

DIGITAL PUBLICATION DESIGN COURSE

CODE: 5176

COURSE DESCRIPTION: The Digital Publication Design course allows students to use their creativity to produce business and personal publications. Students create, format, illustrate, design, edit/revise, and print publications including newsletters, flyers, brochures, reports, advertising materials, catalogs, posters, and other publications. Students who excel have the opportunity to earn nationally-recognized certifications.

OBJECTIVE: Given the necessary equipment, supplies, and facilities, the student will be able to successfully complete all of the following core competencies for a course granting one unit of credit.

RECOMMENDED GRADE LEVELS: 10 - 12

COURSE CREDIT: 1 unit (120 hours)

PREREQUISITE: None

RECOMMENDED SOFTWARE: Adobe CC InDesign

SUPPLEMENTAL SOFTWARE: Adobe CC Illustrator / Adobe CC Photoshop

COMPUTER REQUIREMENT: One laptop/desktop per student

RESOURCES: [Instructional Materials](#)

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.

knowledge. 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.

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; illegal downloading; cyberbullying; 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, Creative Commons, fair use laws, and ethics pertaining to downloading of images, photographs, Creative Commons, 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 INTERPERSONAL 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. Demonstrates reading and writing skills.
12. Demonstrates workplace safety.

A. INTRODUCTION TO DIGITAL PUBLICATION DESIGN

Proficient publication designers demonstrate knowledge in computer design and layout, careers, as well as equipment and software needed to complete their tasks. The following accountability criteria are considered essential for students in the Business Information Management program of study.

1. Define computer illustration and design.
2. Identify careers in the computer illustration and design field.
3. Research system requirements for Adobe Creative Cloud usage:
 - a. hardware platform components and configurations
 - b. memory/storage requirements
4. Compare basic computer platforms and operating systems between various computing devices.
5. Demonstrate troubleshooting skills and procedures.
6. Create and manage files and folders.
7. Utilize local and network drives, remote, shared and cloud storage.
8. Demonstrate downloading and installing fonts (font families).

9. Save, retrieve, load, format, import data into, and export a variety of electronic documents (e.g., word processing, spreadsheet, database, design software, etc.).
10. Demonstrate the proper use of a variety of external peripherals and how they connect to a computer.
11. Demonstrate the understanding of file sharing, file permissions, security, and transferring information.

B. DESIGN AND LAYOUT PRINCIPLES

Proficient publication designers demonstrate knowledge and usage of design and layout principles. The following accountability criteria are considered essential for students in the Business Information Management program of study.

1. Identify and apply the effective uses of color theory.
2. Demonstrate the effective use of elements and principles of design.
3. Demonstrate that the focal point is the visual element that is the center of interest on the page or set of facing pages using the rule of thirds.
4. Demonstrate the effective use of white space and negative space.
5. Analyze and incorporate the principles of balance, scale, contrast, alignment, rhythm, repetition, movement, harmony, emphasis, proximity, and unity in layout compositions.
6. Demonstrate the uses of basic color models (e.g., RGB, CMYK, Additive, Subtractive, and Pantone).
7. Identify and apply basic computer design and layout techniques.
8. Differentiate between the four typeface categories – serif, sans serif, script and display.
9. Apply knowledge of typography to enhance publications using different character styles, text attributes (fonts), effects, and justifications.
10. Identify baseline, x-height, ascender, descender, and drop cap.
11. Measure type in points, picas, and inches.
12. Apply character and word spacing (e.g., kerning, tracking, and leading).
13. Use acceptable standards to create and edit documents for correct grammar, punctuation, word count, and number usage.
14. Use master pages to create consistency, directional flow, and increase productivity (e.g., headers, footers, recurring information).

C. DIGITAL IMAGING

Proficient publication designers demonstrate appropriate skills in digital imaging. The following accountability criteria are considered essential for students in the Business Information Management program of study.

1. Analyze the differences between bitmap and vector graphics.
2. Identify the various types of graphic file formats (e.g., jpg, gif, psd, tif, png, raw).
3. Save and export using the appropriate graphic file format for web, print, and video.

4. Acquire and incorporate digital images from multiple sources.
5. Calculate and convert images to desired sizes and resolution (e.g., file format, bit depth, color space, resolution, pixel dimensions, etc.)
6. Edit images (color, tints, contrast, watermark, brightness, and resolution).
7. Manipulate images (scale, crop, group/ungroup, and rotate).
8. Create simple drawings to include shapes, fills, colors, strokes, and lines.

D. WORKSPACE AND TOOLS

Proficient publication designers understand and utilize their workspace and tools to maximize productivity and to create functional and aesthetically pleasing designs. The following accountability criteria are considered essential for students in the Business Information Management program of study.

1. Identify and manipulate elements of the interface.
2. Organize and customize the workspace.
3. Recognize and identify elements of the workspace (panels, options bar, layers, etc.)
4. Use core tools and features to lay out visual elements.
 - a. Use the type tool to create appropriate typography (text frames, regular type, type on a path, etc.)
 - b. Create frames using the various frame tools (frame tools, Text tool, Pen tool, etc.)
 - c. Make, manage, and edit selections using a variety of tools, (e.g., Selection tool vs Direct Selection tool, page selection, selecting frames vs content, etc.)
 - d. Apply basic auto-correction methods and tools.
 - e. Use tools to add special characters or content. (page numbers, table of contents, index markers, special characters)
 - f. Evaluate or adjust the appearance of objects, frames, or layers using various tools. (fill and stroke, opacity, Pathfinder panel)
 - g. Add multiple pages to a document.
 - h. Display Performance, Interface, Rulers, Grids, Guides & Pasteboard, Spelling, Story Editor (Display, Units & Increments, etc.)
 - i. Adding, removing, and locking/unlocking guides; setting color; hiding guides and grids, showing grids, smart guides; creating guide layouts, etc.
 - j. Use various tools to repair and reconstruct project content (e.g., find/replace, custom dictionaries, dictionary language, etc.)

E. WORKSPACE AND TOOLS - PHOTOSHOP

Proficient publication designers understand and utilize their workspace and tools to maximize productivity and to create functional and aesthetically pleasing designs. The following accountability criteria are considered essential for students in the Business Information Management program of study.

1. Use core tools and features to lay out visual elements.
 - a. Modify and refine selections using various methods (e.g., keyboard modifiers, feather, expand, contract, inverse, selecting and masking, adding to and subtracting

- from selection, deselecting, Lasso tool, Magic Wand, marquee selection tools, etc.)
- b. Transform digital graphics and media: modify the canvas or artboards (e.g., resizing, cropping, expanding, resampling, etc.) Differentiate between resize and resample (rotate, flip, and modify individual layers, objects, selections, groups, or graphical elements, transforming, warping, distorting, skewing, etc.)
- c. Use various tools to repair and reconstruct images (e.g., healing tools, clone tools, Content-Aware tools, liquify, etc.)
- d. Evaluate or adjust the appearance of objects, selections, or layers using various tools (e.g., adjustments layers, histogram, opacity, Eyedropper tool, etc.)
- e. Apply photographic changes to images using tools and adjustments (e.g., Burn tool, Dodge tool, Smudge tool, Blur tool, Sharpen tool, desaturate options, photo filters, etc.)

F. CREATING PUBLICATIONS

Proficient publication designers demonstrate appropriate skills for creating and saving publications. The following accountability criteria are considered essential for students in the Business Information Management program of study.

1. Demonstrate appropriate file management and organization techniques including file compression, saving, and file retrieval.
2. Determine the most appropriate type of desktop publication based upon the purpose, intended audience, life of publication, cost limits, time constraints, and publication method.
3. Design a layout for readability and attractiveness by use of effective white space, column position, spacing, page margins, orientation, graphics frames, and text frames.
 - a. Use techniques to proofread documents to ensure correct grammar, spelling, and punctuation.
 - b. Check documents for errors and project specifications.
4. Develop a desktop publication including *original* graphics created using drawing and paint tools.
5. Create a variety of documents for business and personal use, including multiple-page documents.
6. Demonstrate the ability to preplan a document including creating a thumbnail sketch.
7. Incorporate multimedia, animation, and interactivity into publications (e.g. videos, GIFs, sound, navigation, hyperlinks, cross references, buttons, page transitions, and animation.)
8. Demonstrate knowledge of how to embed rich-media objects. (e.g, HTML content, video files, Media and SWF panels, etc.)
9. Identify and assign triggers for multimedia assets. (e.g., rollover, click, automatic load, etc.)
10. Differentiate appropriate uses of different types of paper, size, weights, and finishes
11. Apply the different types of parallel folds used with publications (e.g., z-fold, trifold, half-fold).

G. BASIC WEB DESIGN PRINCIPLES (OPTIONAL)

Proficient publication designers showcase basic knowledge of web design concepts. The following accountability criteria are considered essential for students in the Business Information Management program of study.

1. Investigate principles of e-commerce as they apply to digital publications on the web and verify copyright procedures.
2. Differentiate the use of Hypertext Markup Language (HTML), Cascading Style Sheets (CSS), and JavaScript (or a similar scripting language) in web development as it relates to digital publications.
3. Plan a web page considering subject, devices, audience, layout, color, links and graphics.
4. Create a web page that contains a variety of HTML elements (e.g., hyperlinks, ordered and unordered lists, images, headings, paragraph) and CSS styles.
5. Prepare and proofread documents for publishing to the web.

H. CAREER AND PORTFOLIO DEVELOPMENT

Proficient publication designers understand the importance of completing and maintaining documentation of their work. The following accountability criteria are considered essential for students in the Business Information Management program of study.

1. Research and compare various types of portfolios.
2. Explain the purpose of portfolios and how to select specific pieces to include in the portfolio.
3. Create a résumé to include in the portfolio.
4. Assemble and maintain a career portfolio to include business and personal publications created in the course.
5. Conduct peer and self-evaluations using rubrics.
6. Prepare a variety of publications for commercial printing.

Course Materials and Resources

Course Academic Standards and Indicators