

# Digital Photography (2020)

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

- 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.**
- 4 Examine the impact of the Communication Media Technologies Industry on marketing practices 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 the safety standards and regulations specific to OSHA 1.11**

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

- 1 Distinguish among copyright, intellectual property, and proprietary rights 2.1**
- 2 Investigate copyright, intellectual property, proprietary rights, plagiarism, and software licensure 2.2**
- 3 Discuss consequences in violating copyright, privacy, and data security laws (i.e., monetary penalties, prison, injunctions, financial restitution, etc.) 2.**

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- 4 Explain fair use (i.e., authorships, credit lines, parody, news reporting, criticism and commentary, etc.) 2.
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- 5 Differentiate between legal and ethical standards as they apply to decision-making in the Communication Media Technologies industry 2.5
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- 6 Explain libel, privacy, censorship, and first amendment rights 2.6
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- 7 Explain the difference and usage of release forms (e.g., model, minor, and property) 2.7
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**ANALYZE FACTORS THAT CONTRIBUTE TO PERSONAL SUCCESS IN THE COMMUNICATION MEDIA TECHNOLOGIES INDUSTRY 3**

- 1 Employ written, verbal, and non-verbal communications that are appropriate to the target audience and situation 3.1
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- 2 Apply formatting, editing, and proofreading skills to all forms of writing 3.2
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- 3 Prepare and deliver a presentation using terminology standard to the Communication Media Technologies industry 3.3
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- 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
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- 5 Identify professional “dress for success” standards and practices for the Communication Media Technologies industry 3.5
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- 6 Explain basic types of résumés and their use (e.g., chronological, functional, combination, targeted, and creative) 3.6
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- 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
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- 8 Explain considerations for résumé format (i.e., simple font; plenty of white space; personalize and customize to reflect your skills and abilities, etc.) 3.8
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- 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
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- 10 Describe portfolio types serving different purposes (i.e., working portfolios, display portfolios, assessment portfolios, etc.) 3.10
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- 11 Describe ways to build a professional portfolio [i.e., binder, digital (iPad), online portfolio, etc.] 3.11
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**ANALYZE THE DIGITAL PHOTOGRAPHY PROFESSION 4**

- 1 Identify art movements that have impacted the photography profession 4.1

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**2 Research technologies that have impacted the Digital Photography profession (i.e., smart phone cameras, etc.)** 4.2

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**3 Describe photography's influence on society** 4.

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**4 Differentiate among photographic genres and styles (i.e., portrait, landscape, macro, street, editorial, sports, journalistic, architectural, fine art, commercial, lifestyle, events, etc.)** 4.4

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**5 Examine the role and cultural significance of photographers** 4.5

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**6 Describe past and present graphic design styles and trends** 4.7

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**8 Identify components required in establishing a freelance business (i.e., taxes, contracts, expenses, billing, licenses, etc.)** 4.8

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**MANAGE PHOTOGRAPHIC EQUIPMENT AND SOFTWARE** 5

**1 Demonstrate proper maintenance and care of equipment (i.e., computers, storage devices, printers, peripherals, cameras, input devices, etc.)** 5.1

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**2 Identify threats to technological devices and computer system networks (i.e., viruses, data breaches, phishing, pirating, etc.)** 5.2

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**3 Utilize software to meet requirements of final product (i.e., page layout, photo manipulation, illustration, etc.)** 5.3

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**4 Apply effective digital file management techniques (e.g., data capture, file transfer, file naming, organization, storage, and backup)** 5.4

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**5 Differentiate among 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.

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**6 Apply effective use of menus, buttons, and functions of digital cameras** 5.6

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**7 Differentiate among types and uses of digital cameras, equipment, and accessories (i.e., point-and-shoot, mirrorless, DSLR, lenses, filters, tripods, lighting equipment, etc.)** 5.7

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**8 Select appropriate resolution, compression, and format for data capture** 5.8

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**9 Explain the importance of an industry standard color management system** 5.9

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**APPLY THE ELEMENTS AND PRINCIPLES OF DESIGN AND COMPOSITION** 6

**1 Incorporate the elements of design (e.g., line, shape, form, texture, pattern, color, value, and space) when composing photographs** 6.1

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**2 Incorporate principles of design (e.g., contrast, repetition, balance, movement, emphasis, harmony, proportion, and unity) when composing photographs** 6.2

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**3 Incorporate guidelines for composition (e.g., simplicity, framing, rule of thirds, focal point, point of view, camera angle, and symmetry)** 6.

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- 4 Communicate a specific idea through the subject matter and the composition of a photograph** 6.4

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  - 5 Use critical thinking skills to describe, interpret, analyze, and make judgments about composition** 6.5

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  - 6 Define basic color schemes (e.g., complementary, analogous, triadic, tetradic, split complementary, monochromatic, and grayscale)** 6.6

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  - 7 Analyze the psychology and theory of color in images to increase visual literacy** 6.7

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  - 8 Utilize posing techniques and product arrangement for visual impact (i.e., portraits, fashion, product, etc.)** 6.8
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**DEMONSTRATE PROPER EXPOSURE SETTINGS TO ACHIEVE DESIRED OUTCOMES** 7

- 1 Describe the basic elements of exposure (e.g., ISO, aperture, and shutter speed)** 7.1

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  - 2 Utilize appropriate shutter speed to create panned, blurred, and stop action photos** 7.2

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  - 3 Apply the appropriate aperture setting for deep or shallow depth of field** 7.3

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  - 4 List the factors that affect depth of field (e.g., aperture, focal length, and distance to subject)** 7.4

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  - 5 Apply the appropriate ISO settings for various lighting conditions** 7.5

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  - 6 Calculate exposure equivalents** 7.6

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  - 7 Utilize in-camera light meter to guide desired exposure** 7.7

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  - 8 Discuss various in-camera metering modes (i.e., spot, partial, evaluative, center-weighted, matrix, etc.)** 7.8

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  - 9 Evaluate a histogram** 7.9

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  - 10 Discuss active focus points and focusing modes (i.e., AI Servo, single, continuous, 3-D, etc.)** 7.10

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  - 11 Discuss exposure modes (e.g., aperture priority, shutter priority, manual, automatic, program, bulb, and preprogrammed automatic settings)** 7.11
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**DEMONSTRATE PROPER LIGHTING TECHNIQUES TO ACHIEVE DESIRED OUTCOMES** 8

- 1 Identify additive colors (RGB – red, green, and blue) and subtractive colors (CMYK – cyan, magenta, yellow, and black/key)** 8.1

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- 2 Explore color spaces (e.g., RGB, CMYK, grayscale, L\*a\*b, Adobe RGB, sRGB, and ProPhoto)** 8.2

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- 3 Explain the importance of “quality of light” (e.g., hard or soft light, fall-off, and color temperature) 8.3**

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  - 4 Explain key/main, fill, back, hair, and rim light 8.4**

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  - 5 Demonstrate traditional studio portrait lighting set-ups (e.g., split, loop, Rembrandt, butterfly/Paramount, short, and broad) 8.5**

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  - 6 Utilize natural/ambient light (e.g., direct, indirect, reflective, and diffused) 8.6**

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  - 7 Describe how environmental conditions affect the quality of light and its effects on the subject 8.7**

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  - 8 Utilize artificial light sources (e.g., flash, strobes, LEDs, and fluorescent) 8.8**

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  - 9 Utilize light modifiers (i.e., reflector, umbrellas, soft boxes, grids, honeycombs, gels, etc.) to adjust the quality of light 8.9**

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  - 10 Balance natural/ambient light and artificial light sources 8.10**

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  - 11 Use handheld light meter 8.11**

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  - 12 Explain correct sync speed 8.12**
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**IMPLEMENT DIGITAL  
WORKFLOW  
PROCESSES 9**

- 1 Demonstrate digital image input (i.e., camera cards, wireless, tethered, direct download, etc.) 9.1**

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- 2 Evaluate metadata 9.2**

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- 3 Apply keywords to images 9.3**

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- 4 Demonstrate nondestructive editing techniques 9.4**

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- 5 Apply image adjustments (e.g., sizing, cropping, retouching, orientation, and resolution adjustment) 9.5**

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- 6 Apply color correction (i.e., white balance, saturation, hue, luminance, etc.) 9.6**

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- 7 Explain the benefits of batch processing 9.7**

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- 8 Export images for final output 9.8**

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- 9 Mount, matte, and frame a print 9.9**