

Digital Imaging Workflow: From Capture to Print

AR346-03, MCC Rm 208, Thurs 1pm – 4:50 pm

Digital Photography introduces the student to the creative possibilities and methods for making digital photographs using Adobe Photoshop and creating digital prints using small and large format color inkjet print technology. The class offers an in-depth exploration of Adobe Photoshop and methods of obtaining the fine digital print. The course also aims to help the student understand the many formal and compositional decisions relative to the treatment and interpretation of subject matter and how the aesthetics of digital technology and its medium contribute to the communicative qualities of visual imagery.

Learn the particular strengths and techniques of digital-image making. This class focuses on the comprehensive digital workflow from camera capture and scanning, through image editing and manipulation, and output options to print or web. Both visual expression and the digital craft are emphasized. Participants are expected to produce a portfolio during this semester-long class.

Numerous examples of contemporary digital photography are examined and discussed. Class time is divided between lecture, demonstration, critique and discussion.

The course will address theory, technique, and practice. Emphasis will be given to learning digital tools and understanding the evolving potential of visual expression using digital media.

Theory

- Opportunities and limitations of digital media
- Reviews of contemporary digital work in photography and mixed media
- Understanding pixels vs. film
- Understanding RGB and CMYK color spaces
- Vendor hype vs realities . . . and vs cost.
- Social transformations: digital tools a reflection of society or motivating force. . . or both?
- Snapshots, art, and advertising

- The new word: Prosumer. What does it mean to us in terms of availability of high-quality equipment and software for artistic and personal use. How can we influence vendors to meet our needs for affordability and quality in the fine-art market?
- The questions of ethics (and the ever-changing legal landscape) of digital media
- Digital tools and interdisciplinary potential
- Traditional graphic disciplines and digital tools.
- Learning to see with a digital camera. Instant feedback and on-location corrections

Technique

- Entire digital imaging workflow
 - Understanding digital cameras: comprehensive exploration of camera use and survey of market relative to one's needs
 - Resolution, file size, and file formats vs output needs
 - Capture methods: digital cameras, scanners, camera-less photography and downloading
 - Use of Adobe Photoshop for image correction/adjustment/enhancement, and manipulation.
 - Output methods: the art of digital printing, web publishing, and graphic reproduction
 - Thorough exploration of Epson desktop and wide-format printing.
- Understanding of traditional photographic tools relevant to digital media.

Practice

- Personal production of weekly assignments and semester portfolio.
- Portfolio on theme of one's own choosing (approved by instructor).
- Oral/written presentation research project on digital arts and artists
- Use of digital camera or scanner – and Epson printers -- for personal production.
- Portfolio can be print or web-based. If web-based, a selected number of digital prints will be required to demonstrate printing competency. If print-based, use of jpg's and pdf conversion will be required to present a digital CD portfolio of work for class screen display.
- Mid-semester review should see substantial portfolio production of images. Leave ample time for PS work, editing, and printing for end-of-semester review.

Class objectives

To learn digital-based photography, including camera capture, scanning, image correction and enhancement using Adobe Photoshop, image storage, and output options to print, web, and multi-media.

To examine new media in photography from a theoretical and historical point of view, and develop an evolving understanding of how digital tools interact with art, advertising, and visual communication.

Expand, reinforce, and solidify concepts through exploring the work of contemporary photographers, weekly assignments and in-class critiques.

Explore the specific aesthetics associated with digital photography including the manipulation of images for enhanced design, color and tone management, inkjet printing, and the use of images for multi-media/web communication.

The broad goal of this course is to create a foundation of theoretical and practical knowledge that will give students the means to employ digital tools in their photographic or mixed-media work – and the experiential awareness to stay abreast of the rapidly changing technologies and evolving aesthetic considerations.

Resources

Art Department, Design Lab – Room 210

(1) Epson 9800 wide format printer – ultrachrome inks, 44" wide

(1) Epson 3800 printer – K3 ultrachrome inks, 17" wide

(1) Epson V750 Scanner for negatives and prints. Ideal for prints, medium and large format negatives, not 35mm.

(1) Nikon 4000 transparency scanner, 35mm only, 4000 dpi

Hours to be posted for both labs. Design and photo students will have access to additional departmental equipment – digital cameras and scanners.

Supply List

Access to digital camera and memory cards. Recommend minimum 1 gig cards and adjustable camera, preferably able to capture Camera RAW images.

Ink-jet paper and inks are supplied with printers for a fee that covers consumables. Roughly \$4 per foot.

Additional ink-jet papers beyond what is supplied in the labs is the responsibility of the class participant.

Approximately 15-20 blank CD's for weekly assignments and for image storage.

External hard drive for hi-res large image storage if your work is large in size or extremely high resolution. Recommend drives made by OWC or La Cie.

Adobe Photoshop (version CS or above). Must support 16 bit workflow. Or Adobe Photoshop Elements 3.0. Must support 16 bit workflow. For PC or Mac.

Weekly syllabus

Note: WEEKLY CONTENT IS APPROXIMATE, and will be affected by the overall motivation of participants, equipment and lab availability, the timeliness of work produced, and the comprehension level of participants.

Week number one: Class expectations. Equipment resources. Supply needs. Camera use, and basic image correction tools in Adobe Photoshop. Understanding pixels vs film. Resolution requirements and equipment needs.

Assignment: Capture 3 images (photograph or scan at 16 bit) at 300 dpi – in the following lighting situations: Daylight outdoors – indoors/tungsten light -- low light (dawn/dusk/deep shadow) – in BOTH Camera RAW and jpg. Goal is to determine strengths and limitations of your particular camera/scanner. Examine files at 1-200% to evaluate digital "noise," shadow and highlight detail, and color inconsistencies. Basic tonal and color correction. Basic sharpening. For all assignments, bring to class on CD or USB "Flash" drive.

Note: For all images used as part or parcel of your artistic efforts, or for class exercises beyond the training files that are provided, you must have ownership or demonstrate efforts to gain permission to use images from the copyright holder. If you wish to challenge intellectual property rights as part of your artistic direction – or consciously subvert or push the limits of copyright law in any way -- it is mandatory that you check with the instructor first. The Art Department and Cornish College maintain strict anti-plagiarism policies. Any use of images that you have not created or are not considered legally "fair-use" or you have not gained permission to use will result in failure of the class.

Week number two: Image enhancement and correction tools in Adobe Photoshop for "non-destructive" image editing. Use of adjustment layers and layer masks. Survey of comprehensive digital imaging workflow for single images (not composite images). Scanning techniques and demonstration.

Assignment: Five additional images selected using the Photoshop file browser from either one full card photographed this week, or ten scans made from images captured this week. Follow-through with complete digital imaging workflow for global tonal and color correction, local controls and image enhancement, retouching, re-sizing if needed, and sharpening. Due in two weeks.

Week number three: Presentation and discussion of digital images from contemporary practitioners in art, journalism, and advertising/media. Classroom discussion and exploration of the use of digital single images, image composites, digital integration of media (words, images, sound, etc.), and output possibilities (print, web, mixed-media).

Compositing methods in Adobe Photoshop.

Assignment: Written "brief" or proposal (two-three pages) due on intent for portfolio project. Brief should include concept, rationale (what questions your work will ask, or what visual challenges will it address), technical means (digital camera, scanner, what type of output?), and to roughly "locate" your work within contemporary artistic practice. Please indicate what form the final presentation will take: portfolio of digital prints, website, design, multi-media, etc.

Week number four: Digital Camera specifics: White balance, resolution needs, file formats, on-site viewing and image correction. Reading histograms and RAW capture. Demonstration and experimentation with Adobe Camera Raw plug-in. Eight bit vs sixteen bit color. Scanning, photographing, image correction and enhancements in 16 bit mode.

Assignment: Begin portfolio work. Capture or scan 5 images in 16 bit color. Do image corrections and enhancements in full 16 bit workflow.

Week number five: Digital printing demonstration. Types of output. Paper and ink exploration. Exploration of printing drivers and software. Examination of aesthetic potential of digital ink-jet printing, compared to silver printing, dye printing, and alternative processes. Specific printer controls in Adobe PS. "Soft-proofing" of images. Exploration of hybrid methods, incorporating digital tools with traditional processes.

Assignment: Due in two weeks: 3 finished high-quality digital prints. Either 8 1/2 X 11 or 13 X 19.

Week number six: Interdisciplinary potential of digital tools and methods. Demonstration and experimentation with digital compositing of two or more images. Use of words and or graphic elements with photographic images. Truth versus fiction. Exploration of question – strategies for "fictionalizing," interpreting, and representing different kinds of realities.

Assignment: Due in two weeks. Fictional realities, using images and words, or images in composite, or images with graphic design elements – to make a cohesive statement.

Week Number seven: Critique/review of ongoing portfolio work.

Assignment: Due in two weeks. This will be presented early in semester. Research project (oral and written) on particular aspect of digital arts or artists.

Week Number eight: Digital printing enhancements. Discussion and opening of question about the ethics of digital media, with numerous examples shown from media, art, and advertising. Presentation of instructors work – current projects both digital and traditional. Numerous samples of digital prints viewed.

Week number nine: Student presentations of digital work. Analysis and discussion led by class participants on samples of digital artists, photographers, and designers.

Week number ten: Digital Printing techniques. Fine-tuning the digital print. Advanced color correction and tonal enhancements. Critique review of portfolio work. Discussion of potentials of digital image-making for photo, design, multi-media. Samples shown. Ongoing individual portfolio work.

Week number eleven: Critiques of portfolio work. Final printing techniques examined, demonstrated, and discussed. Review of contemporary digital prints by artists, photographers, and printmakers.

Week number twelve: Methods of criticism, response, and analysis of digital images. New directions in photography, contemporary trends in representation and expression using digital methods.

Week number thirteen: Critique of ongoing portfolio work. Discussion and response. Exploration of presentation methods: printmaking, web sites, multi-media, interdisciplinary, and presentation methods.

Week number fourteen: Professional practices. Using digital tools for presentation of work. Creation of CD's pdf files, digital resumes, and artists statements. Creation of a digital portfolio. : Review of ongoing portfolio work. Sequencing and presentation.

Week number fifteen: Final portfolio review. Hand in CD or web portfolios.

Attendance and Grades

Grades will be based on the following criteria:

- Weekly assignments and completion of assigned readings prior to class meeting
- Final Project (failure to complete the Final Project will result in a grade of NO CREDIT)
- Conceptual development (creativity and problem solving)
- Technical execution

- Craftsmanship appropriate to the nature of the work
- Class participation and involvement
- Presentation (oral communication, written communication, and organization)
- Timeliness & preparedness
- Enthusiasm

Grading Breakdown:

60% final portfolio/class assignments

20% class participation – critique, response, and discussion

10% Research project

5% Artists Statement

5% Innovation, insight, motivation, and instructor's discretion of your overall contributions to the class, the community, or to the medium.

An incomplete grade will only be granted for extenuating circumstances.

Classroom Rules

No cell phones or pagers -- please turn yours off before entering the classroom.

No Food or drinks near workstations

More than two unexcused absences will affect your letter grade. An unexcused absence is when you do not inform the instructor or Art Department office in advance of your absence.

Three late arrivals of more than 15 minutes late equals one absence.

Written Material: Books and Handouts

Class handouts will be provided either on hard copy or available as downloads from the instructors website.

Recommended books

** Real World Adobe Photoshop CS3, by David Blatner, Conrad Chavez, Bruce Fraser. Peachpit Press.

Adobe Photoshop. Classroom-in-a-book, Adobe Press

Adobe Photoshop Master Class: John Paul Caponigro, 2nd Edition, Adobe Press

Adobe Photoshop Master Class: Maggie Taylor's Landscape of Dreams, Adobe Press

Photoshop CS Artistry, Haynes & Crumpler, New Riders Press

Real World Camera Raw with Adobe Photoshop CS, Bruce Fraser

Real World Color Management, Bruce Fraser

The Photoshop CS2 Book for Digital Photographers (Voices That Matter)

by Scott Kelby

How to Wow: Photoshop for Photography, by Jack Davis, Jill Davis

Photoshop Masking & Compositing (Voices That Matter), by Katrin Eismann

Photoshop Restoration & Retouching, Second Edition by Katrin Eismann

Class weblinks will be posted on instructor's website: www.creativeguide.com

Go to **Lecture/Workshop** section of website: <http://creativeguide.com/digitalphoto.html>

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