

# Career & Technical Education | Arts & Communication

## Photographic Composition

Subject Code: 340150

### Outcome & Competency Descriptions

#### Course Description:

Aesthetics and techniques are essential to producing a good photograph. This course focuses on capturing and manipulating images in digital photography with some skill development in editing, printing, and enlarging. Topics include camera functions, mechanics of image capture, image manipulation, and print production. Students shoot photographs in various studio and indoor and outdoor settings.

#### Strand 1. Business Operations / 21st Century Skills

Learners apply principles of economics, business management, marketing, and employability in an entrepreneur, manager, and employee role to the leadership, planning, developing, and analyzing of business enterprises related to the career field.

#### Outcome: 1.1. Employability Skills

Develop career awareness and employability skills (e.g., face-to-face, online) needed for gaining and maintaining employment in diverse business settings.

#### Competencies

- 1.1.1. Identify the knowledge, skills, and abilities necessary to succeed in careers.
- 1.1.2. Identify the scope of career opportunities and the requirements for education, training, certification, licensure, and experience.
- 1.1.3. Develop a career plan that reflects career interests, pathways, and secondary and postsecondary options.
- 1.1.5. Develop strategies for self-promotion in the hiring process (e.g., filling out job applications, resumé writing, interviewing skills, portfolio development).
- 1.1.6. Explain the importance of work ethic, accountability, and responsibility and demonstrate associated behaviors in fulfilling personal, community, and workplace roles.

**Outcome: 1.2. Leadership and Communications**

Process, maintain, evaluate, and disseminate information in a business.  
Develop leadership and team building to promote collaboration.

**Competencies**

- 1.2.1. Extract relevant, valid information from materials and cite sources of information.
- 1.2.2. Deliver formal and informal presentations.
- 1.2.4. Use negotiation and conflict-resolution skills to reach solutions.
- 1.2.7. Use problem-solving and consensus-building techniques to draw conclusions and determine next steps.
- 1.2.9. Identify advantages and disadvantages involving digital and/or electronic communications (e.g., common content for large audience, control of tone, speed, cost, lack of non-verbal cues, potential for forwarding information, longevity).
- 1.2.12. Use technical writing skills to complete forms and create reports.

**Outcome: 1.3. Business Ethics and Law**

Analyze how professional, ethical, and legal behavior contributes to continuous improvement in organizational performance and regulatory compliance.

**Competencies**

- 1.3.2. Follow protocols and practices necessary to maintain a clean, safe, and healthy work environment.
- 1.3.5. Access and implement safety compliance measures (e.g., quality assurance information, safety data sheets [SDSs], product safety data sheets [PSDSs], United States Environmental Protection Agency [EPA], United States Occupational Safety and Health Administration [OSHA]) that contribute to the continuous improvement of the organization.
- 1.3.7. Identify the labor laws that affect employment and the consequences of noncompliance for both employee and employer (e.g., harassment, labor, employment, employment interview, testing, minor labor laws, Americans with Disabilities Act, Fair Labor Standards Acts, Equal Employment Opportunity Commission [EEOC]).
- 1.3.8. Verify compliance with computer and intellectual property laws and regulations.

**Outcome: 1.4. Knowledge Management and Information Technology**

Demonstrate current and emerging strategies and technologies used to collect, analyze, record, and share information in business operations.

**Competencies**

- 1.4.6. Use an electronic database to access and create business and technical information.
- 1.4.7. Use personal information management and productivity applications to optimize assigned tasks (e.g., lists, calendars, address books).

**Outcome: 1.5. Global Environment**

Evaluate how beliefs, values, attitudes, and behaviors influence organizational strategies and goals.

**Competencies**

- 1.5.7. Use intercultural communication skills to exchange ideas and create meaning.

**Outcome: 1.6. Business Literacy**

Develop foundational skills and knowledge in entrepreneurship, financial literacy, and business operations.

**Competencies**

- 1.6.1. Identify business opportunities.
- 1.6.2. Assess the reality of becoming an entrepreneur, including advantages and disadvantages (e.g., risk versus reward, reasons for success and failure).
- 1.6.4. Identify types of businesses, ownership, and entities (i.e., individual proprietorships, partnerships, corporations, cooperatives, public, private, profit, not-for-profit).
- 1.6.5. Describe organizational structure, chain of command, the roles and responsibilities of the organizational departments, and interdepartmental interactions.
- 1.6.6. Identify the target market served by the organization, the niche that the organization fills, and an outlook of the industry.
- 1.6.12. Describe classifications of employee benefits, rights, deductions, and compensations.

**Outcome: 1.7. Entrepreneurship/Entrepreneurs**

Analyze the environment in which a business operates, and the economic factors and opportunities associated with self-employment.

**Competencies**

- 1.7.7. Create a list of personal strengths, weaknesses, skills, and abilities needed to be successful as an entrepreneur.
- 1.7.9. Conduct a self-assessment to determine entrepreneurial potential.
- 1.7.10. Describe techniques for obtaining experience (e.g., apprenticeship, co-operative [co-op] education, work placement, internship, job shadowing) related to an entrepreneurial objective.
- 1.7.13. Protect intellectual property and knowledge (e.g., copyright, patent, trademark, trade secrets, processes).

**Outcome: 1.8. Operations Management**

Plan, organize, and monitor an organization or department to maximize contribution to organizational goals and objectives.

**Competencies**

- 1.8.1. Forecast future resources and budgetary needs using financial documents (e.g., balance sheet demand forecasting, financial ratios).
- 1.8.4. Identify alternative actions to take when goals are not met (e.g., changing goals, changing strategies, efficiencies).
- 1.8.9. Develop a budget that reflects the strategies and goals of the organization.

**Outcome: 1.9. Financial Management**

Use financial tools, strategies, and systems to develop, monitor, and control the use of financial resources to ensure personal and business financial well-being.

**Competencies**

- 1.9.1. Create, analyze, and interpret financial documents (e.g., budgets, income statements).
- 1.9.8. Identify income sources and expenditures.

**Outcome: 1.10. Sales and Marketing**

Manage pricing, place, promotion, packaging, positioning, and public relations to improve quality customer service.

**Competencies**

- 1.10.6. Discuss the importance of correct pricing to support a product or service's positioning in the marketing mix.

## **Strand 2.**

### **Design**

Learners apply the elements and principles of design and compositional techniques to create works of art and visual layouts for both tactile and digital art forms.

#### **Outcome: 2.1.**

#### **Arts Elements and Design Principles**

Analyze works of art for the art elements and the design principles needed to create professional products.

#### **Competencies**

- 2.1.1. Describe art elements of line, value, color, shape, space, form, and texture in various media that are used individually or in combination.
- 2.1.2. Identify specific characteristics (i.e., positive and negative, organic, geometric, quality, weight, direction, variety, unity, balance, symmetry) of art elements that communicate and express ideas.
- 2.1.3. Determine how and when to apply the principles of design, including unity, variety, balance, movement, emphasis, visual hierarchy, and proportion/scale to communicate ideas.
- 2.1.4. Identify, compare, and contrast unity and variety within a design (e.g., formal/symmetrical, informal/asymmetrical, and radial balance).
- 2.1.6. Interpret emphasis through contrast, isolation, size, and placement.
- 2.1.7. Identify visual hierarchy used to establish dominance.
- 2.1.8. Recognize the use of proportion/scale.

#### **Outcome: 2.2.**

#### **Color Theory**

Assess the use of color for commercial design.

#### **Competencies**

- 2.2.1. Explain the science of color perception using the electromagnetic spectrum.
- 2.2.2. Choose color pairings with regard to ADA compliance, color visibility, readability, and accessibility.
- 2.2.3. Describe how changes to tint, shade, hue, value, intensity, and saturation relate to color theory.
- 2.2.8. Compare and contrast choices using the psychology of color.
- 2.2.9. Critique the use of color schemes (e.g., primary, secondary, tertiary, analogous, complementary, triads, monochromatic) in various media.

**Outcome: 2.4.****Visual Layouts**

Create layouts for pre-production and analyze the communicative effects on the commercial product.

**Competencies**

- 2.4.1. Create thumbnail and rough sketches.
- 2.4.8. Apply compositional techniques, including rule of thirds, use of a grid system, 180-degree rule, framing, fill frame, pyramid, strong center of interest, and aspect ratio.

**Strand 3.****Written Content Creation**

Learners apply content creation knowledge and skills to use the intended message for entertainment, journalism, or marketing purposes.

**Outcome 3.1.****Career-Based Writing**

Develop basic skills and knowledge related to fact-, entertainment-, and marketing-based copy.

**Competencies**

- 3.1.10. Select visual imagery to support or enhance copy.

**Outcome: 3.5.****Social Media**

Develop content for social media.

**Competencies**

- 3.5.5. Create content tailored to a specific social media platform.

## **Strand 4. Audio, Video, and Photo Imaging**

Learners apply knowledge and skills of photography and videography to capture, engineer, and manipulate audio, images, and video for media production.

### **Outcome: 4.4. Lighting**

Measure and manipulate lighting based on the characteristics and properties of light.

#### **Competencies**

- 4.4.1. Measure light levels in camera and using hand-held devices.
- 4.4.2. Determine the color temperature that is appropriate for the environment.
- 4.4.3. Manipulate and direct light using ratios, gels, filters, diffusion, and gobos.
- 4.4.4. Implement lighting techniques (e.g., four-point, bounce, high-key, low-key, cross-key, mixed) to produce specific effects.

### **Outcome: 4.5. Photography**

Capture and edit still images for commercial purposes.

#### **Competencies**

- 4.5.1. Analyze the capabilities of different image capturing devices.
- 4.5.2. Clean and maintain camera equipment.
- 4.5.3. Identify the effects of ISO settings on image quality.
- 4.5.4. Achieve proper exposure through light, shutter speed, and aperture.
- 4.5.5. Affect apparent motion through shutter speed.
- 4.5.6. Manipulate aperture settings to alter depth of field.
- 4.5.7. Alter image through focus, white balance, exposure modes, and camera lens filters.
- 4.5.8. Capture images through various lenses.
- 4.5.9. Modify images through sizing, cropping, and output resolution.
- 4.5.10. Modify an image through color-management and special effects.
- 4.5.11. Enhance an image with tone, contrast, filters, composites, and sharpening techniques.
- 4.5.12. Retouch an image by cloning, healing, patching, and rebuilding.

- 4.5.13. Integrate image capture with post-production processes.
- 4.5.14. Capture multiple images and render them in high dynamic range.
- 4.5.15. Understand the fundamentals of composition.
- 4.5.16. Capture images using various camera shots.
- 4.5.17. Produce or modify story elements such as mood, tone, and theme to tell a coherent story through images.

## **Strand 6. Digital Design**

Learners apply knowledge and skills of digital design to manipulate and animate new and existing audio, video, or photo images to create graphics for internet, broadcast, mobile, and other multimedia applications.

### **Outcome: 6.1. Content Management**

Import, store, export, and manage digital assets.

#### **Competencies**

- 6.1.3. Select an application according to its capabilities in meeting the purpose and budget.
- 6.1.4. Import media into the selected application.
- 6.1.5. Identify the hardware capabilities of various devices and how processor speed, Random Access Memory (RAM), monitor resolution, and media storage affect the development and use of digital projects.
- 6.1.6. Convert file formats for use in editing software and other applications.
- 6.1.7. Export media in the appropriate format for delivery.
- 6.1.8. Manage and archive digital assets through organizational techniques (e.g., metadata, keywords, file/folder structure, name conventions).

### **Outcome: 6.5. Web Page Design**

Design and create webpages to appeal to the end user.

#### **Competencies**

- 6.5.4. Select a web page template based on website characteristics.