COURSE DESCRIPTION: Image editing tools are used by industry professional to edit and enhance most images presented in magazines, newspapers and other media. This course is designed to provide students with the knowledge and skills needed to master image manipulation and photographic retouching. Students will explore the technical and artistic aspects of image editing by creating images to be used in various types of media. Successful completion of this course will prepare the student for industry certification.

OBJECTIVE: Given the necessary equipment, supplies, and facilities, the student will be able to successfully complete all of the core standards.

RECOMMENDED GRADE LEVELS:	9-12
COURSE CREDIT:	1 unit (120 hours)
RECOMMENDED PREREQUISITE:	Fundamentals of Computing or Digital Multimedia and/or any digital literacy course
COMPUTER REQUIREMENT:	One computer per student with Internet access
REQUIRED SOFTWARE:	Adobe® Photoshop
RESOURCES:	MySCTextbooks

INDUSTRY CREDENTIALS/CERTIFICATIONS AVAILABLE:
    Adobe Certified Associate (ACA) Visual Communication Using Adobe Photoshop

A. SAFETY

Effective professionals know the academic subject matter, including safety as required for proficiency within their area. They will use this knowledge as needed in their role. The following accountability criteria are considered essential for students in any program of study.

1. Review school safety policies and procedures.
2. Review classroom safety rules and procedures.
3. Review safety procedures for using equipment in the classroom.
4. Identify major causes of work-related accidents in office environments.
5. Demonstrate safety skills in an office/work environment.

B. STUDENT ORGANIZATIONS

Effective professionals know the academic subject matter, including professional development, required for proficiency within their area. They will use this knowledge as needed in their role. 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.
3. 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.

C. TECHNOLOGY KNOWLEDGE

Effective professionals know the academic subject matter, including the ethical use of technology as needed in their role. The following accountability criteria are considered essential for students in any 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., cyberbullying; piracy; 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 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. Describe ethical and legal practices of safeguarding the confidentiality of business-related information.
7. Describe possible threats to a laptop, tablet, computer, and/or network and methods of avoiding attacks.

D. PERSONAL QUALITIES AND EMPLOYABILITY SKILLS

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

1. Demonstrate punctuality.

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2. Demonstrate self-representation.
3. Demonstrate work ethic.
4. Demonstrate respect.
5. Demonstrate time management.
6. Demonstrate integrity.
7. Demonstrate leadership.
8. Demonstrate teamwork and collaboration.
9. Demonstrate conflict resolution.
10. Demonstrate perseverance.
11. Demonstrate commitment.
12. Demonstrate a healthy view of competition.
13. Demonstrate a global perspective.
14. Demonstrate health and fitness.
15. Demonstrate self-direction.
16. Demonstrate lifelong learning.

E. PROFESSIONAL KNOWLEDGE

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

1. Demonstrate effective speaking and listening skills.
2. Demonstrate effective reading and writing skills.
3. Demonstrate mathematical reasoning.
4. Demonstrate job-specific mathematics skills.
5. Demonstrate critical-thinking and problem-solving skills.
6. Demonstrate creativity and resourcefulness.
7. Demonstrate an understanding of business ethics.
8. Demonstrate confidentiality.
9. Demonstrate an understanding of workplace structures, organizations, systems, and climates.
10. Demonstrate diversity awareness.
11. Demonstrate job acquisition and advancement skills.
12. Demonstrate task management skills.
13. Demonstrate customer-service skills.

F. DESIGN PRINCIPLES/PROJECT REQUIREMENTS (IMPLEMENTED THROUGHOUT COURSE)

Effective Business Information Management professionals demonstrate the effective use of design principles and project management requirements, as needed in their role. The following accountability criteria are considered essential for students in the Business Information Management program of study.

1. Identify the purpose, audience, and audience needs for preparing images.

2. Summarize how designers make decisions about the type of content to include in a project, including considerations such as copyright, project fit, permissions, and licensing.
3. Demonstrate and communicate knowledge of design process (identify the problem, brainstorm, design, build, test and evaluate, redesign, share/present solution).

G. DESIGN ELEMENTS

Effective Business Information Management professionals demonstrate knowledge of basic design principles and best practices, as needed in their role. The following accountability criteria are considered essential for students in the Business Information Management program of study.

1. Understand key terminology related to digital images.
2. Demonstrate knowledge of basic design principles and best practices employed in the visual design industry.
   a. Demonstrate knowledge of typography and its use in visual design.
      i. Use the terminology related to type including font, point size, and line space.
      ii. Demonstrate effective use of type fonts.
      iii. Determine appropriate typographic choices for a graphic design.
      iv. Demonstrate effective use of character and paragraph spacing.
      v. Apply style to text through proper use of fonts, weight, and color.
   b. Demonstrate knowledge of color and its use in digital images.
      i. Demonstrate effective use of color.
      ii. Use color tables (e.g., hue and saturation).
   c. Demonstrate knowledge of image resolution, image size, and image file format for web, video, and print.
      i. Determine appropriate resolution for project requirements (web vs. print).
      ii. Determine appropriate image size for project use (e.g., web banner, flyer, poster, portrait, background, etc.).
      iii. Explain the impact resolution and image size has on file size.
      iv. Determine appropriate background setting for an image (i.e., transparent, black, white, color).
      v. Compare and contrast various image formats (i.e., JPEG, GIF, PSD, TIFF, PNG, and RAW).
   d. Demonstrate knowledge of various layout principles (e.g., proportion, balance, symmetry, whitespace, etc.).

H. UNDERSTANDING IMAGE EDITING TOOLS AND WORKSPACE

Effective Business Information Management professionals demonstrate effective knowledge and use of software image editing tools and the workspace, as needed in their role. The following accountability criteria are considered essential for students in the Business Information Management program of study.

1. Identify elements of the workspace and demonstrate knowledge of their functions.

2. Identify and define the functions of commonly used Panels, including the Properties, Layers, Brushes, Adjustments, and Type panels.
3. Define the functions of commonly used tools, including selection, drawing, painting, type, and vector shape tools.
4. Navigate, organize, and customize the workspace.
5. Use non-printing design tools in the interface, such as rulers and guides.
6. Demonstrate knowledge of layers and masks.
7. Manage colors, swatches, and gradients.
8. Manage brushes, symbols, graphic styles, and patterns.

I. CREATING AND MANIPULATING IMAGES

Effective Business Information Management professionals demonstrate appropriate skills for creating and manipulating images, as needed in their role. The following accountability criteria are considered essential for students in the Business Information Management program of study.

1. Demonstrate the creation of a new project based on project requirements.
2. Demonstrate the ability to import assets from various sources into a project.
   a. Download images from the Internet.
   b. Transfer images from removable media.
   c. Capture images using a scanner.
   d. Transfer images from a digital, video, or web camera.
3. Demonstrate the effective use of various selection tools.
   a. Make selections using various selection tools.
   b. Move selection contents.
   c. Save and load selections.
   d. Transform and edit a selection.
   e. Combine the use of selection tools.
   f. Fill and stroke a selection.
4. Transform and edit images (e.g., crop, rotate, scale, skew, and straighten).
5. Create and manage layers and masks as necessary to meet project requirements.
   a. Create, duplicate, rearrange and merge layers.
   b. Create Layer Groups to organize and manage documents.
   c. Use layer styles and adjustment layers.
   d. Create a text and shape layers.
   e. Create and edit a quick mask.
   f. Create and edit a layer mask.
   g. Save a selection as a mask.
   h. Load a mask as a selection.
   i. Create and apply effects using a gradient mask.
6. Demonstrate the use of basic retouching techniques to restore a digital image
   a. Correct exposure errors to improve color, contrast, and tone.
   b. Restore images, correct damage, and reconstruct missing image information.
   c. Retouch photos to modify skin, makeup, and hair.
7. Compare and contrast destructive and nondestructive editing.

8. Create and edit vector graphics using shapes and paths.
9. Add and manipulate type.
10. Apply various filters and filter effects.

J. PUBLISHING IMAGES

Effective Business Information Management professionals demonstrate appropriate skills for publishing images, as needed in their role. The following accountability criteria are considered essential for students in the Business Information Management program of study.

1. Prepare images for export to web, print, and video.
2. Export or save digital images to various file format (e.g., editable, print, web, commercial print).
3. Prepare images for export to web, print, and video.
   a. Optimize images to balance need for detail against file size (e.g., flatten, compression ratio, size).
   b. Compare and contrast the benefits of various file types (e.g., GIF, JPEG, PNG, WBMP).
4. Explain lossy and lossless compression.
5. Export or save digital images to various file formats (e.g., editable, print, web, commercial print).

K. CAREER DEVELOPMENT

Effective Business Information Management professionals demonstrate appropriate career-ready skills, as needed in their role. The following accountability criteria are considered essential for students in the Business Information Management program of study.

1. Identify careers that incorporate image editing skills.
2. Explain the role of portfolios in the design industry.
3. Assemble a portfolio including a variety of <u>original</u> student-created work.
4. Create a biographical narrative to include in the portfolio.

L. ADVANCED IMAGE EDITING (OPTIONAL)

Effective Business Information Management professionals demonstrate advanced image editing skills, as needed in their role. The following accountability criteria are considered essential for students in the Business Information Management program of study.

1. Create and transform a Smart Object.
2. Create and edit 3D Text and Objects.
3. Create and apply actions and automation.
4. Create and slice a website mockup.

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5. Create and animate graphics and video.

[Course Materials and Resources](#)

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