

Massachusetts CTE

Arts and Communication Services: Design & Visual Communications (2014)

Technical Knowledge and Skills

A Fundamentals of Design and Visual Communications Health and Safety 2.A

- 1 Describe and apply health and safety regulations 2.A.01
 - 1 Identify the location of safety equipment within the DVC shop area, such as: first aid kit, fire escape routes, fire alarms, eye wash station, fire extinguishers, SDS sheets, specialized shop equipment, and hazardous materials. 2.A.01.01
 - 2 Identify safety and emergency procedures for the shop, and emergency phone numbers. 2.A.01.02
 - 3 Identify copyright infringement laws. 2.A.01.03
 - 4 Identify internet safety procedures. 2.A.01.04
 - 5 Identify principles of ergonomics. 2.A.01.05
 - 6 Identify OSHA recommendations specific to the Design and Visual Communications field. 2.A.01.06
- 2 Demonstrate health and safety practices specific to Design and Visual Communications. 2.A.02
 - 1 Demonstrate proper handling of utility knives, safe storage of blades, and safe disposal of used blades. 2.A.02.01
 - 2 Demonstrate the proper use of paper cutters. 2.A.02.02
 - 3 Demonstrate safe handling of aerosol adhesives by wearing a mask/ventilator or spraying in well ventilated areas only, and the use of a spray booth. 2.A.02.03
 - 4 Demonstrate safety habits to protect vision, such as wearing safety glasses when photographing areas that require safety glasses and by limiting the amount of time spent focusing on computer screens. 2.A.02.04
 - 5 Demonstrate safety awareness, while photographing subjects from ladders, step stools, stairs or staging by applying OSHA standards for ladder safety. 2.A.02.05
 - 6 Demonstrate safety awareness when using cords or studio lighting by applying OSHA standards for those items. 2.A.02.06
 - 7 Demonstrate safety awareness in protecting equipment from damage, such as preventing photography or video cameras from falls, bumps, water or extreme temperatures. 2.A.02.07
 - 8 Demonstrate safe internet practices (e.g., protecting ones online image). 2.A.02.08
 - 9 Demonstrate safe network practices, such as following school protocol. 2.A.02.09
 - 10 Follow copyright infringement laws. 2.A.02.10
 - 11 Explain bullying, harassment, and discrimination laws, and school policies. 2.A.02.11

B Fundamentals of Design 2.B

- 1 Describe and apply the Elements of Design 2.B.01
 - 1 Describe and apply Elements of Design to design work, including line, shape, form, color, value, texture, space, and size. 2.B.01.01
- 2 Describe and apply the Principles of Design 2.B.02
 - 1 Describe and apply Principles of Design to design work, including contrast, repetition, alignment, proximity, balance, movement, rhythm, emphasis, pattern, and unity. 2.B.02.01
 - 2 Describe and apply principles of visual hierarchy in regards to composition. 2.B.02.02

C The Creative Process 2.C

1 Employ Design Strategies 2.C.01

- 1** Identify and utilize steps in the design process: - 1) Understand the Goal; 2) Research; 3) Brainstorm/Thumbnail Development; 4) Roughs; 2C.01.01
- 2** Describe and demonstrate roles and responsibilities of a creative team in dealing with client needs, including a timeline and budget. 2.C.01.02
- 3** Describe considerations for print, web and video audiences. 2.C.01.03

2 Apply Concept Development 2.C.02

- 1** Maintain a sketchbook. 2.C.02.01
- 2** Demonstrate basic understanding and application of marketing and advertising principles, such as target audience, demographics, psychographics, branding and advertising campaigns. 2.C.02.02
- 3** Describe and demonstrate different types of brainstorming activities. 2.C.02.03
- 4** Write original copy. 2.C.02.04
- 5** Produce draft quality drawings, including thumbnails, roughs, comps, storyboards and site maps. 2.C.02.05
- 6** Analyze designs throughout the creative process. 2.C.02.06

3 Employ Design Execution/Production Strategies 2.C.03

- 1** Produce final design solutions. 2.C.03.01
- 2** Participate in critique process from both the client's and designer's perspective. 2.C.03.02
- 3** Demonstrate copy editing skills by proofreading for grammar and spelling. 2.C.03.03
- 4** Save and export digital files in a variety of appropriate formats. 2.C.03.04

4 Demonstrate presentation skills 2.C.04

- 1** Demonstrate industry standards of professionalism, including appropriate attire, speech, attitude, and body language, such as maintaining eye contact and good posture. 2.C.04.01
- 2** Present original design pieces meeting client objectives and timeline. 2.C.04.02
- 3** Communicate with a variety of audiences using visual aids, written and verbal communication. 2.C.04.03
- 4** Participate in a question and answer session upon the conclusion of the presentation. 2.C.04.04

D Content Creation Skills 2.D

1 Demonstrate Illustration Skills 2.C.04

- 1 Examine the history of illustration, graphic design and art. 2.D.01.01
- 2 Demonstrate various illustration styles. 2.D.01.02
- 3 Maintain a sketchbook. 2.D.01.03
- 4 Create a self-portrait. 2.D.01.04
- 5 Render an illustration using perspective. 2.D.01.05
- 6 Render an illustration using the human figure. 2.D.01.06
- 7 Render an illustration from direct observation. 2.D.01.07
- 8 Render an illustration demonstrating interpretation and conceptualization. 2.D.01.08

2 Demonstrate vector based skills. 2.D.02

- 1 Define purpose and use of vector based graphics. 2.D.02.01
- 2 Demonstrate the use of tools, palettes, options, clipping masks and compound paths. 2.D.02.02
- 3 Demonstrate techniques for converting raster images to vector art. 2.D.02.03
- 4 Create a vector illustration, eligible for portfolio inclusion. 2.D.02.04

3 Demonstrate raster based skills. 2.D.03

- 1 Define raster images and their qualities. 2.D.04.01
- 2 Retouch, modify and correct images. 2.D.04.02
- 3 Improve color and tonal balance of an image. 2.D.04.03
- 4 Demonstrate use of masks, channels and a clipping path. 2.D.04.04

4 Demonstrate photography skills. 2.D.04

- 1 Explain the characteristics of commercial, journalistic, portrait, and fine art photography. 2.D.04.01
- 2 Identify and demonstrate the use of manual settings that control lighting (aperture, shutter speed, etc.) versus automatic settings. 2.D.04.02
- 3 Explain lighting techniques (natural, supplemental, and flash). 2.D.04.03
- 4 Photograph a variety of subjects using appropriate photographic principles, styles and techniques 2.D.04.04
- 5 Prepare a contact sheet for client review. 2.D.04.05

5 Demonstrate page layout skills. 2.D.05

- 1 Import copy and design elements into a page layout document. 2.D.05.01
- 2 Create a multipage document using master pages and style sheets. 2.D.05.02
- 3 Define and demonstrate standard industry imposition techniques. 2.D.05.03
- 4 Perform preflight/package operations. 2.D.05.04

- 6 Demonstrate website design skills. 2.D.06
 - 1 Define the history and role of the web in current market trends and various technologies. 2.D.06.01
 - 2 Analyze websites for style, content and usability 2.D.06.02
 - 3 Design websites consistent with other marketing materials. 2.D.06.03
 - 4 Create a sitemap, prototype, and final website. 2.D.06.04
- 7 Demonstrate animation skills. 2.D.07
 - 1 Create a storyboard then execute an animation based on that storyboard. 2D.07.01
 - 2 Create graphics suitable for animation, such as characters, objects and backgrounds. 2D.07.02
 - 3 Describe and demonstrate the use of animation shapes and symbols (create, key frame, edit, nest) and animation techniques including frame by frame or key frame animation, and tweening. 2D.07.03
 - 4 Incorporate audio into an animation. 2D.07.04
- 8 Demonstrate video production skills. 2.D.08
 - 1 Explain and demonstrate camera and lighting techniques. 2.D.08.01
 - 2 Develop a script and storyboard for a video project. 2.D.08.02
 - 3 Develop a script and storyboard for a video project. 2.D.08.03
 - 4 Optimize and save final edited footage in appropriate formats. 2.D.08.04
- 9 Demonstrate fundamental technical skills according to current industry standards. 2.D.09
 - 1 Demonstrate and apply file management practices, utilizing industry naming conventions. 2.D.09.01
 - 2 Export, save and archive assets and files for future use and editing. 2.D.09.02
 - 3 Demonstrate appropriate use of tools, options and palettes specific to different design software programs. 2.D.09.03
 - 4 Define and demonstrate measurement skills. 2.D.09.04
 - 5 Define the difference between placing and embedding elements into a document. 2.D.09.05
 - 6 Demonstrate the ability to integrate type. 2.D.09.06
 - 7 Define and demonstrate the use of peripheral devices, such as scanners, external hard drives, printers, tablets and cameras. 2.D.09.07
 - 8 Prepare visual content for printing or digital media. 2.D.09.08

E Career and Portfolio Development 2.E

1 Develop and prepare a body of work. 2.E.01

- 1** Include a minimum of 10 drawings direct from observation, including but not limited to a still life, a self-portrait, an illustration using perspective, and an illustration using the human figure. 2.E.01.01
- 2** Include a minimum of five drawings with creative concepts that reflect personal style and strengths, including but not limited to fine art, abstract or surrealism, which reflect a higher level of critical thinking. 2.E.01.02
- 3** Include a minimum of 10 pieces of work from the student's area of focus, which may include photographs, live work and/or a variety of media utilized. 2.E.01.03
- 4** Create a graphic work, which focuses on strong use of one design element such as color, line, or texture. 2.E.01.04

2 Present Portfolio 2.E.02

- 1** Review and explain the opportunities for employment in the Design and Visual Communications Field, such as in Publishing, Entertainment, Education, Fine Art, Advertising, Interactive Media and Graphic Design. 2.E.02.01
- 2** Review and critique the body of work created. 2.E.02.02
- 3** Develop a resume, artist statement or statement of purpose, college essay or cover letter, business card and other self-promotional materials. 2.E.02.03
- 4** Develop a final portfolio from the student's body of work for educational and/or career purposes in both a traditional and digital format. 2.E.02.04