer-based animation

Demonstrate use of controller palettes to review, loop, and play back animation.

Week 7

Introduction to Animation Software

1. Identify and utilize elements of the animation software interface (Tools, Property Inspector, Timeline, document properties, guides and rulers, and Motion Editor).
2. Identify the functions of commonly used tools, including selection tools, drawing tools, and shape tools. **HS1.DA.1.3**
3. Navigate, organize, and customize the workspace. **HS3.CS.1.1**
4. Demonstrate knowledge and appropriate use of typography, i.e. text, text tools, and visual design layout. **M6**
HS2.CS.1.1

Demonstrate knowledge and use of layers. **M7** **HS1.AP.3.1**

Week 8

Animation Production

1. Create, import, modify, and manipulate objects, graphics, and text using a variety of tools and techniques. **HS2.CS.2.13**.
2. Create and edit graphic symbols and instances. **HS3.AP.3.1**
3. Apply various animation techniques (i.e. frame-by-frame, tweening, ease).
4. Create and modify keyframes and key poses.
5. Change an object's state or position over time.

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6. Modify frame rate and speed.

HS1.AP.4.2

7. Demonstrate an object following a path.

Create a simple key frame animation.

Week 9

Adding Interactivity and Scripting

1. Add simple controls utilizing industry scripting language (e.g., JavaScript, HTML5 or ActionScript 3).

HS2.AP .3.1

2. Create and animate interactive symbols (movie clips and buttons). **HS3.AP .3.1**

3. Demonstrate navigation techniques using Scripting.

HS2.AP .3.1

4. Program responsive sound effects to occur with actions in animation. **HS2.AP .3.1**

Demonstrate Keyboard and Mouse response actions

Week 10

Exporting, Testing and Distribution

1. Identify best practices for managing file size and file types. **HS2.CS.2.13.**

2. Select appropriate distribution format. **HS1.DA.1.2,**

3. Publish and export Interactive animation. **HS2.DA.1.2**

4. Conduct basic technical and usability tests.

HS2.CS.2.13.

Export Animation, Test and Present to class

Week 11

Elements and Principles Of Design

1. Identify elements of design: line, shape, form, space, texture, value, and color. **D15**
2. Identify principles of design: contrast, unity, repetition, rhythm, balance, emphasis, and proportion. **D16**

Deconstruction and Revisioning of Character Design

Weeks 12

Color Theory and Patterns

1. Construct a color chart for color theory and harmony. **B-4**
2. Explain color theory as it applies to design: additive, subtractive, CMYK, RGB, and Web safe. **D13**
3. Demonstrate an understanding of color theory

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by describing primary, secondary, and tertiary colors including hue, saturation, and lightness. **I8,14,16,18**

4. Demonstrate appropriate use of space (positive vs. negative; size and proportion). **D15**
Deconstruction and Revisioning of Background Design

6. List the major typefaces/font families and their uses.
7. Explain letter spacing, tracking, kerning, baseline shift, and horizontal scale. **C6**
8. Demonstrate the type arrangements: flush left–ragged right, flush right–ragged left, centered, justified, force justified, and widows and orphans. **C7**

Simple Typography Animation and Presentation

Weeks 13 Typography

1. Identify various forms and styles of typography. **C1**
2. Illustrate x-height, mean-line, base-line, ascenders, descenders, serifs, and leading, as well as their roles in measuring and designing with type. **C2**
3. Illustrate caps, lowercase, uppercase, small caps, and ligatures. **C3**
4. Define dingbats, bullets, rules, glyphs, and symbols, plus their uses in publications. **C4**
5. Distinguish between display (headline) type and body (text) type by their point sizes, styles, and uses. **C5**

Week 14 Production Practices and Print Design

1. Define units of measure and proper uses of each. **G1**
2. Utilize units of measure (points, pixels, and/or inches). **G2**
3. Import copy from a word processing program and format in a page layout program. **G3**
4. Set text with appropriate margins, formatting, gutters, and proper leading. **G4**
5. Design and produce a document using desired fonts, styles, margins, indents, tabs, and colors. **G5**

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6. Create multiple page documents using text blocks, graphics, frames, and headings using drop caps and wrap-a-rounds (run-a-rounds). **G6**
 7. Create documents using grids, templates, master pages, paragraph style sheets, and character style sheets. **G7**
 8. Determine appropriate size, resolution, and format of images before document. Save files to removable storage devices. Export a print-ready Portable Document Format (PDF) using page layout. **G8**
 9. Identify trim size, bleed size, and live area of a project. and quarter-page ads). **G9**
 10. State and identify file transfer protocol (FTP). **G10**
HS1.CS.1.2,
 11. Improve the color and tonal balance of an image. **G11**
 12. Demonstrate techniques of layer management. **G12**
 13. Define masks and channels and demonstrate techniques for using them in an **G13**
 14. Locate examples of ad sizes from publications (full-page, half-page) **G14**
 15. Demonstrate an understanding of file formats (.ai, .jpg, psd, gif, tif, indd, pdf, etc.), file organization, and file naming conventions. **G15**
 16. Perform pre-flight and package operations. **G16**
 17. Describe process control procedures necessary for successful digital file output. **G17**
 18. Explain the benefits of file extensions that are compatible with current software and appropriate for documents and their settings. **G18**
- Advertising Poster for Animation**
- Weeks 15-18- Final Exam Project and ACA Test Client Animation with Advertisement package**
1. Demonstrate effective speaking and listening skills. **E1**
 2. Demonstrate effective reading and writing skills. **E2**

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3. Demonstrate mathematical reasoning. **E3**
4. Demonstrate job-specific mathematics skills. **E4**
5. Demonstrate critical-thinking and problem-solving skills. **E5**
6. Demonstrate creativity and resourcefulness. **E6**
7. Demonstrate an understanding of business ethics. **E7**
8. Demonstrate confidentiality. **E8**
9. Demonstrate an understanding of workplace structures, organizations, systems, and climates. **E9**
10. Demonstrate diversity awareness. **E10**
11. Demonstrate job acquisition and advancement skills. **E11**
12. Demonstrate task management skills. **E12**
13. Demonstrate customer-service skills. **E13**

Animation Final Exam Project
Adobe Certified Associate for
Flash/Animate CC exam.