

IMAGE EDITING

Course Code: 5340

COURSE DESCRIPTION: Image editing tools are used by industry professionals 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 related to the graphic design industry. 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 and is one of the required courses to be a completer in the Business Information Management program.

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:	Any digital literacy course
COMPUTER REQUIREMENT:	One computer per student with Internet access
REQUIRED SOFTWARE:	Adobe Photoshop
RESOURCES:	Instructional Materials

A. DESIGN PROCESS

Business Information Management professionals will use planning, principles, and elements of design to compose a project. 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. Incorporate various techniques for planning a project, including developing a timeline, page arrangement and production method, creating thumbnail/sketches (storyboard).
4. Demonstrate and communicate knowledge of the design process: identify the problem, brainstorm, design, build, test and evaluate, redesign, share/present solution.
5. Identify and utilize the following principles of design: balance (formal/symmetrical, informal/ asymmetrical), contrast, emphasis, movement, unity, proportion, whitespace.
6. Identify and utilize the elements of design to include line, shape, value, texture,

color, space (positive, negative), and form.

B. COLOR THEORY

Business Information Management professionals demonstrate knowledge and use of basic color theory principles. The following accountability criteria are considered essential for students in the Business Information Management program of study.

1. Describe how colors are used to communicate a mood or message using different colors that are associated with different meanings (i.e. warm, cool colors).
2. Develop a basic understanding of the color wheel and its use in digital images.
3. Recognize and apply the following color variations (gradient, opacity), properties (hue, saturation, value, tint, shade), and schemes (complementary, analogous, monochromatic, triadic patterns).
4. Demonstrate how bit depth affects color availability (i.e., 8-bit, 16-bit, 32-bit).
5. Compare and contrast color modes for web-based graphics and printed graphics (i.e., RGB, CMYK, grayscale).

C. TYPOGRAPHY

Business Information Management professionals demonstrate knowledge and use of typography. The following accountability criteria are considered essential for students in the Business Information Management program of study.

1. Demonstrate knowledge of typography and its use in visual design.
2. Apply various font types and their uses (point size, Serif, Sans-serif, Script, Decorative, Arial, Garamond).
3. Utilize the three basic categories of type styles (normal, bold, italic).
4. Apply style to text through proper use of fonts, weight, and color.
5. Demonstrate effective use of character and paragraph spacing (leading, kerning, tracking, alignment, pointsize).
6. Apply basic text alignment (left, right, centered, justified).
7. Identify use of ascenders, descenders, and baseline of text.

D. IMAGE FORMATS

Business Information Management professionals demonstrate knowledge of formatting various images. The following accountability criteria are considered essential for students in the Business Information Management program of study.

1. Demonstrate knowledge of image resolution, image size, and image file format for web, video, and print.
2. Determine appropriate image size for project use (e.g., web banner, flyer, poster, portrait, background, etc.)
3. Explain the impact resolution and image size has on file size.
4. Determine appropriate background setting for an image (i.e., transparent, black, white, color).
5. Identify graphic formats and their appropriate use (e.g., Vector: PDF, AI, EPS, RAW, etc.; Raster: JPG/JPEG, GIF, TIFF, BMP, PSD, PNG, etc.)

6. Acquire image assets (e.g., scan, digital camera, internet search, stock sources, etc.)
7. Import/export images for project requirements (i.e., lossy and lossless compression, size, screen versus print resolution, flatten).

E. TOOLS AND WORKSPACE

Business Information Management professionals demonstrate effective knowledge and use of software image editing tools and the workspace. 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. Navigate, organize, and customize the workspace.
3. Identify and use commonly used Panels: Properties, Layers, Brushes, Adjustments, Type, Patterns, Styles, etc.
4. Define the functions of commonly used tools: selection, drawing, painting, type, grouping, ungrouping, symbols, and vector shape tools.
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, stroke, fill (solid and gradient), and opacity.
8. Use various shortcut keys.

F. IMAGE CREATION AND MANIPULATION

Business Information Management professionals demonstrate appropriate skills for creating and manipulating images based on project requirements. The following accountability criteria are considered essential for students in the Business Information Management program of study.

1. Create a new project by downloading and/or importing new assets from various sources (i.e., Internet, removable media, scanner, and digital, video, or web camera).
2. Demonstrate the effective use of various selection tools (i.e., move, save, load, transform, edit, combine, fill, and stroke).
3. Operate painting and drawing tools to create and manipulate paths (lines and bezier curves) using anchor points, direction handles.
4. Define, create, manipulate, and appropriately use bitmap (pixel based) raster graphics and vector graphics using shapes and paths.
5. Crop, resize/scale, straighten, skew, straighten, and transform an image while constraining proportions (filters, effects, colors, color selection techniques, gradients, transparency, Alpha Channels).
6. Create and manage styles, adjustment, text, shape layers (duplicate, rearrange, merge).
7. Create and manage masks (save, load, create and apply gradient).
8. Demonstrate the use of basic retouching techniques to restore a digital image (correct exposure errors to improve color, contrast, and tone, restore images, correct damage, reconstruct missing image information, retouch photos to modify skin, makeup, and hair).
9. Compare and contrast destructive and nondestructive editing.
10. Prepare images for export to web, print, and video and save digital images to various file formats.

G. CAREER DEVELOPMENT

Business Information Management professionals demonstrate appropriate career-ready skills. 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 original student-created work (print or digital format).
4. Create a biographical narrative to include in the portfolio.

H. ADVANCED IMAGE EDITING (OPTIONAL)

Business Information Management professionals demonstrate advanced image editing skills. 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.
5. Create and animate graphics and video.

Safety, Student Organizations, Technology Knowledge, Personal Qualities and Skills, and Professional Knowledge are to be embedded in course standards A-H.

SAFETY

Business professionals know the academic subject matter, including safety as required for proficiency within their area. 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.

STUDENT ORGANIZATIONS

Business professionals know the academic subject matter, including professional development. 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 CTOS are integral parts of specific clusters, majors, and/or courses.
3. Explain the benefits and responsibilities of being a member of a CTOS.
4. List leadership opportunities that are available to students through participation in CTOS.

conferences, competitions, community service, philanthropy, and other activities.

5. Explain how participation in CTSOs can promote lifelong benefits in other professional and civic organizations.

TECHNOLOGY KNOWLEDGE

Business professionals know the academic subject matter, including the ethical use of technology. 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. piracy; cyberbullying, 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 creative commons, 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.

PERSONAL QUALITIES AND EMPLOYABILITY SKILLS

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

1. Demonstrate creativity and innovation.
2. Demonstrate critical thinking and problem-solving skills.
3. Demonstrate initiative and self-direction.
4. Demonstrate integrity.
5. Demonstrate work ethic.
6. Demonstrate conflict resolution skills.
7. Demonstrate listening and speaking skills.
8. Demonstrate respect for diversity.
9. Demonstrate customer service orientation.
10. Demonstrate teamwork.

PROFESSIONAL KNOWLEDGE

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

1. Demonstrate global or “big picture” thinking.

2. Demonstrate career and life management skills and goal-making.
3. Demonstrate continuous learning and adaptability skills to changing job requirements.
4. Demonstrate time and resource management skills.
5. Demonstrates information literacy skills.
6. Demonstrates information security skills.
7. Demonstrates information technology skills.
8. Demonstrates knowledge and use of job-specific tools and technologies.
9. Demonstrate job-specific mathematics skills.
10. Demonstrates professionalism in the workplace.
11. Demonstrate reading and writing skills.
12. Demonstrate workplace safety.

The Additional Course Materials & Resources and Course Academic Standards and Indicators can be found in the Instruction Hub.