Tools for Digital Graphics

**USC
Viterbi**
School of Engineering

ITP-190 (2 units)

Description

Digital tools for image creation and editing, techniques, composition, layout, and output. This course is geared towards students interested in digital photography, image editing, web page development, professional page layout, and printing with color accuracy.

Objective

This course introduces industry graphic standard tools and methods for images and photos, work with customary tools and advanced features, navigate in the workspace by using standard and custom set-ups, artboards, work with layers and masks, draw and create vector graphics, work with Type, creation of documents and working with pages, understand color, and prepare images for professional print and web page output.

Concepts

- Understand and develop knowledge of the Palette Windows and Tools
- Create Multiple Layers to maximize flexibility of editing options
- Understand Channels for both Selection Tools and Color
- Create images using Raster Graphics
- Basic Fundamentals of Digital Photography
- Generate Masks to assist in editing capabilities
- Understand file types for graphics
- Create images using Vector Graphics
- Color and painting using brushes and fills
- Applying affects
- Use Filters to enhance digital images and assist in advance composites
- Work with Typography and develop methods for creation and customization
- Finalize output in either web or pre-press output

Prerequisites

None.

Instructor	Chander Burgos
Contacting the Instructor	cburgos@usc.edu
Office Hours	Listed on Blackboard under Contacts
Lab Assistants	Listed on Blackboard under Contacts
Contacting the Lab Assistants	Listed on Blackboard under Contacts
Lecture / Lab	3 hours / week

Required Textbook

Adobe Photoshop CC Classroom in a Book (2015 release). Adobe Press, Adobe Systems Incorporated. ISBN-13: 978-0-13-430813-5

Supplemental Textbooks

Adobe Illustrator CC Classroom in a Book (2015 release). Adobe Press, Adobe Systems Incorporated. ISBN-13: 978-0-13-430811-1

Adobe InDesign CC Classroom in a Book (2015 release). Adobe Press, Adobe Systems Incorporated. ISBN-13: 978-0-13-431000-8

Website

All course material will be on Blackboard (http://blackboard.usc.edu).

Grading

Assignments	30%
Midterm Exam	20%
Projects	30%
Final Exam	20%

Grading Scale

A	100-93	B-	82-80	D+	69-67
A-	92-90	C+	79-77	D	66-65
B+	89-87	C	76-73	F	64 or below

B   86-83   C-   72-70

Policies

Students are expected to:
- Attend and participate in lecture discussions and critiques
- Attend and complete weekly Assignments
- Attend and complete exams

Students are responsible for completing assignments and labs by stated deadlines. Most assignments will be uploaded to the course's Blackboard site.

Assignments

There will be approximately 12 assignments. Assignments will be assigned in class and must be completed before the start of the following lecture/lab session and submitted via Blackboard.

Projects

There will be 3 projects assigned throughout the semester which will require specific output to both digital and hard copy print press. Each project will be graded based on the tools and methods outlined for each project and will be verified with each associated image file graded. Due dates are Week 4, Week 8, and Week 12.

Late Work

Assignments are accepted late with a penalty of 10% per day. This penalty applies immediately after the deadline. It is the responsibility of the student to contact the grader when posting late work.

ITP Labs

Before logging onto an ITP computer, students must ensure that they have emailed or saved work created during the class or lab session. Any work not saved will be erased after restarting the computer. ITP is not responsible for any work lost.

ITP offers Open Lab use for all students enrolled in ITP classes. These open labs are held beginning the second week of classes through the last week of classes. Please contact your instructor for specific times and days for the current semester.

Incomplete or Missing Grades

Excerpts for this section have been taken from the University Grading Handbook, located at http://www.usc.edu/dept/ARR/grades/gradinghandbook/index.html. Please see the link for more details on this and any other grading concerns.

A grade of Missing Grade (MG) "should only be assigned in unique or unusual situations… for those cases in which a student does not complete work for the course before the semester

ends. All missing grades must be resolved by the instructor through the Correction of Grade Process. One calendar year is allowed to resolve a MG. If an MG is not resolved [within] one year the grade is changed to [Unofficial Withdrawal] UW and will be calculated into the grade point average a zero grade points.

A grade of Incomplete (IN) "is assigned when work is no completed because of documented illness or other 'emergency' **occurring after the twelfth week** of the semester (or 12th week equivalency for any course scheduled for less than 15 weeks)."

Statement on Academic Conduct and Support Systems

Academic Conduct

Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Section 11, *Behavior Violating University Standards*https://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions/. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, http://policy.usc.edu/scientific-misconduct/.

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the *Office of Equity and Diversity* http://equity.usc.edu/ or to the *Department of Public Safety* http://capsnet.usc.edu/department/department-public-safety/online-forms/contact-us. This is important for the safety whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report, or can initiate the report on behalf of another person. *The Center for Women and Men* http://www.usc.edu/student-affairs/cwm/ provides 24/7 confidential support, and the sexual assault resource center webpage sarc@usc.edu describes reporting options and other resources.

Support Systems

A number of USC's schools provide support for students who need help with scholarly writing. Check with your advisor or program staff to find out more. Students whose primary language is not English should check with the *American Language Institute* http://dornsife.usc.edu/ali, which sponsors courses and workshops specifically for international graduate students. *The Office of Disability Services and Programs* http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.htmlprovides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, *USC Emergency Information* http://emergency.usc.edu/will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.

Emergency Preparedness/Course Continuity in a Crisis

In case of emergency, when travel to campus is difficult, if not impossible, USC executive leadership will announce a digital way for instructors to teach students in their residence halls or homes using a combination of the Blackboard LMS (Learning Management System), teleconferencing, and other technologies. Instructors should be prepared to assign students a "Plan B" project that can be completed 'at a distance.' Additional information about Campus Safety and Emergency Preparedness can be found at: http://preparedness.usc.edu.

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Course Outline
Subject to change throughout the semester

Week 1 – Introduction
- Class Requirements and Personal Information
- Operating Systems & Terms
- Tool Palette

No Reading

Weekly Assignment #1- Create new 8x10 image with 300dpi. Create and paint an image. Import an image.

Week 2 – Tool Palette and Interface
- The Tool Palette
- Painting and Editing
- Custom Brushes

Reading: Lesson 1: Getting to Know the Work Area

Weekly Assignment #2- Brush assignment utilizing a standard, loaded, and custom brush.

Week 3 – Selection Techniques

- Making selections
- Tool Palette Selection Tools
- Modifying Selections

Reading: Lesson 3: Working with Selections

Weekly Assignment #3- Create complex selections from the various selection tools.

Week 4 – Basic Photo Corrections
- Rotating, Scaling, and Distorting with Transformations
- Feathering and Info Palette
- Understand Resolution
- Touch up Tools

Reading: Lesson 2: Basic Photo Corrections

Weekly Assignment #4- Use techniques in lecture to touch up an existing photo utilizing the adjustment tools and re-touch tools.

Project #1- Metaphoric Landscape- Create a high resolution image (300dpi) 8x10 with the brush, selection, and color tools. You will create the image by sketching/drawing using only the brush tool. This project will require a printed hard copy mounted on foam board for presentation.

Week 5 – Layers
- Using Multiple Layer
- Composition effects
- Re-arranging and stacking order
- Layer effects

Reading: Lesson 4: Layer Basics

Weekly Assignment #5- Create a tourist postcard for a city of your choice with various images, layer effects, and type.

Week 6 – Digital Photography Techniques/ Digital Raw Photo Processing
- Basic Digital Photography
- Do's and Don'ts before you snap that Photo
- Using Raw Images in Photoshop

Reading: Lesson 5: Correcting and Enhancing Digital

Weekly Assignment #6- Use the digital photography tools to create a "bulb" or night time shot utilizing a slow shutter speed on your camera.

Week 7 – **Midterm**
- The midterm will cover weeks 1-6.

Reading: None

No Assignment

Week 8 – Using Layers Using Masks and Channels
- Using Quick Mask
- Saving Selections
- Understand Color Channel vs. Channel Mask
- Layer Mask
- Clipping Mask

Reading: Lesson 6: Masks and Channels

Weekly Assignment #7- Create a digital book cover utilizing advanced layer tools as layer masks and layer adjustments.

Project #2-The theme is "Symbolism" to create an image utilizing the tools learned from this point of the semester. Requires using at least one original photo. 300 dpi 8x10 printed output is required.

Week 9 – Design Using Typography / Intro to Adobe Illustrator
- Create image composition
- Using Type with layers
- Advanced Type palette features
- Creating Point Type (AI)
- Creating Area Type (AI)
- Working with Types on Paths (AI)

Reading: Lesson 7: Typographic Design (PS)
                    Lesson 7: Working With Type (AI)

Weekly Assignment #8- Create your own bottle label utilizing the type and vector tools.

Week 10 – Integrating Vector Graphics
- Shape Tools
- Pen Tools & Selection Tools
- Paths and Clipping Paths
- Importing and exporting AI Vector Graphics

Reading: Lesson 8: Vector drawing techniques
                    Lesson 5: Drawing with the Pen and Pencil Tools (AI)

Weekly Assignment #9- Create a posterized 8x10 image by using both Photoshop and Illustrator raster and vector tools.

Week 11 – Color and Painting (Adobe Illustrator)
- Working with color
- Adjusting colors
- Painting with Patterns
- Working with Live Paint

Reading: Lesson 6: Color and Painting (AI)

Weekly Assignment #10- Use a photo and convert to paths. Use painting brushes and tools to re-color image.

Week 12 – Complex Effects Using Layers / Introduction to Adobe InDesign
- Adjustment Layers
- Vanishing Point 3-D effects
- Merge and stamp layers
- Documents and Pages (ID)
- Placing Text and Graphics (ID)

Reading   Lesson 9: Advanced Compositing
                    Lesson 3: Setting up a Document and working with Pages (ID)

Weekly Assignment #10 – Magazine cover Part 1- Create a magazine cover using Photoshop for the images for export.

Project #3- Create a t-shirt by using the tools learned to this point. The image will require a vector logo, painted in Adobe Illustrator. Additional art can be added with Photoshop. Colors will be limited to 4. This will require an actual T-Shirt to be presented.

Week 13 – Objects (InDesign)
- Working with Layers
- Placing and linking graphics
- Transforming and aligning objects

Reading: Lesson 4: Working with Objects

Assignment #11- Magazine Cover Part 2- Create a magazine cover by placing images and objects onto a new InDesign page.

Week 14 – Image graphics flow from Adobe Photoshop/Illustrator to InDesign
- Working with Adobe Bridge CC
- Placing a Photoshop Image (AI)
- Applying Clipping Masks (AI)
- Adding Graphics to InDesign
- Adjust Display Quality (ID)
- Working with Alpha Channels (ID)

Reading: Lesson 15: Combining Illustrator CC graphics with other Adobe applications (AI)
Lesson 10: Importing and Modifying Graphics (ID)

Assignment #12 Magazine Cover Part 3- Integrate the magazine cover to include additional graphics and type objects from Illustrator to complete the magazine cover.

Week 15 – Final Press
- Preparing output for the Web
- Preparing output for pre-press
- Color Consistency
- Packaging Files
- Creating Adobe PDF proof

Reading: Lesson 13: Preparing Files for the Web
Lesson 14: Producing and Printing Consistent Color
Lesson 10: Printing and Exporting (ID)

FINAL EXAM (Date as per examination schedule) – Final exam will be comprehensive over all topics covered during the semester.