South Carolina CTE

Digital Art & Design 1 (2024)

BASIC DRAWING SKILLS AND RENDERING

Proficient professionals demonstrate appropriate drawing skills. The following accountability criteria are considered essential for students in the Digital Art and Design program of study.

1. Create line drawings. A.1
2. Design compositions. A.2
3. Render artwork using appropriate medium (e.g, ink, charcoal, pencil, digital tablet). A.3
4. Construct a color chart for color theory and harmony. A.4
5. Create thumbnails and rough sketches. A.5
6. Prepare photos and artwork for reproduction. A.6
7. Prepare compositional layout. A.7
8. Prepare electronic proofs. A.8

TYPOGRAPHY

Proficient professionals demonstrate appropriate typography skills. The following accountability criteria are considered essential for students in the Digital Art and Design program of study.

1. Identify various forms and styles of typography. B.1
2. Illustrate x-height, mean-line, base-line, ascenders, descenders, serifs, and leading, as well as their roles in measuring and designing with type. B.2
3. Illustrate caps, lowercase, uppercase, small caps, and ligatures. B.3
4. Distinguish between display (headline) type and body (text) type by their point sizes, styles, and uses. B.4
5. List the major typefaces/font families and their uses, including web and chromatic fonts. B.5
6. Explain letter spacing, tracking, kerning, baseline shift, and horizontal scale. B.6
7. Demonstrate the type arrangements: flush left–ragged right, flush right– ragged left, centered, justified, force justified, and widows and orphans. B.7

PRE-PRODUCTION PRACTICES

Proficient professionals demonstrate appropriate pre-production practices. The following accountability criteria are considered essential for students in the Digital Art and Design program of study.

Skip to main content

1. Demonstrate the ability to communicate with industry-appropriate language (e.g., signatures, mock-up, two-up, media, substrates). C.1

2 Produce draft quality drawings, including thumbnail drawings and rough sketches in a sketchbook (integral to the creative process). C.2

3 Identify elements of design: line, shape, form, space, texture, value, and color. C.3

4 Identify principles of design: contrast, unity, repetition, rhythm, balance, emphasis, and proportion. C.4

5 Brainstorm a design concept based on customer need and target audience. C.5

6 Produce a layout which demonstrates the elements and principles of design. C.6

7 Demonstrate an understanding of the relationship between message, color, typography, images, and layout. C.7

8 Explain color theory as it applies to design: additive, subtractive, CMYK, RGB, Hex, Pantone. C.8

9 Demonstrate an understanding of color theory by describing primary, secondary, and tertiary colors including hue, saturation, lightness, tint, shade, and tone. C.9

PRODUCTION PRACTICES

Proficient professionals demonstrate appropriate production practices. The following accountability criteria are considered essential for students in the Digital Art and Design program of study.

1 Choose appropriate design software applications to create art for end use. D.1

2 Create original production pieces while serving client needs, meeting a deadline, and implementing the design elements and principles. D.2

3 Demonstrate appropriate editing, proofing (spelling/grammar). D.3

4 Create and maintain a working portfolio. Critique a layout based on project requirements. D.4

5 Utilize the iterative design process to achieve project goals. D.5

6 Calculate the appropriate scale of a layout for a given output size & format. D.6

7 Recognize and utilize size, weight, type, and amount of paper necessary for fulfilling project goals. D.7

PHOTOGRAPHIC PRINCIPLES (OPTIONAL)

Proficient professionals demonstrate appropriate photography skills. The following accountability criteria are considered essential for students in the Digital Art and Design program of study.

1 Identify how the exposure triangle, aperture, shutter speed, and ISO impact a photograph. (e.g. aperture affects depth of field, shutter speed affects the clarity of motion, ISO affects the clarity and visbility of detail/noise). E.1

2 Identify the advantages which RAW photography workflows maintain over compressed image workflows. E.2

3 Distinguish between digital and conventional photography E.3

4 Capture digital images using a scanner and other digital devices. E.4

Skip to main content

Demonstrate appropriate scanner/program operations for line artwork and continuous tone in both black/white and color. E.5

6 Demonstrate the application of focus, aperture, shutter, and ISO to achieve a properly exposed image, and to achieve the desired effect. E.6

IMAGE CREATION AND MANIPULATION: ADOBE PHOTOSHOP

Proficient professionals demonstrate appropriate image creation and manipulation skills. The following accountability criteria are considered essential for students in the Digital Art and Design program of study.

1 Define raster graphics. F.1

2 Use multiple input devices to import photos, images, and other content for a variety of digital uses. F.2

3 Analyze RGB, CMYK, and grayscale image modes and their usage. F.3

4 Demonstrate proficiency with various photo editing tools such as, modify, correct image options and palettes, including but not limited to cropping, resizing, retouching, making selections, and using layers. F.4

5 Correct a raster image using appropriate tools. F.5

6 Apply appropriate selection methods when isolating areas of an image for editing. F.6

7 Demonstrate layer management techniques including groups and folders. F.7

8 Define and demonstrate non-destructive and destructive editing techniques including: adjustment layers, masks, and smart objects. F.8

9 Differentiate between raster imagery and vector-based imagery. F.9

10 Demonstrate how to publish your image in a different format, rather than a working format. F.10

11 Demonstrate the procedures for editing raster-based imagery, both high resolution and low resolution, in CMYK and RGB, and preparing files for both print and web media. F.11

ILLUSTRATION: ADOBE ILLUSTRATOR

Proficient professionals demonstrate appropriate vector illustration skills. The following accountability criteria are considered essential for students in the Digital Art and Design program of study.

1 Define vector graphics. G.1

2 Compare and contrast differences and appropriate applications of vector-based and raster images. G.2

3 Use typography as a design element. G.3

4 Set type on a path and within a shape. G.4

5 Create outlines from text. G.5

6 Demonstrate the application of patterns, textures, and gradients to objects. G.6

7 Demonstrate assigning fill and stroke to objects. G.7

8 Demonstrate the application of attributes, styles, and effects. G.8

9 Demonstrate proficiency in transforming objects. G.9

Skip to main content

10 Demonstrate layer management techniques. G.10

11 Demonstrate the use of proper settings when saving or importing/exporting graphics. G.11

12 Create custom paths using an appropriate tool. G.12

13 Demonstrate the ability to apply color swatches. G.13

COMPUTER BASICS

Proficient professionals demonstrate appropriate computer literacy skills. The following accountability criteria are considered essential for students in the Digital Art and Design program of study.

1 Compare basic computer platforms and operating systems between various computing devices. H.1

2 Demonstrate troubleshooting skills and procedures. H.2

3 Create and manage files and folders. H.3

4 Apply knowledge of local and shared storage to daily activities. H.4

5 Save, import and export a variety of electronic documents. H.5

6 Demonstrate the understanding of file sharing, file permissions, security, and transferring information. H.6

PROFESSIONAL DEVELOPMENT AND ETHICS

Proficient professionals prepare for careers in the Digital Art and Design industry. The following accountability criteria are considered essential for students in Digital and Art Design program of study.

1 Identify industries, organizations, and careers that require design skills. I.1

2 Analyze the impact of a digital footprint, including but limited to gamer tags, avatars, e-mail addresses, and social media content. I.2

3 Begin a working portfolio. I.3

4 Receive and provide feedback constructively. I.4

CREATING ANIMATIONS

Proficient professionals demonstrate appropriate animation skills. The following accountability criteria are considered essential for students in the Digital Art and Design program of study.

1 Define animation and its relationship to time. J.1

2 Create a storyboard of proposed animation. J.2

3 Create a simple frame-based/key frame animation. J.3

4 Demonstrate use of controller palettes to review, loop, and play back animation. J.4

5 Create a layer-based animation. J.5

6 Animate a project using motion tweening. J.6

WE

Skip to main content

roficient professionals demonstrate appropriate web design skills. The following countability criteria are considered essential for students in the Digital Art and

Design program of study.

1 Analyze existing Web sites for style and content. K.1

2 Compare and contrast preferred formats for various page elements. K.2

3 Analyze and design Web sites for aesthetic appeal. K.3

4 Create a basic site architecture. K.4

5 Plan a Web page design with thumbnail sketches, rough layouts, and site map. K.5

6 Create a functional and esthetic interface. K.6

7 Organize, optimize, and collect images and content for Web site design. K.7

8 Create consistency between Web design and existing marketing materials. K.8

9 Describe the delivery of prototype to client and receipt of feedback from client. K.9

10 Define file management and illustrate examples of root/folder management. K.10

11 Execute final Web pages from a Web authoring program. K.11

12 Manage various asset folders. K.12

13 Optimize photos and illustrations. K.13

14 Identify Web color and resolution. K.14

15 Create components to be used on a Web page (rollovers, buttons, banners, etc.). K.15

SAFETY

Proficient professionals know the academic subject matter, including safety as required for proficiency within their area. The following accountability criteria are considered essential for students in any program of study.

1 Identify lab policies and procedures.

2 Identify lab equipment.

3 Identify contact information for classroom emergencies.

4 Demonstrate safety procedures used in digital art and design program including safe body mechanics and ergonomics.

5 Identify all fire exits.

6 Demonstrate proper workspace cleaning procedures.

STUDENT ORGANIZATIONS

Proficient professionals know the academic subject matter, including professional development required for proficiency within their area. The following accountability criteria are considered essential for students in any program of study.

1 Identify the purpose and goals of a Career and Technology Student Organization (CTSO).

2 Explain how CTSOs are integral parts of specific clusters, majors, and/or courses.

Skip to main content

Explain the benefits and responsibilities of being a member of a CTSO.

4 List leadership opportunities that are available to students through participation in CTSO conferences, competitions, community service, philanthropy, and other activities.

5 Explain how participation in CTSOs can promote lifelong benefits in other professional and civic organizations.

LEGAL REQUIREMENTS AND ETHICAL CONSIDERATIONS

Proficient professionals know the academic subject matter, including the ethical use of technology. The following accountability criteria are considered essential for students in the Digital Art and Design program of study.

1 Demonstrate proficiency and skills associated with the use of technologies that are common to a specific occupation.

2 Identify proper netiquette when using e-mail, social media, and other technologies for communication purposes.

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

5 Discuss legal issues and the terms of use (e.g., plagiarism) 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.

6 Define differences between classroom and professional practices in regard to copyrights.

7 Define the impact of the Americans with Disabilities Act and other civil rights legislation on a business/organization, its employees, and its customers.

8 Analyze accessibility laws and their impact on the end-user.

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

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

PERSONAL QUALITIES AND EMPLOYABILITY SKILLS

Proficient professionals know the academic subject matter, including positive work practices and interpersonal skills. The following accountability criteria are considered essential for students in any program of study.

1 Demonstrate creativity and innovation.

2 Demonstrate critical thinking and problem-solving skills.

3 Demonstrate initiative and self-direction.

4 Demonstrate integrity.

5 Demonstrate work ethic.

Skip to main content

6 Demonstrate conflict resolution skills.

7 Demonstrate listening and speaking skills.

8 Demonstrate respect for diversity.

9 Demonstrate customer service orientation.

10 Demonstrate teamwork.

PROFESSIONAL KNOWLEDGE

Proficient professionals know the academic subject matter, including positive work practices and interpersonal skills. The following accountability criteria are considered essential for students in any program of study.

1 Demonstrate global or “big picture” thinking.

2 Demonstrate career and life management skills and goal-making.

3 Demonstrate continuous learning and adaptability skills to changing job requirements.

4 Demonstrate time and resource management skills.

5 Demonstrates information literacy skills.

6 Demonstrates information security skills.

7 Demonstrates information technology skills.

8 Demonstrates knowledge and use of job-specific tools and technologies.

9 Demonstrate job-specific mathematics skills.

10 Demonstrates professionalism in the workplace.

11 Demonstrate reading and writing skills.

12 Demonstrates workplace safety.