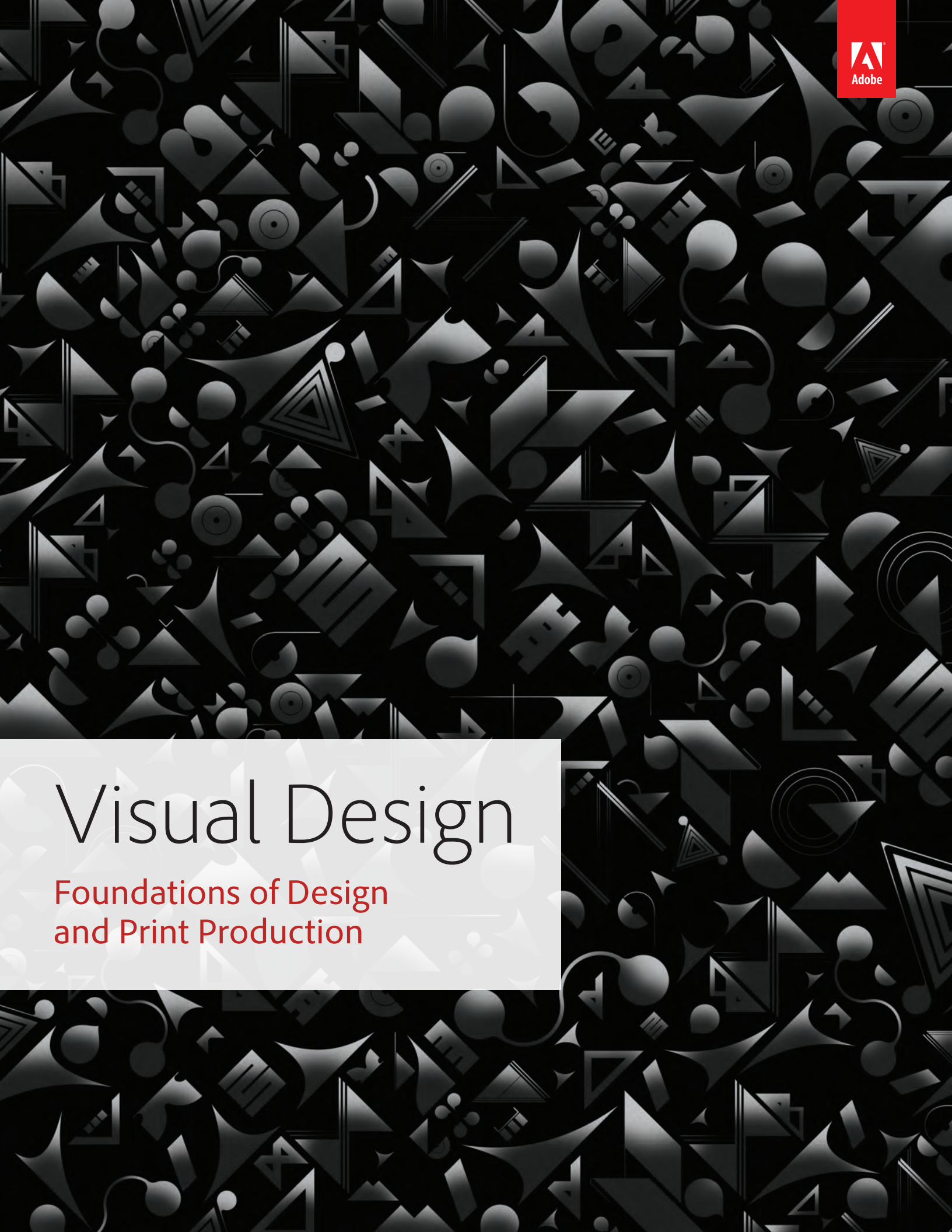

Visual Design

Foundations of Design and Print Production

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Authors

Anuja Dharkar, Dale Underwood, Jeff Sengstack, Skipper Pickle, Andrew Strombeck, and Ellen Flaherty

CS6 revision

Jay Heins, Dale Underwood, and Matt Niemitz

Editors

Dale Underwood and Matt Niemitz

Cover art

Scott Design

Program Manager

Matt Niemitz

Copy Editor

Malinda McCain

Photography

Andrew Strombeck, Matthew Aho

Teacher contributors

Sandra Mustacato, Susan O'Connor, Linda Dickeson, Ann Ayers, Eva Lamar, Susan Roberts, Debra Keller, Mark Johnson

Table of Contents

Course overview and setup **1**
First semester projects 2
Second semester projects 2
Alternate methods for utilizing *Visual Design* 3
Visual Design skills matrix 4
Classroom computer setup 11
Classroom enrichment 14
Skills overview rubric 18

ISTE NETS*S Standards for Students **22**

Adobe Certified Associate, Visual Communication objectives **24**

Project 1: Collages and photography
- Instructor project guidelines
- Student guides

Project 2: Logos
- Instructor project guidelines
- Presentation
- Student guides

Project 3: Business Cards
- Instructor project guidelines
- Presentation
- Student guides

Project 4: Advertisements
- Instructor project guidelines
- Student guides

Project 5: Portfolios
- Instructor project guidelines
- Student guides

Project 6: Brochures
- Instructor project guidelines
- Student guides

Project 7: Newsletters
- Instructor project guidelines
- Student guides

Project 8: Mini-yearbooks
- Instructor project guidelines
- Student guides

Project 9: Final portfolios
- Instructor project guidelines

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Course overview and setup

Visual Design: Foundations of Design and Print Production is a yearlong, project-based curriculum that develops career and communication skills in print production and graphic design, using Adobe tools. *Visual Design* develops four key skill areas:

- Project management and collaboration
- Design
- Research and communication
- Professional print production using graphic design tools

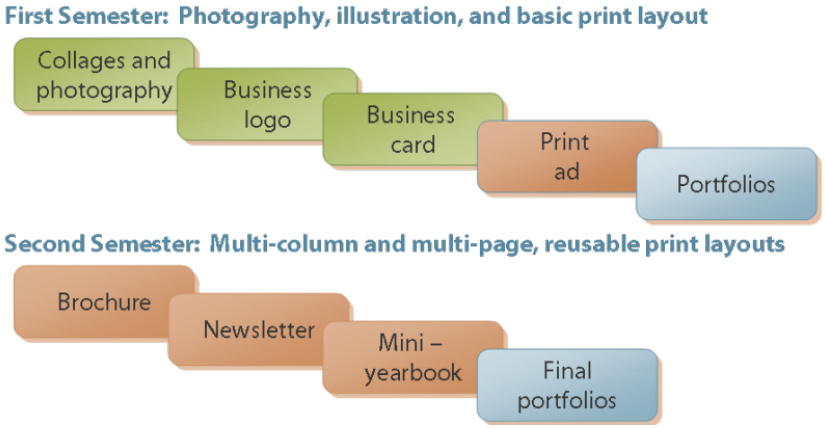
Students develop these key skills in a spiral—each project adds more challenging skills to foundation proficiencies. Students experience subject areas and skills across careers in graphic design, photography, print and layout design, and production.

Adobe collaborated with a community of educators across the US and UK to develop the appropriate depth and breadth of each project. Additionally, Adobe collaborated and co-developed this content with the International Society of Technology Education (ISTE) to create standards-aligned, career-track, course materials that focus on graphic design and print production.

Visual Design addresses each of these areas, using a project-based approach. Each project has phases that follow a design and development process, from project planning and analysis to evaluation and distribution. Students gain experience through real-world projects that help them better understand the roles and processes across a broad range of careers involving visual design. To simulate a professional work environment, students gradually migrate their design work from an individual process to a group process, focused on personal and client work. Design work by its very nature is iterative, so the projects contain activities that require students to evaluate and then redesign and rework their communications. Specific attention has been paid to developing concepts and principles for thorough, effective design. This content prepares students for the Adobe Certified Associate, Visual Communication using Adobe Photoshop CS6 examination.

Each project guideline provides structure for the content and process of a project while allowing flexibility for the instructor to tailor the level of social and technical interaction appropriate for students. For example, you can manage client work within the school or open it up to involve the community at large.

The following diagram shows the sequence and flow of the projects:



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First semester projects

The first semester of *Visual Design* (Projects 1–5) develops skills that lay the foundation for photography and producing print-ready communications: graphic design principles, visual comps, print production development, shared project management skills such as interviewing and project scheduling, peer review, and redesign. Project activities focus on developing effective communications that can be deployed in print, on the web, or in a video. Students develop a variety of graphics, a logo, a business card, and a client advertisement. They produce design documents and visual comps that clients review. Students culminate the semester with a portfolio project during which they reflect on the skills and topics they've covered thus far and begin to explore the career areas that interest them in visual design.

The key skills emphasized in this semester are:

- Soft skills such as interviewing and responding to feedback
- Designing for a variety of audiences and needs
- Problem solving that helps support multiple perspectives
- The design process and effective communication
- Peer teaching and evaluation in a collaborative environment
- Technical image manipulation and print publishing skills

In the first semester, students use Adobe Photoshop CS6 and Adobe Illustrator CS6 to develop images. They use Adobe InDesign CS6 to design and build layouts and print materials. They use Adobe Acrobat X Pro to review and improve content, produce print-ready materials, and develop a portfolio.

Second semester projects

The second semester of *Visual Design* (Projects 6–9) builds on student design and development skills by focusing on longer print production projects as well as more in-depth content and advanced techniques for graphics and layout development. Students continue to work on teams to produce rich print communications such as brochures, newsletters, and yearbooks. They focus on effective graphic design, project management, design specifications, and iterative development. They develop graphic-design and print-production skills that solve specific communication challenges to meet client and audience needs. They build technical skills to address project needs and learn to track complex projects. Students culminate this semester with a portfolio redesign that has them project forward on their aspirations, goals, and interests.

The key skills emphasized in this semester are:

- Project management skills such as task management, client management, milestone tracking, and contingency planning
- Illustration and drawing
- Communication with peers and team members, using project plans or specifications
- Design and redesign
- Technical graphic- and print-production skills such as creating vector-based graphics and filters
- Design solutions, including multi-page and double-page layouts

In the second semester, students enhance their skills in Adobe Photoshop CS6, Adobe Illustrator CS6, and Adobe InDesign CS6 to create their designs.

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Alternate methods for utilizing *Visual Design*

If your circumstances do not allow you to use Visual Design as a yearlong curriculum, there are other ways to structure the content to fit certain time, skill, and course structure limitations.

Product-based instruction

You can use a product-based approach that focuses primarily on teaching how to use Adobe Photoshop CS6, Adobe Illustrator CS6, or Adobe InDesign CS6. The technical guides included in the *Visual Design* projects are alternatively packaged by individual product. Download the PDF Portfolio of all the Photoshop CS6 guides if you solely plan to teach Photoshop skills to your students.

You are encouraged to be creative with a product-based approach while attempting to incorporate an activity-based teaching method. In that vein, you can still use all or pieces of the individual projects to teach specific products. The table below details the specific steps in each project that align to each product.

	Photoshop	**Illustrator**	**InDesign**
Project 1: Collages and Photography	Steps 9-13		
Project 2: Logos	Steps 5, 7-11, 15	Steps 7-9	
Project 3: Business cards	Steps 8-10		Steps 11-14, 17
Project 4: Advertisements	Steps 13, 16, 18		Steps 17-18
Project 5: Portfolios	Step 8		Step 8
Project 6: Brochures	Steps 11-12		Steps 14-15, 18-20
Project 7: Newsletters	Steps 12, 26	Steps 18-20, 26	Steps 13, 21-22, 24, 26
Project 8: Mini-yearbooks	Step 11	Step 18	Steps 10, 14-15, 20-23
Project 9: Final portfolios			

Individual projects

Depending on the skill level of students, you can utilize individual projects from the *Visual Design* curriculum, without completing the other projects in the curriculum sequence. For example, an educator teaching a marketing course might only wish to teach the advertisements projects. Educators can adapt the instruction and utilize technical guides from previous projects to teach an individual project.

Be creative!

You are encouraged to utilize the *Visual Design* curriculum as a jumping off point to developing their own projects and curriculum that is customized for their classroom. By utilizing the existing product technical guides, educators can formulate complete instructional projects based on particular areas of interest. If you do create your own projects or curriculum, please share them with the community on the Adobe Education Exchange (http://edexchange.adobe.com) where you can also browse for additional resources that are useful for teaching with the Adobe Creative Suite 6.

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Visual Design skills matrix

	Project management	Design	Research and communication	Technical
Project 1: Collages and photography *Focus:* • Principles of image composition • Color enhancement and retouching techniques • Understanding the importance of file formats, resolution, and file size *Time:* 3–5 hours (1 week)	• Planning and creating a collage • Organizing and managing images • Managing files and using file-naming conventions	• Understanding image composition • Understanding color correction and effects • Understanding file formats, resolution, and file size • Understanding image source • Understanding techniques used to create visual hierarchy	• Communicating information clearly; using correct terminology • Understanding copyright issues and fair use guidelines • Analyzing and critiquing photographs	*General* • Using a digital camera • Scanning images *Photoshop* • Understanding the Photoshop interface • Importing and working with various file formats • Working with layers • Retouching photos by using selection tools • Adjusting brightness and contrast • Adjusting levels and colors • Cropping, resizing, and straightening images • Combining multiple images • Transforming images *Acrobat Pro* • Understanding the Acrobat interface • Creating PDFs

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	Project management	Design	Research and communication	Technical
Project 2: Logos *Focus:* • Understanding and selecting file formats • Exploring color theory and design principles • Understanding the importance of redesign in the design process *Time:* 4–7 hours (1–2 weeks)	• Planning and creating a logo • Managing and organizing graphics elements and illustrations	• Understanding and employing design principles • Understanding and employing color theory • Identifying the difference in color modes • Understanding color management • Sketching • Creating and editing graphical elements and illustrations • Designing for a specific audience and purpose	• Investigating logos • Critiquing designs • Communicating purpose and goal • Communicating and presenting design decisions • Giving feedback on a project	*Photoshop* • Using guides and rulers • Understanding vector and bitmap graphics • Using swatches • Painting • Drawing lines • Drawing and modifying shapes • Creating vector masks • Adding text to images • Outputting for web • Outputting for print • Outputting for video *Illustrator* • Understanding the Illustrator interface • Creating vector artwork • Using Image Trace to convert photos to vector artwork • Drawing lines • Painting • Drawing and modifying shapes • Using gradients

	Project management	Design	Research and communication	Technical
Project 3: Business cards *Focus:* • Review and redesign • Designing for purpose and tone • Professional print production preparation *Time:* 5–8 hours (2–3 weeks)	• Planning and managing projects with multiple steps • Incorporating different types of assets • Conducting a review workshop • Identifying audience(s) • Selecting and using appropriate applications • Practicing safe, responsible use of copyright information when using outside graphic elements	• Understanding the impact of typography • Understanding the relationship between color, typography, layout, and tone • Designing for readability • Redesigning based on feedback • Understanding different print formats • Understanding sustainable design techniques • Applying principles of print design • Designing for audience(s) • Creating an original work	• Evaluating and analyzing business cards • Providing insightful critiques and feedback • Demonstrating personal responsibility by incorporating feedback • Presenting a design layout to a group • Planning strategies to guide inquiry • Communicating business card redesign effectively to peers and instructors	*Photoshop* • Exporting to InDesign • Resizing and cropping images • Applying filters, such as the Lighting Effect or Lens Flare *InDesign* • Understanding the InDesign interface • Setting document properties, including dimensions and margins • Adding and modifying text • Using alignment tools, ruler, guides, and grid *Acrobat Pro* • Creating PDF slideshows

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	Project management	Design	Research and communication	Technical
Project 4: Advertisements *Focus:* • Effective team collaboration • Designing for a client • Deeper look at audience and audience needs *Time:* 11–15 hours (3–4 weeks)	• Designing for a client • Planning and managing projects with multiple steps • Identifying audiences(s) • Selecting and using appropriate applications • Conducting review sessions • Writing a summary of client needs • Developing a project plan • Preparing files for print, web, and video	• Designing for audiences(s) • Creating an original work • Balancing graphics and text • Sketching advertisements • Creating designs that meet client requirements • Understanding different file formats • Creating comps • Designing for emphasis • Designing for usability • Designing on a grid	• Analyzing and evaluating advertisements • Planning strategies to guide inquiry • Questioning to focus and clarify • Presenting designs to a client • Demonstrating personal responsibility by incorporating feedback • Researching a topic for advertisement • Interviewing clients • Conducting a focus group	*Photoshop* • Editing photographs • Creating design comps • Creating reusable assets • Using opacity and fill tools • Saving as PDF *InDesign* • Exporting to different formats • Formatting text (kerning, tracking, scaling, and so on) • Combining graphic and text frames to make page layouts • Using InDesign layers • Placing objects (images, text, PSD files) on the page • Placing text over images • Using graphic frames as masks *Acrobat Pro* • Creating a PDF document
Project 5: Portfolios *Focus:* • PDF Portfolio design • Presentation of skills • Career research and development *Time:* 4–6 hours (1–2 weeks)	• Planning and creating a PDF Portfolio • Organizing and managing content • Conducting a review and redesign • Creating flowcharts	• Investigating and incorporating layout and color consistently • Designing consistent pages • Designing for a specific audience and purpose	• Investigating and researching career areas within print production • Communicating information to particular audiences • Defining the goals and uses of a portfolio • Soliciting and providing feedback	*Photoshop* • Creating a Web Photo Gallery *InDesign* • Creating a portfolio *Acrobat Pro* • Packaging multiple documents

	Project management	Design	Research and communication	Technical
Project 6: Brochures *Focus:* • Tri-fold layout design • Interactive brochures design • Designing for a client • Client and peer critique and presentation *Time:* 12–15 hours (3–4 weeks)	• Designing for a client • Conducting review sessions • Tracking milestones • Managing files and using file-naming conventions • Repurposing content	• Designing tri-fold layouts • Designing interactive brochures • Redesigning based on feedback • Reusing content • Creating designs that meet client requirements • Creating comps • Understanding sustainable design principles	• Analyzing and evaluating brochures • Questioning to focus and clarify • Presenting designs to a client • Gathering and synthesizing information from a client • Creating compelling brochure content • Giving and receiving peer review comments • Reflecting on how to improve product • Conducting focus groups	*Photoshop* • Using color management tools • Using filters • Using blending tools • Transforming images • Retouching images *InDesign* • Understanding InDesign frames • Using placeholder text • Designing in columns • Using character and paragraph styles • Wrapping text around objects (including using anchors) • Applying effects to text • Placing objects on page • Creating shapes and borders • Creating interactive documents • Exporting multiple versions of the brochure for different screens *Acrobat Pro* • Using commenting tools

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	Project management	Design	Research and communication	Technical
Project 7: Newsletters *Focus:* • Usability and consistency • Look and feel • Content • Evaluating and comparing newsletters *Time:* 11–16 hours (3–4 weeks)	• Organizing into print-production roles • Managing tasks based on roles • Identifying asset needs • Working with copy • Creating and managing a project plan • Engaging in the full print-production process	• Designing a nameplate • Using design to differentiate content • Designing multi-column and multi-page layouts • Incorporating color and layout consistently (using themes) • Integrating imagery and text to express story content • Providing clear navigation • Using design techniques to provoke interest	• Analyzing newsletters • Using design tools to communicate between team members • Accessing, evaluating, and synthesizing content from multiple sources • Reviewing and revising content to match goals • Collaborating with teammates • Presenting a newsletter • Understanding the journalistic code of ethics	*InDesign* • Creating templates • Reusing objects with the Library • Putting text on a path • Creating multi-page spreads • Transforming objects • Managing text flow between frames and columns • Importing text from Microsoft Word • Adding page numbers • Adding captions *Illustrator* • Understanding the Illustrator interface • Adding text and creating a text outline • Drawing in Illustrator • Drawing in perspective • Comparing vector and bitmap images • Understanding Illustrator filters • Creating polygons • Smoothing and simplifying paths • Selecting stroke and fill *Acrobat Pro* • Packaging a newsletter for distribution

	Project management	Design	Research and communication	Technical
Project 8: Mini-yearbooks *Focus:* • Consistency in layout design • Peer critique and presentation *Time:* 14–18 hours (3–4 weeks)	• Assigning and managing roles • Creating and managing a production plan • Creating a style guide	• Designing and creating double-page layout spreads • Bleeding photos across pages • Gathering or creating reusable graphics and illustrations • Designing and creating reusable page treatments • Designing and creating thematically linked pages • Designing and creating backdrops for photo pages • Designing for multiple devices and outputs	• Communicating to peers, instructors, and the community • Researching and investigating yearbooks • Researching and gathering information on school activities • Planning and selecting what information is important • Planning and conducting focus groups • Completing a review and redesign cycle • Presenting a yearbook and reflection	*InDesign* • Creating master pages • Converting text to outline • Using the Paste Into command • Designing facing-page spreads • Bleeding photos • Working with the gutter • Combining multiple files • Using books • Creating tables of content and indexes • Applying stroke, scale, and skew to text • Using sections • Using object styles • Using alternate layouts • Using liquid layouts *Illustrator* • Understanding Illustrator symbols • Using the Symbol sprayer • Creating patterns

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	Project management	Design	Research and communication	Technical

Project 9: Portfolios
Focus:
• Consistency in layout design
• Peer critique and presentation
• Career development and planning
Time: 5–7 hours (2–3 weeks)
	• Planning and creating a PDF Portfolio
	• Organizing and managing content
	• Conducting a review and redesign
	• Providing constructive criticism
	• Creating flowcharts
		• Investigating and incorporating layout and color consistently
		• Designing consistent pages
		• Designing for a specific audience and purpose
			• Communicating information to particular audiences
			• Planning and conducting research strategies
			• Understanding and practicing lifelong career skills:
			  • Job research skills
			  • Presenting skills
			• Soliciting and providing feedback
			• Taking notes on a critique
			• Demonstrating the realization of redesign goals
			• Creating a marketing plan
				Acrobat Pro
				• Packaging multiple documents

Classroom computer setup

We've included the technical information you will need to get your computer lab or classroom ready to implement the Visual Design curriculum.

Adobe Photoshop CS6

Install Photoshop CS6 on all workstations. System requirements and installation procedure are included with the software. For updates to system requirements, visit: www.adobe.com/go/photoshop_systemreqs

Windows

- Intel® Pentium® 4 or AMD Athlon® 64 Processor
- Microsoft® Windows® XP with Service Pack 3 or Windows 7 with Service Pack 1
- 1 GB of RAM
- 1 GB of available hard-disk space for installation; additional free space required during installation (cannot install on removable flash-based storage devices)
- 1,024 x 768 display (1,280 x 800 recommended) resolution display with 16-bit color and 256MB (512MB recommended) of VRAM
- OpenGL 2.0-capable system
- DVD-ROM drive

- This software will not operate without activation. Broadband Internet connection and registration are required for software activation, validation of subscriptions, and access to online services. Phone activation is not available.

*Some GPU-enabled features are not supported on Windows XP.

Macintosh

- Multicore Intel® processor with 64-bit support
- Mac OS X v10.6.8 or v10.7
- 1 GB of RAM
- 2 GB of available hard-disk space for installation; additional free space required during installation (cannot install on a volume that uses a case-sensitive file system or on removable flash-based storage devices)
- 1,024 x 768 display (1,280 x 800 recommended) resolution display with 16-bit color and 256MB (512MB recommended) of VRAM
- OpenGL 2.0-capable system
- DVD-ROM drive
- This software will not operate without activation. Broadband Internet connection and registration are required for software activation, validation of subscriptions, and access to online services. Phone activation is not available.

Adobe InDesign CS6

Install InDesign CS6 on all workstations. System requirements and installation procedure are included with the software. For updates to system requirements, visit: www.adobe.com/go/indesign_systemreqs

Windows

- Intel® Pentium® 4 or AMD Athlon® 64 Processor
- Microsoft® Windows® XP with Service Pack 3 or Windows 7
- 1 GB of RAM (2 GB recommended)
- 1.6 GB of available hard-disk space for installation; additional free space required during installation (cannot install on removable flash-based storage devices)
- 1,024 x 768 display (1,280 x 800 recommended) with 16-bit video card
- DVD-ROM drive
- Adobe Flash® Player 10 software required to export SWF files
- Some features in Adobe Bridge rely on a Direct X 9–capable graphics card with at least 64MB of VRAM
- This software will not operate without activation. Broadband Internet connection and registration are required for software activation, validation of subscriptions, and access to online services. Phone activation is not available.

Macintosh

- Multicore Intel® processor
- Mac OS X v10.6.8 or v10.7
- 1 GB of RAM (2 GB recommended)

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- 2.6 GB of available hard-disk space; additional free space required during installation (cannot install on a volume that uses a case-sensitive file system or on removable flash-based storage devices)
- 1,024 x 768 display (1,280 x 800 recommended) with 16-bit video card
- DVD-ROM drive
- Adobe Flash® Player 10 software required to export SWF files
- This software will not operate without activation. Broadband Internet connection and registration are required for software activation, validation of subscriptions, and access to online services. Phone activation is not available.

Adobe Illustrator CS6

Install Illustrator CS6 on all workstations. System requirements and installation procedure are included with the software. For updates to system requirements, visit: www.adobe.com/go/illustrator_systemreqs

Windows

- Intel® Pentium® 4 or AMD Athlon® 64 processor
- Microsoft® Windows® XP with Service Pack 3 or Windows 7 with Service Pack 1
- 1 GB of RAM (3 GB recommended) for 32 bit; 2 GB of RAM (8 GB recommended) for 64 bit.
- 2 GB of available hard-disk space for installation; additional free space required during installation (cannot install on removable flash-based storage devices)
- 1,024 x 768 display (1,280 x 800 recommended) with 16-bit video card
- DVD-ROM drive*
- Some features in Adobe® Bridge rely on a DirectX 9–capable graphics card with at least 64MB of VRAM
- This software will not operate without activation. Broadband Internet connection and registration are required for software activation, validation of subscriptions, and access to online services. Phone activation is not available.

Macintosh

- Multicore Intel® processor with 64-bit support
- Mac OS X v10.6.8 or v10.7
- 2 GB of RAM (8 GB recommended)
- 2 GB of available hard-disk space for installation; additional free space required during installation (cannot install on a volume that uses a case-sensitive file system or on removable flash-based storage devices)
- 1,024 x 768 display (1,280 x 800 recommended) with 16-bit video card
- DVD-ROM drive*
- This software will not operate without activation. Broadband Internet connection and registration are required for software activation, validation of subscriptions, and access to online services. Phone activation is not available.

*Versions of Illustrator sold in Continental Europe require a DVD-ROM drive compatible with dual-layer DVDs

Adobe Acrobat X Pro

Install Acrobat X Pro on all workstations. System requirements and installation procedure are included with the software. For updates to system requirements, visit:
www.adobe.com/products/acrobatpro/systemreqs

Windows

- 1.3GHz or faster processor
- Microsoft® Windows® XP Home, Professional, or Tablet PC Edition with Service Pack 3 (32 bit) or Service Pack 2 (64 bit); Windows Server® 2003 (with Service Pack 2 (64 bit); Windows Server 2008 (32 bit and 64 bit); Windows Server 2008 R2 (32 bit and 64 bit); Windows Vista® Home Basic, Home Premium, Business, Ultimate, or Enterprise with Service Pack 2 (32 bit and 64 bit); Windows 7 or Windows 7 with Service Pack 1 Starter, Home Premium, Professional, Ultimate, or Enterprise (32 bit and 64 bit)
- 512 MB of RAM (1 GB recommended)
- 1.9 GB of available hard-disk space
- 1,024 x 576 screen resolution
- Microsoft Internet Explorer 7, 8, or 9; Firefox 3.6, 4, or 5; or Chrome
- Video hardware acceleration (optional)

Macintosh

- Intel® processor
- Mac OS X v10.5.8, v10.6.7, or v10.7
- 1 GB of RAM
- 1.2 GB of available hard-disk space
- 1,024 x 768 screen resolution
- Apple Safari 4 for Mac OS X v10.5.8 and v10.6.7; Safari 5 for Mac OS X v10.6.4 and v10.6.8

Classroom enrichment

Many techniques can enhance students' experience as they engage in these projects and also help you manage the content and technology. When you set up your computer lab or classroom for working on technology-based projects, the suggestions below can help create a successful learning experience for your Visual Design students.

Acceptable use policies

To promote good digital citizenship and to help students feel ownership of the technology and tools they use, discuss acceptable use policies with students. Your institution might already have a policy, but discuss with students appropriate use of the Internet and technology tools and have them apply their understanding to various misuse scenarios to determine consequences. Work with students to create a class policy to protect the rights and privileges of fellow students and class hardware/software. Propose rules for good team dynamics and peer critiques.

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File management

To save time in assessing student work, make sure all classroom materials and student work are properly saved and posted (preferably on a school server). The following guidelines will help:

- *Student folders:* All students should have a folder for all of their work. Folder names might include student's last name, first initial, and class period (such as "per7_m_smith").
- *Backups:* Students might want to keep flash drives with their folders or local or server copies of their folders.
- *Working from home:* Students can work from home, but make sure they find a way to transfer their work to the school computers (such as FTP, e-mail, or flash drive).
- *Turning in work:* If students work from home by e-mail, make sure you have effective file virus protection and that all work is clearly labeled for ease of identification and organization (for example, per7_logo_m_smith).
- *Legal issues:* If you plan to publish student work on the web, check into your school's rules about putting pictures or names of students on the web. It might be appropriate for students not to include their full names or e-mail addresses.

Classroom environment

Using technology as part of any lesson in the classroom can lead to management issues unrelated to the content being covered. This course is designed to introduce students to a professional work environment. Here are some tips and techniques that can help you manage the technology you are integrating into projects, allowing you time to focus on content:

- *Good design posters:* Because the course focuses on good design techniques, you might want to print and laminate examples of well-designed posters, advertisements, brochures, newsletters, and so on, and post them throughout the classroom. A variation would be to post "good" and "bad" design examples on opposite sides of the classroom. You might also have students compile a list of good design criteria throughout the course and post it in the classroom.
- *Help center:* Create a library of print materials for software and design techniques in a corner of the classroom where students can browse for answers to challenging questions.
- *Knowledge transfer:* Create a "tip sheet" for each project, where students offer best practices and technical suggestions for future design teams to be successful.
- *Running questions list:* List technical questions for student research on a large piece of paper or chalkboard in the classroom. As the questions are answered, write the answers below them.
- *Student leaders:* Designate lead students with strong technical skills to be the first persons contacted for software or hardware questions and issues so students do not break up the lesson time with technology questions. You might rotate this role among different sets of students, empowering them to take more initiative with their learning.
- *Questioning process:* You might face some running around when students have open time to work on projects. To alleviate this, urge students to try to find the answer themselves first and rely on the teacher second and to continue working without waiting for an answer. For example, you might request students to look in the help system first and ask their neighboring peers before they ask the teacher. You might also provide students with props to place on their monitors as a silent signal that they want help.
- *Technology extension:* As students work on their projects, some will come across techniques that have not been demonstrated to the class. When student groups learn a new technique on their own,

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ask them to present it to the class. The group should show the resulting product, share step-by-step how they completed it, and have the class complete the same steps while group members walk around to help others learn the technique.

- *Using constructive comments:* Working in teams requires students to become better communicators. During the print production process, students will sometimes need to critique each others' work. Giving feedback requires students to be sensitive to the feelings of others. To help students become better communicators, you might spend some time brainstorming with the class to identify constructive comments and words. This class-generated list can be posted as a reminder for everyone when giving a critique of a fellow student's work.

Ethical content use and production

In many projects, students will gather, manipulate, and create images. Emphasize the social responsibility students have to each other and their audience to help them build good practices as they take these skills to future programs and jobs. Some areas to focus on include:

- *Content validity:* As students research content online, have them continually consider and evaluate content bias, currency, and source, corroborating the information with multiple sources.
- *Copyright:* Emphasize the need to gain permission to use graphics and images produced by others and to copyright their own original work.
- *Journalistic code of ethics:* As students begin to interpret and inform by using various graphics and print media, they have a responsibility to their audiences to convey the truth. Remind students of the persuasive power they have when using these digital tools and communication methods. Urge them to always consider the code of ethics when building their communications: truth, accountability, fairness, and protecting sources.

Limited resources (digital cameras, video cameras, scanners, etc.):

- Consider having students work in groups instead of individually.
- Consider connecting all computers into a local network to encourage collaborative learning.
- You might divide computers into learning stations, perhaps grouped by subject areas or activities (digital media center, web research center, etc.).
- You might consider splitting up the activities associated with the project. Have some students use the equipment to gather their data while others spend time researching the topic at hand, planning their time with the equipment for what they might capture, or building an aspect of the project. Rotate groups to ensure all students are occupied at all times.

Professional skills

This course is designed to introduce students to professional experiences. You can reinforce the ideas around professional behavior and work in a few ways.

- *Soft skills:* When communicating with clients, students need soft skills to help them interview and review their work with clients. You might have students practice interviewing each other or conduct practice interviews with you as they develop skills for speaking with clients.
- *Project tracking:* Reinforce the need to plan appropriate schedules and manage time. You might consider having students give brief daily status reports of how they are doing on time per task. Guide students in reprioritizing when needed.

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- *Team work:* Helping students develop individually and as productive team members is a challenging task. You might reinforce the importance of both types of development by evaluating their individual performance as well as the ways they contribute to team goals, work to solve any team conflicts, and collaborate with other teams to adopt successful practices.
- *Professional environment:* To prepare students to work with clients and help them develop professional attitudes, you might want to give them weekly points for displaying professional attitudes and skills, such as the following:
  - Punctuality
  - Dressing well when interviewing peers and clients
  - Promptly replying to peers and clients
  - Listening to suggestions and working well in groups
- *Professional designers:* Students can benefit greatly from speaking with a professional designer. You could arrange a field trip to a design studio or ask a designer to visit your classroom. Key topics to address with the designer:
  - Teamwork and collaboration
  - Effective design
  - Samples of the designer's work and the challenges they presented
  - Use of professional software, such as Adobe products, in the design field
  - Critique of student work

Teaching across disciplines

You could team-teach some units with an art, business, English, or science teacher. You can have students go into the other teacher's classroom for a change of atmosphere, bring the other teacher into your classroom, or tailor project content to the content being covered by subject-area teachers. This is especially helpful with the following topics:

- *Photography:* An art teacher can address taking and positioning pictures.
- *Graphic design:* An art teacher can address line, rule of thirds, and typography.
- *Layout design:* An art teacher can address composition, color, and shape.
- *Print design and production:* A business or career exploration teacher can discuss the qualifications, salary, and skills required for working in the print and graphic design field. A marketing teacher can enhance the discussion around audience and purpose.
- *Writing copy:* A literature or English teacher can work with students to write for different audiences, such as newspapers, brochures, or yearbooks.
- *Image analysis and measurement:* A math or science teacher can help students understand the concepts around distance, perimeter, area, and other measurements by reinforcing student use of the analysis and measurement tools in Photoshop to gather data from images.
- *Core subject-area projects:* A subject area teacher in English, science, math, or history can provide specific research and content opportunities for projects. Students can learn the specific content area in addition to the design skills.

Skills overview rubric

This general skills rubric is a tool for assessing various aspects of major design and print projects. Although each project has its own rubric, you might use the following to help you assess particular aspects of projects. Select the items that apply to a particular project.

Design skills

Category	0 - Does not meet expectations	3 - Meets expectations	5 - Exceeds expectations
Composition	There is no use of white space, symmetry, and focal point. Pages (and elements within pages) are cut off inappropriately at their borders or are surrounded by excessive white space.	There is some use of white space, symmetry, and focal point. Pages (and elements within pages) usually fit appropriately within their borders.	White space, symmetry, and focal point are used effectively. Pages (and elements within pages) fit within their borders in a pleasing manner.
Color	Colors clash and do little for the theme of the design. Background color interferes with text and images. Colors make text less readable.	Colors are somewhat complementary. Background color coordinates with images and text design. Colors do not interfere with readability.	Colors work together, reinforcing the theme of the design. Background color enhances images and text design. Colors strongly support readability.
Typography	Text is not easily readable. White space is not used effectively. Fonts and text effects interfere with the design and readability.	Text is readable. Type sizes communicate information and are compatible with overall site design. White space around text supports readability and design. Fonts and text effects are compatible with the design and readability.	Text is readable, and selected fonts support design goals. Type sizes reflect desired emphasis and hierarchy. White space around text strongly supports readability and design. Fonts and text effects add to mood and tone. Fonts enhance readability through color, size, and contrast.
Layout	Page layout and styles are not consistent. Layout does not give the audience access to all content or graphics and is not intuitive to read or follow.	Page layout and styles are consistent. Layout gives audience access to most content and is intuitive to read and follow. Some content or graphics are hard to read or notice.	Consistent and coordinated page layout and styles appear on all pages. Layout gives audience access to all content and graphics and is intuitive to read and follow.

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Category	0 - Does not meet expectations	3 - Meets expectations	5 - Exceeds expectations
Use of technical elements (Photoshop, InDesign, Illustrator, or Acrobat)	Use of technical elements and effects does not enhance the audience's experience (though readability, navigation, and so on) or consistently support the overall goals and purpose of the project.	Use of technical elements and effects consistently supports the overall goals and purpose of the project but does not enhance the audience's experience (though readability, navigation, and so on). Use of such elements or effects is not excessive or distracting.	Use of technical elements and effects adds to the overall design and layout by enhancing the audience's experience (though readability, navigation, and so on) and supporting the goals and purpose of the project. Use of such elements or effects is not excessive or distracting.
Project plan	Project plan provides incomplete or contradictory production information.	Project plan is complete but somewhat difficult to interpret.	Project plan is thorough, complete, and very clear.

Technical skills

Category	0 - Does not expectations	3 - Meets expectations	5 - Exceeds expectations
Image manipulation	Images are poorly manipulated and do not always represent appropriate techniques and tools.	Images are sufficiently manipulated, using a range of techniques and tools such as color correction, filters, retouching, transforming, and blending.	Images are cleanly manipulated, using a full range of techniques and tools such as color correction, filters, retouching, transforming, and blending.
Drawing	Illustrations are poorly drawn and do not always represent appropriate drawing and effects tools.	Illustrations are sufficiently drawn, using a range of drawing and effects tools.	Illustrations are cleanly and clearly drawn, effectively using the full range of drawing and effects tools.
Color	Color is not consistently applied and is usually not configured for print, web, or video.	Color is consistently applied most of the time and is usually configured for print, web, or video.	Color is consistently applied and is configured for print, web, or video.
Optimization	The quality of images is not sufficient or the file size is too large.	Images have a satisfactory balance of quality and file size.	Images have an excellent balance of quality and file size.
Tool use	Student frequently has to ask what tool to use to create desired elements and effects. Does not independently use available information about the tools. Does not use tools efficiently.	Student usually knows what tool to use to create desired elements and effects but may need to be reminded to use available information about the tools. Uses most tools efficiently.	Student knows what tool to use to create desired elements and effects or uses resources effectively and independently to find out. Uses tools efficiently.

Research and communication skills

Category	0 - Does not meet expectations	3 - Meets expectations	5 - Exceeds expectations
Design process	The design process does not include all appropriate elements, such as sketches, design comps, project plans, and review comments. The final product does not completely reflect the project plan and feedback.	The design process includes elements such as sketches, design comps, project plans, and review comments. The final product reflects the project plan, with some revisions based on feedback.	The design process includes all appropriate elements, such as sketches, design comps, project plans, and review comments. The final product accurately reflects the project plan, including thoughtful design decisions made during production and design comp revisions based on feedback.
Feedback	Reviews of other students' designs do not adequately address content and design. Does not use informative vocabulary in feedback and is often not constructive.	Reviews of other students' designs provide some analysis of content and design. Uses some informative vocabulary in feedback and connects comments to design and content. Feedback is not always constructive.	Reviews of other students' designs provide thorough and insightful analysis of content and design. Uses clear and informative vocabulary in feedback and connects comments to design and content. Feedback is always constructive.
Presentation	Design presentations provide little information on the goals, design principles, and requirements of a project.	Design presentations cover the goals, design principles, and requirements of a project.	Design presentations clearly and completely state the goals, design principles, and requirements of a project.
Team collaboration	Student does not collaborate with other students to provide feedback or assistance. Fulfills assigned team roles but does not contribute equally to project work. Does not consult with other team members before making major project decisions. Does not help others build skills.	Student collaborates with other students as required to provide feedback or assistance. Fulfills assigned team roles and contributes equally to project work. Sometimes consults with other team members on major project decisions but makes minimal effort to help others build skills.	Student collaborates freely with other students to provide feedback or assistance. Fulfills assigned team roles and contributes equally to project work. Consults with other team members on major project decisions and voluntarily helps others build skills to complete the project.

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Project management skills

Category	0 - Does not meet expectations	3 - Meets expectations	5 - Exceeds expectations
Progressive design	Student does not use a project plan or feedback from peers, instructor, or client.	Student uses a project plan to guide the design process. Inconsistently uses peer, instructor, or client feedback to guide the redesign process.	Student consistently uses a project plan to guide the design and development process. Thoughtfully uses peer, instructor, or client feedback to guide the redesign process.
Peer review	Student does not respond to feedback, or student redesigns without deciding whether the feedback improves the content and design of the project.	Student responds to feedback, deciding which feedback improves the content and design of the project. Incorporates some of this feedback into redesign.	Student responds thoughtfully and completely to feedback, deciding which feedback most effectively improves the content and design of the project. Incorporates this feedback into redesign of a project.
Time management	Student does not effectively allot time for the phases of the design and development process. Completes few phases on schedule.	Student allots time for each phase of the design and development process. Completes most phases on schedule.	Student thoughtfully and effectively allots time for each phase of the design and development process. Completes all phases on schedule.

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ISTE NETS*S Standards for Students

The International Society for Technology in Education (ISTE) is the trusted source for professional development, knowledge generation, advocacy, and leadership for innovation. These standards, identified throughout the Visual Design curriculum, are integrated into the various activities students engage in during each project.

1. Creativity and Innovation
   Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:
   a. apply existing knowledge to generate new ideas and products and processes.
   b. create original works as a means of personal and group expression.
   c. use models and simulations to explore complex systems and issues.
   d. identify trends and forecast possibilities.

2. Communication and Collaboration
   Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Students:
   a. interact, collaborate, and publish with peers, experts or others employing a variety of digital environments and media.
   b. communicate information and ideas effectively to multiple audiences using a variety of media and formats.
   c. develop cultural understanding and global awareness by engaging with learners of other cultures.
   d. contribute to project teams to produce original works and solve problems.

3. Research and Information Fluency
   Students apply digital tools to gather, evaluate, and use information. Students:
   a. plan strategies to guide inquiry.
   b. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
   c. evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
   d. process data and report results.

4. Critical Thinking, Problem-Solving & Decision-Making
   Students use critical thinking skills to plan and conduct research, manage projects, solve problems and make informed decisions using appropriate digital tools and resources. Students:
   a. identify and define authentic problems and significant questions for investigation.
   b. plan and manage activities to develop a solution or complete a project.

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c. collect and analyze data to identify solutions and/or make informed decisions.

d. use multiple processes and diverse perspectives to explore alternative solutions.

5. Digital Citizenship
   Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:

   a. advocate and practice safe, legal, and responsible use of information and technology.

   b. exhibit positive attitudes toward technology uses that support collaboration, learning, and productivity.

   c. demonstrate personal responsibility for lifelong learning.

   d. exhibit leadership for digital citizenship.

6. Technology Operations and Concepts
   Students demonstrate a sound understanding of technology concepts, systems and operations. Students:

   a. understand and use technology systems.

   b. select and use applications effectively and productively.

   c. troubleshoot systems and applications.

   d. transfer current knowledge to learning of new technologies.

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Adobe Certified Associate, Visual Communication objectives

In 2007, Adobe conducted research to identify the foundation skills students need to create effective communication in print production and graphic design. Adobe met with educators and design professionals and surveyed businesses and educational institutions around the world. The research resulted in objectives that cover design, communication, project management, and image and print technology. The following set of essential learning objectives are part of the Adobe Certified Associate exams in Visual Communication and are integrated throughout Visual Design.

Setting project requirements

1.1 Identify the purpose, audience, and audience needs for preparing image(s).

1.2 Demonstrate knowledge of standard copyright rules for images and image use.

1.3 Demonstrate knowledge of project management tasks and responsibilities.

1.4 Communicate with others (such as peers and clients) about design plans.

Identifying design elements when preparing images

2.1 Demonstrate knowledge of image resolution, image size, and image file format for web, video, and print.

2.2 Demonstrate knowledge of design principles, elements, and image composition.

2.3 Demonstrate knowledge of typography.

2.4 Demonstrate knowledge of color correction using Photoshop CS6.

2.5 Demonstrate knowledge of image generating devices, their resulting image types, and how to access resulting images in Photoshop.

2.6 Understand key terminology of digital images.

Understanding Adobe Photoshop CS6

3.1 Identify elements of the Photoshop CS6 user interface and demonstrate knowledge of their functions.

3.2 Demonstrate knowledge of layers and masks.

3.3 Demonstrate knowledge of importing, exporting, organizing, and saving.

3.4 Demonstrate knowledge of producing and reusing images.

3.5 Demonstrate an understanding of and select the appropriate features and options required to implement a color management workflow.

Manipulating images using Adobe Photoshop CS6

4.1 Demonstrate knowledge of working with selections.

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4.2 Use Photoshop guides and rulers.

4.3 Transform images

4.4 Adjust or correct the tonal range, color, or distortions of an image.

4.5 Demonstrate knowledge of retouching and blending images.

4.6 Demonstrate knowledge of drawing and painting.

4.7 Demonstrate knowledge of type.

4.8 Demonstrate knowledge of filters.

Publishing digital images using Adobe Photoshop CS6

5.1 Demonstrate knowledge of preparing images for web, print, and video