Arizona CTE

# Graphic Design

**Creative Process**

## 6 APPLY GRAPHIC DESIGN CONCEPTS TO PRODUCE VISUAL SOLUTIONS 6.0

1. Identify elements of design (e.g., line, shape, form, texture, pattern, color, value, space, and size) 6.1
2. Identify principles of design (e.g., contrast, repetition, alignment, proximity, hierarchy, balance, movement, emphasis, harmony, and unity) 6.2
3. Identify anatomical components and qualities of type (i.e., x-height, ascenders, descenders, etc.) 6.3
4. Identify categories of type (i.e., serif, san serif, script, display, old style, modern, slab serif, etc 6.4
5. Explain how typography impacts design 6.5
6. Identify additive colors (RGB – red, green, and blue) and subtractive colors (CMYK – cyan, magenta, yellow, and black/key) 6.6
7. Identify basic color schemes (e.g., complementary, analogous, triadic, tetradic, split complementary, and monochromatic) 6.7
8. Explain the psychology of color and how color can impact the effectiveness of a design 6.8

## 7 APPLY GRAPHIC DESIGN WORKFLOW TO INCREASE SUCCESS AND PRODUCTIVITY 7.0

1. Generate project ideas using stakeholder communication, research, brainstorming, thumbnails, roughs, mock-ups, and wireframes 7.1
2. Identify demographic components for a target audience (e.g., gender, age, income, education, socioeconomic, ethnicity, and location) 7.2
3. Develop a project workflow from initiation to completion 7.3
4. Consider user experience (UX) when designing for the target audience (e.g., motivation, functionality, and accessibility) 7.4
5. Collaborate with others to plan and execute a graphic work 7.5
6. Describe project evaluation and review techniques (e.g., compare final product to original needs and specifications; give and receive feedback on a project) 7.6

## 8 CREATE PROBLEM-SOLVING GRAPHIC WORKS USING INDUSTRY STANDARD SOFTWARE 8.0

1. Differentiate among the color spaces (e.g., RGB, CMYK, Spot Color, L*a*b*, HSB, HSL, grayscale, and hex color) and how they relate to graphic design 8.1
2. Analyze the applications of vector-based and raster images 8.2
3. Create vector illustrations using industry standard software 8.3
4. Use a digital camera to demonstrate composition techniques (i.e., rule of thirds, diagonals, framing, balance, leading lines, repeating patterns/texture, symmetry, etc.) 8.4
5. Execute a photo shoot according to client's needs 8.5
6. Apply non-destructive image editing techniques 8.6
7. Composite raster images using a combination of layers, transparency, masking, selection tools, blending modes, filters, and special effects 8.7
8. Manipulate digital images using industry standard software 8.8
9. Construct graphic works utilizing and manipulating type using industry standard software 8.9
10. Produce single- and multi-color graphic works using industry standard software 8.10
11. Create single- and multi-page graphic works utilizing margins, columns, grids, and bleeds 8.11
12. Demonstrate layout skills for digital media using industry standard software 8.12

**Technology Production**

## 5 MANAGE COMPUTER HARDWARE AND SOFTWARE 5.0

1. Demonstrate proper use and care of equipment (i.e., computers, storage devices, printers, peripherals, cameras, input devices, etc.) 5.1
2. Identify threats to technological devices and computer system networks (i.e., viruses, data breaches, phishing, pirating, etc.) 5.2
3. Utilize correct software for the final product (i.e., page layout, photo manipulation, illustration, etc.) 5.3
4. Apply effective computer file management techniques (e.g., file naming, organization, storage, and backup) 5.4
5. Differentiate among graphic file formats based on compatibility, file size, resolution, color gamut, and medium (i.e., JPG, TIFF, RAW, PSD, PDF, INDD, AI, GIF, PNG, etc.) 5.5
6. Identify file transfer options for security, compatibility, and control (i.e., physical media, cloud-based, network, peer to peer, etc.) 5.6
7. Identify methods of data capture (i.e., digital camera, video input device, graphics tablet, scanner, keyboard, etc.) 5.7
8. Differentiate among types and uses of digital cameras and accessories (i.e., point-and-shoot, DSLR, lenses, filters, lighting equipment, etc.) 5.8
9. Select appropriate resolution, compression, and format for data capture 5.9
10. Differentiate among PPI, DPI, and LPI (e.g., resolution, machine pixels, and screen frequency) 5.10
11. Explain the importance of an industry standard color management system to improve outcomes 5.11

## 9 DEMONSTRATE APPLICATION OF MEDIA OUTPUT 9.0

1. Preflight digital file for industry standard output (i.e., check for overset text, errors, missing elements, color issues, fonts, etc.) 9.1
2. Package a digital file for delivery, including PDF creation 9.2
3. Compare common printing processes, their market segments, and the advantages/disadvantages of each (e.g., offset, digital, screen printing, and flexography) 9.3
4. Select paper options for a job, including environmental concerns, grades and classes, and specialty substrates (i.e., canvas, vinyl, metal, coroplast, etc.) 9.4
5. Apply binding and finishing options, including imposition 9.5
6. Print, trim, and mount projects for professional presentation 9.6 9.6

**Communication Skills**

**3 ANALYZE FACTORS THAT CONTRIBUTE TO PERSONAL SUCCESS IN THE COMMUNICATION MEDIA TECHNOLOGIES INDUSTRY** 3.0

1. Employ written, verbal, and non-verbal communications that are appropriate to the target audience and situation) 3.1
2. Apply formatting, editing, and proofreading skills to all forms of writing 3.2
3. Prepare and deliver a presentation using terminology standard to the Communication Media Technologies industry 3.3
4. Use interpersonal skills when communicating with colleagues, clients, and vendors (i.e., active listening, empathy, body language, openness, negotiation, problem-solving, conflict resolution, assertiveness, positive attitude, etc.) 3.4
5. Identify professional “dress for success” standards and practices for the Communication Media Technologies industry 3.5
6. Explain basic types of résumés and their use (e.g., chronological, functional, combination, targeted, and creative) 3.6
7. Identify the basic parts of a résumé (e.g., contact/address section, objective, profile, career summary, experience section, education section, and reference section) 3.7
8. Explain considerations for résumé format (i.e., simple font; plenty of white space; personalize and customize to reflect3.8 your skills and abilities, etc.) 3.8
9. Define a professional portfolio (e.g., organized collection of relevant writing, graphics, and projects; artifacts showcasing talents and relevant skills; and summary of professional growth) 3.9
10. Describe portfolio types serving different purposes (i.e., working portfolios, display portfolios, assessment portfolios, etc.) 3.10
11. Describe ways to build a professional portfolio [i.e., binder, digital (iPad), online portfolio, etc.] 3.11

**4 ANALYZE THE GRAPHIC DESIGN PROFESSION** 4.0

1. Differentiate between art and design 4.1
2. Identify art movements that have impacted the Graphic Design profession 4.2
3. Research technologies that have impacted the Graphic Design profession 4.3
4. Describe graphic design’s influence on society 4.4
5. Examine the role and cultural significance of graphic designers 4.5
6. Describe past and present graphic design styles and trends 4.6
7. Describe how diversity (i.e., cultural, ethnic, generational, etc.) influences design decisions 4.7
8. Identify components required in establishing a freelance business (i.e., taxes, contracts, expenses, billing, licenses, etc.) 4.8

**Media Industries/Practices & Ethics**

## 1 ANALYZE THE COMMUNICATION MEDIA TECHNOLOGIES INDUSTRY, ITS BUSINESS PRACTICES, AND ITS ROLE IN THE ECONOMY 1.0

1. Investigate the history and evolution of the Communication Media Technologies industry (i.e., technology, processes, production, etc.) 1.1
2. Examine the impact of social media and emerging technologies on the Communication Media Technologies industry 1.2
3. Research the societal and economic impact of the Communication Media Technologies industry 1.3
4. Examine the impact of the Communication Media Technologies Industry on marketing practice 1.4
5. Explain how diversity and inclusion are managed in the workplace to create a supportive culture 1.5
6. Define cultural diversity and the need for awareness and sensitivity in the workplace 1.6
7. Explain the acceptance of multiculturalism in the workplace (i.e., treating impartially and fairly each ethnic group, etc.) 1.7
8. Analyze customer service practices appropriate to the Communication Media Technologies industry 1.8
9. Examine time management practices appropriate to the Communication Media Technologies industry 1.9
10. Identify professions that comprise the Communication Media Technologies industry (i.e., animation, broadcasting, filmmaking, graphic design, illustration, music and audio productions, photography, printing, publishing, etc.) 1.10
11. Comply with safety standards and regulations specific to OSHA 1.11

## 2 ANALYZE ETHICAL AND LEGAL ISSUES RELATED TO THE COMMUNICATION MEDIA TECHNOLOGIES INDUSTRY 2.0

1. Distinguish among copyright, intellectual property, and proprietary rights 2.1
2. Investigate copyright, intellectual property, proprietary rights, plagiarism, software licensure, and Creative Commons license Communication Media Technologies industry 2.2
3. Discuss consequences in violating copyright, privacy, and data security laws (i.e., monetary penalties, prison, injunctions, financial restitution, etc.) 2.3
4. Explain fair use (i.e., authorships, credit lines, parody, news reporting, criticism and commentary, etc.) 2.4
5. Differentiate between legal and ethical standards as they apply to decision-making in the Communication Media Technologies industry 2.5
6. Explain libel, privacy, censorship, and first amendment rights 2.6