DIGITAL IMAGING II
Instructor: Peter Thompson

Course Information

Columbia College address	600 S. Michigan Avenue, Chicago, IL 60605
Document Date/Semester	Spring, 2012. Syllabus revised 20120115
Department	Photography
Course Numbers	23-3202-01 (Tuesday class), 23-3202-04 (Thursday class)
Credit Hours	3
Class Time and Day	Tuesday, 1PM (for 01 section) Thursday, 1PM (for 04 section)
Add/Drop/Withdraw dates	http://www.colum.edu/Administrative_offices/Records/Registration
Classroom Location	600 South Michigan Avenue, room 1103
Additional facilities	Digital Imaging Lab, room 1100
Photo Department Website	http://www.colum.edu/undergraduate/photo/
Digital Imaging Coordinator	Tom Shirley

Instructor Information

Name	Peter Thompson
Department Phone	312 344-7593
Studio Phone	773 404-2002
Email Address	pthompson@colum.edu
Office Hours	Main Campus building, 600 S. Michigan, room 1106, Mondays, from 12-1, Tuesdays, from 11-1PM, and 5-6PM. Make all appointments through Oasis.
Office Location	600 S. Michigan Avenue, room 1106
Mailbox Location	600 S. Michigan Ave., room 1200

Required Texts and Materials

Class website	http://www.chicagomediaworks.com
Text	ADOBE PHOTOSHOP CS5 FOR PHOTOGRAPHERS, by Martin Evening. ISBN-978-0-240-52200-5. $55. Available at the Columbia College Bookstore, 624 S. Michigan Avenue, 1st floor, and at many other bookstores, including Amazon.com.
Supplies/Materials	• I *strongly* advise you to invest in *two* external hard drives for portability as well as regular backup of your files. Said differently-- hard drive malfunction is not an excuse for missing homework. (Suggestion: avoid Western Digital Traveler and MyBooks HD's). • For those who plan to shoot digitally, I advise you to buy a digital card reader. (Calumet's brand: $20).
Bibliography, supplemental and suggested readings	• All essential handouts are located on my website for downloading: http://www.chicagomediaworks.com. Once there, click on "Instructional Works" icon, then on "Digital Imaging II" and then navigate to desired document. • Additionally, the extraordinary industry standard tutorials on all aspects of digital imaging are available, free, 24/x7, for photography students through the "Training" tab within each student's Oasis homepage. • Additionally, "Digital Take-Home Professor" Quicktime movies and PDF text tutorials on major aspects of Photoshop and Camera Raw can be accessed from the Chicago Media Works homepage, free, 24X7.

Instructional Fee	$115. All Instructional Fees are used for the maintenance of the photography classrooms and labs. A portion of those fees will be available for direct class expenses as determined by the chair.

Course description

Building upon skills learned in previous classes, this course expands students' knowledge using extended digital controls to manipulate and enhance photographic images. Emphasis is placed on specialized image manipulation using Photoshop. The student will create a cohesive final project of professional quality utilizing these new tools supported by critical discussions, readings, and research.

Course rationale

This course solidifies the digital imaging knowledge acquired in Digital Imaging 1 or in Foundations of Digital Imaging, and extends and deepens it to reflect the knowledge and skills required of photographers to survive in the real world.

Prerequisites

23-2201 Digital Imaging I "C" grade, OR 23_2202 Foundations of Digital Imaging "C" grade. Co-Requisites: none. Concurrent Requisites: none. Requirements: none. Besides a foundation of competency in Photoshop, a working knowledge of the computer productivity software contained in the Foundations of Computer Applications class is helpful, but not required.

Learning Outcomes

At the successful completion of this course, the student will have learned:
• Contemporary issues and professional practices pertaining to digital imaging culture.
• Advanced software applications.
• Advanced digital imaging workflow and tools.
• Advanced input and output devices.
• Color to grayscale conversion and grayscale prints.
• Color theory, color models, and color spaces.
• Options for outsourcing image files.
• Different types of professional digital print options.
• Synthesis of learned skills to produce as a final project, a cohesive photographic body of work that meets professional standards.

More Specifically:
The goal of this course is to provide competency-based knowledge that will allow you to seamlessly integrate digital imaging into your photographic practice at a professional level. Specifically, you will learn the following:

Understand basic concepts necessary to navigate our digital imaging culture.
√   Readings pertaining to contemporary digital imaging theory and methodology.
Software Applications
√   Adobe Photoshop
√   Adobe Bridge
√   Adobe Camera Raw Converter
√   Fetch
Input Devices
√   Scanner: Imacon
Retouching Tools
√   Adjustment layers (Threshold, Levels, Curves, Hue & Saturation, Selective Color, Color Balance), Setting black and white points, Neutralizing color casts using Channels with Levels and Curves adjustment layers, Spot Healing Brush, Healing Brush, Patch Tool, Flow, Eraser, Magic Eraser, Background Eraser, History Brush and History Palette options, Blur, Sharpen, Desaturate, Sponge, Dodge, Gradient tool, Eyedropper, Navigation palette, Info Palette, Path Tool, Direct Selection Tool

Blending Modes and their appropriate relationships to each type of adjustment layer
√   Normal, Multiply, Screen, Overlay, Soft Light (with 50% auto dodge layer), Difference, Hue, Color, Saturation, Luminosity.
Color to grayscale conversion methods
√   Color to grayscale (IMAGE/MODE/Grayscale, IMAGE/ADJUSTMENTS/Desaturate, Channel Mixer, Channel throwaway, IMAGE/MODE/LAB (throw away channels "a" and "b"), Hue & Saturation adjustment layer, Split-channels, Black and White adjustment layer.
Advanced Digital Output.
√   Color management (color settings)
√   Color Settings options
√   Color Models: LAB, RGB, CMYK
√   Color Spaces: sRGB, Colormatch, Adobe RGB 1998, ProPhoto RGB
√   Outsourcing image files to Service Bureaus
√   Large file transfer via FTP and Fetch
√   Lambda, Lightjet and Precision prints
Advanced Digital Input
√   Using the Bridge application to navigate to, sort and process imaging files
√   Exposing for Camera Raw and processing Camera Raw files using Adobe Camera Raw converter
√   Configuring and applying Metadata to files
√   Digital naming conventions and batch renaming
√   Digital negative format (.dng)
Sharpening
√   Unsharp mask
√   Jeff Schewe's methods for input, interpretive and output sharpening
Filters
√   Sharpen (Unsharp Mask, High Pass, Find Edge, Median)
√   Despeckle, Dust and Scratches
√   Noise
√   Blur (Gaussian)
√   Fade Filter
√   Smart Filters
Make fine digital prints of higher quality than your best analog prints.
√   High end scanning for digital prints.
√   Black and White and color
√   Color Prints: applying color profiles, viewing prints under controlled color temperature, adjusting the files for varying lighting conditions.
√   Compare various types of digital paper printing surfaces
Digital Image Capture and Processing
√   Camera Raw exposure, controls, global settings
√   Digital workflow (use of Bridge, custom workspaces, job folders, batch renaming of digital files, metadata, keywords, writing Actions for batch processing, Automate, Image Processor)
√   Opening as Smart Objects in Photoshop
√   DNG format
Imaging Harvesting Techniques
√   Selections and layer masks
√   Merging multiple different exposures
Develop a Final Project.

A lot to learn…. So, I want to give you some advice based on past experience--your success in learning these advanced photographic controls is predicated on your having learned all the learning outcomes in **Digital Imaging I** (for specifics, see the DG1 syllabus on my website). If you find yourself ill-prepared for this class, you will know it during our first class session. If so, **it is your responsibility to bring yourself up to speed.** The following resources are available to help you: your textbook from Digital Imaging I; my sequence of Photoshop tutorials entitled "Digital Imaging Take-Home Professor" tutorials accessible at www.chicagomediaworks.com; and the tutorials accessible on Lynda.com.

All tutorials are available 24X7, free. **You will have *three weeks* to remediate any deficiencies*.* After that, we move forward quickly. If you are not prepared to do so, it is probable that you will fail this class.**

PLEASE DO NOT ALLOW YOURSELF TO FALL BEHIND, ESPECIALLY IN THE FIRST SIX WEEKS. WE MOVE QUICKLY AND IT IS *EXTREMELY* DIFFICULT—IF NOT *IMPOSSIBLE*— TO CATCH UP ONCE YOU FALL BEHIND.

I am *committed* to teaching you the digital knowledge that you need to survive as photographers in the real world. Reading the textbook, reading the prepared notes that I have made for you, and taking your own notes are *essential*—without them you will simply *not* pass this course. You must be organized, able to work for long periods alone, and enjoy the process of creating images systematically with time devoted to building and rebuilding them. You will need to devote 6-15 hours per week to work outside class.

Grading policy and evaluation procedures

Credit hours:	3
Grading scale:	I grade **only** for the quality of your work as a professional-in-training and on your ability to meet each deadline. I do not grade for "effort" or for "improvement"--I assume both. I do not respond positively to explanations for lack of work other than for jury duty, jail or military duty, nor to appeals to raise a grade in order to remain a Photography major or to graduate on time, etc. I give grades as follows (the percentages are approximations, and I reserve the right to alter them for individual students based on class performance): **Assignments: (50% of grade).** You will be graded at each deadline and, like any professional deadline, if you miss it you may **NOT** make it up unless you have previously arranged to do so with me. Late assignments without such previous arrangements will *not* be graded. However, you may *always* hand in late assignment for *feedback*, only. F for the assignment if you miss it; D, C, B, or A for quality of work if you meet it. **Midterm Practicum and Tech Exam: (25% of grade).** There will be one or more practicums and a final technical exam based on lectures, vocabulary, handouts and readings. Neither the midterm nor the final tech exam may be made up without previous arrangement. Quizzes or examinations may be given later if you arrange it in advance with me. **Final Project:. (25% of grade).**
Require-ments and assignments:	Assignments, practicums and final project are listed in the syllabus. Keep this document as well as your returned assignments, practicums and examinations since it is your responsibility to know these written policies as well as your grade performance to date.
Standards and proportions used:	**Grading Scale:** I "An Incomplete Grade (I) can only be issued for an undergraduate student who has met one of the following criteria: The student has successfully completed all course requirements to date but is faced with unexpected circumstances during the final weeks of the semester resulting in the inability to complete course requirements by the end of the semester. The student must have, in the instructor's estimation, the ability to complete missed course requirements outside of class and by the end of the eighth week of the following semester. The instructor must agree to evaluate the student's work and replace the Incomplete grade before the end of

	the following semester. An agreement specifying work to be completed and a due date must be signed by both instructor and student and approved by the Department Chair. The instructor is responsible for obtaining the final evaluation and submitting a letter grade to replace the Incomplete by the eighth week of the following semester. An agreement specifying the need for the final evaluation from the external supervisor must be signed by both instructor and approved by the Department Chair."
	F If you are absent from your final presentation(s); incomplete course requirements, poor work quality. (Normally, some students receive this grade).
	D Below average quality of work and with below average participation.
	C Work of average quality and with average participation.
	B Assignments presented on time, good participation, and steady significant efforts throughout. (Normally, a significant number of students receive this grade).
	A "B" requirements, along with outstanding participation and work. (Normally, a small number of students receive this grade).
	Grading scale: (100-94%=A; 93-90%= A- ; 89-88% = B+ ; 87-84%= B ; 83-80%= B – ; 79-78% = C+ ; 77-74%= C ; 73-70%= C – ; 69-68%= D+; 67-64 = D; 63-60 = D-; 59% and below = F)
Return student work	All prints will be returned to you by the last class period. After that, I do not have the storage space to retain prints, and they will be recycled.

Classroom policies

Academic Integrity and Courtesy:	Students at Columbia College Chicago enjoy significant freedom of artistic expression and are encouraged to stretch their scholarly and artistic boundaries. However, the College prohibits all forms of academic dishonesty. For present purposes, "academic dishonesty" is understood as the appropriation and representation of another's work as one's own, whether such appropriation includes all or part of the other's work or whether it comprises all or part of what is represented as one's own work (plagiarism). Appropriate citation avoids this form of dishonesty. In addition, "academic dishonesty" includes cheating in any form, the falsification of academic documents of the falsification of works or references for the use in class or other academic circumstances. When such dishonesty is discovered, the consequences to the student can be severe. Please read the undergraduate catalog for this complete policy. I will follow those policies in any instance of academic dishonesty.
	Intellectual Property: all materials used in this class are the exclusive property of the copyright holder(s). You are prohibited from using the work materials or any other attributes of the class for any other purpose other than to gain knowledge without the express permission of the copyright holder(s). You may not repackage or distribute your work in any current method or process yet to be established, nor to exhibit, nor to post, display, upload, download or file transfer to or from any site on or to the Internet without the express permission of the copyright holder(s).
	Courtesy will be observed at all times in my classroom (this also means that texting and emailing may be done only during class breaks).
Attendance policy:	I strongly advise against missing a single class because of the amount of information covered and the fact that almost every week **is** a deadline. In a nutshell: my experience is that the student who misses three classes rarely

	manages to pass the course. No student has ever passed having missed four classes. Absences are marked with an "X" on the grade sheet for my benefit: if a student is absent on a day on which work is due, the "X" simply reminds me that I will not accept that work for grading beyond that date (but will accept it for feedback) **if** I have not been previously alerted by email of the impending absence.
Absences:	You must plan ahead for any absence by emailing me beforehand. Please obtain the email and telephone number of a fellow student in order to contact them for notes and any changes in work due if you are forced to be absent—especially since this syllabus will be modified from week to week in response to your needs and learning pace (see Syllabus, below).
Tardiness:	Tardiness is unacceptable because it disrupts learning.
Late work and makeup assignments:	You will be graded at each deadline. As with any professional deadline, if you miss it you **MAY NOT** make it up unless you have previously arranged it with me. Late assignments without previous arrangement will *not* be graded. You may always, however, hand in a late assignment *for feedback, only*. F for the assignment if you miss it; F, D, C, B, or A for quality of work if you meet it.

Satisfactory Academic Progress:	http://students.colum.edu/handbook/entries/satisfactory-academic-progress-policy
	"Columbia will evaluate the satisfactory academic progress (SAP) all undergraduate students at the conclusion of the grading period each semester. Columbia will determine a student's cumulative grade point average (GPA); cumulative completion rate (total credits attempted divided by total credits earned); and the student's total credits attempted to date, including transfer credits. An undergraduate student is considered to be meeting SAP if the student: * has earned a cumulative GPA of 2.0 or better; and * has a cumulative completion rate of 67% or better; and * has attempted less than 160 credit hours. Students who are not meeting the above SAP requirements will be placed on Warning for their next semester of attendance. If a student on Warning does not meet SAP at the end of the warning semester, he or she will be Dismissed. In order to register for a future semester, a student must meet with the College Advising Center. Students who do not meet the SAP requirements after a semester on Probation Continuance are Dismissed from Columbia and are not eligible to register for future terms. Full details and information can be found at the link above.
	
	In the fifth week of the semester, your teacher will be asked to provide some early feedback on your academic performance to help the College identify students who may be falling behind and are at risk of not satisfactorily completing a course. This online Academic Progress Report will notify students in time to seek academic coaching or other assistance to improve their grade and is necessary because new federal regulations require that students who achieve less than a 2.0 GPA and/or don't complete two-thirds of their classes for two semesters in a row must be dismissed from the College. The following indictors will be used by your teacher to make that determination:
	  I) Student has missed at least half of the scheduled class sessions or individual conferences (3 out of 5 for classes that meet once a week; 5 out of 10 for classes that meet twice a week).
	  ii) Student arrives more than 15 minutes late or leaves more than 15 minutes early 3 out of 5 class sessions.
	  iii) Student has earned a grade lower than C on the majority of graded assignments so far (including quizzes, homework, in-class activities, etc.).

| | iv) Student has turned in the majority of assignments more than 1 day late. |
| | v) If the semester ended at week 5, the student would have a grade lower than C for the class." |

Students with Disabilities Statement
"Columbia College Chicago seeks to maintain a supportive environment for students with disabilities. Students who self-identify as having a disability should present their documentation to the Services for Students with Disabilities (SSD) office. After the documentation has been reviewed by the SSD office, a Columbia College accommodation letter will be provided to the student. Students are encouraged to present their Columbia accommodation letters to each instructor at the beginning of the semester so that accommodations can be arranged in a timely manner by the College, the department, or the faculty member, as appropriate. Accommodations will begin at the time the letter is presented. Students with disabilities who do not have accommodation letters should visit the office of Services for Students with Disabilities, Room 304 of the 623 S. Wabash building (312 369-8296."

The Learning Studio
Tutors at the Learning Studio will work with you on "all stages of the writing process." You can sign up for weekly appointments in Oasis, call ahead for an appointment (or make an appointment through Oasis using the: "My Appointments" tab), or just drop in. Please take advantage of this resource. The Learning Studio is located at 618 S. Michigan on the 1st floor. You can find information online at: http://www.colum.edu/Academics/Learning_Studio//index.php

Additional Student Resources
• Info regarding important dates for student registration:
http://students.colum.edu/events/calendars/important-dates/
• Students Experiencing Difficulties: A Guide for Faculty and Staff:
http://www.colum.edu/Administrative_offices/College_Communications/Responding_to_Crisis.php
• Online Student Handbook link: http://students.colum.edu/handbook/
• Photo Department Policies: Equipment and Facilities Use, "C" Minimum Grade Policy, "Incompletes" Policy, etc.   All of these are available on the OASIS resource center site.
• College course catalog: http://catalog.colum.edu/
• Student Loop access page: http://students.colum.edu/

Course calendar
Please note that individual class sessions are subject to change in response to your learning needs. I will make every effort to keep you informed of changes in the schedule. Some items may change at my discretion, but the overall workload will not. Note that the first date in the syllabus refers to the Tuesday DGII section; the second date refers to the Thursday section.

PART ONE: *FILM-BASED* DIGITAL WORKFLOW

Week 1 [January 17, 19]
Digital Knowledge Questionaire and Competency Test File(s)
Introduction
> Class website, Peter's email, competency-based course, text, readings, assignments, weekly digital imaging files folder, final project, your responsibility to know each Digital imaging I learning outcome, five-week review window.

Lecture: Digital Imaging Workflow
Demos:
> Hand cleanliness, setting your Photoshop Color Settings presets, creating project files, naming conventions, saving layered files, saving a copy, flattening and converting to appropriate file formats, dropping items into class "drop box", copying class materials, backing up files and optimizing your home hard drive, multi-site archiving. Digital workflow steps, correcting perspective and tilts, using Transform tools, Adjusting perspective (Workflow step #4), setting black and white points, neutral gray point, adjusting layer masks, levels, curves. Checking your eyesight acuity and camera lens sharpness. Following directions about naming conventions. Advice on hard drives, and on final projects for those using digital cameras to shoot Camera Raw between Weeks 1 and 8. Your color perception and preferred learning mode.

Download:
> Syllabus, http://www.chicagomediaworks.com/2instructworks/3digital2/digitalimaging2/
> Peter Thompson, from Week One folder: "film-based_digital_workflow.pdf", digital_imagterms_categories_2008.pdf digital_imagterms_alpha_2008.pdf, and Final Project Guidelines folder. For those planning to shoot digitally for their final project, download "digitalcapture_workflow_2011.pdf"

To do:

1. Download and read the handouts, above. (To burn a copy of any material from the class partition or from the tutorials folder, **first** drag its folder to the Desktop, **then** open the Roxio Toast icon and drag the material you wish to copy into that application and follow the normal process to burn a CD-R).

2. In the Evening text, review chapter 2. Use the Digital Imaging Terms handouts as resource documents.

3. Read and play the "Digital Take-Home Professor" tutorials corresponding to the digital imaging techniques you need to review: www.chicagomediaworks.com

4. Print out and sign the "Statement of Understanding" on the last page of this syllabus and bring to Week Two.

5. Think about what you would love to do for a final project. Draft decision due on Week 6.

6. Take the Online Color Challenge to get an accurate readout on your ability to perceive and distinguish between colors. Test is located at this URL: http://www.xrite.com/custom_page.aspx?PageID=77&Lang=en
It will take approximately one-half hour to complete. Take a screenshot (SHIFT + COMMAND +4) of the results page entitled "Online Color IQ Challenge Results"). Label it *exactly* as follows: "(yourlastname)_colorpercept.png" and place it in the appropriate class Dropbox. (Note: To drop any file into the class Dropbox, **first** copy it from your CD by dragging it to the Desktop, **then** drop it into the Dropbox).

7. Take the Typology Test to get a sense of how you best process information. Test is located at this URL: http://www.humanmetrics.com/cgi-win/JTypes1.htm   It will take approximately 5 minutes to complete. Take a screenshot of the results page entitled "Your Type Is"). Label it *exactly* as follows: "(yourlastname)_typology.png" and place it in the appropriate class Dropbox. (Note: To drop any file into the class Dropbox, **first** copy it from your external media by dragging it to the Desktop, **then** drop it into the Dropbox).

Week 2   [January 24, 26]
DUE: Signed statement of Understanding, Color Perception and Typology screenshots
In class:

> Questionaire and quiz results. Student ID's.
> Film-based digital workflow
> Solving digital imaging problems: calibrating monitors via System and Gretag MacBeth EyeOne software and peripheral, advanced tonal corrections for color images: threshold adjustment layer, levels adjustment layer and options, curves adjustment layer, setting black point and white point and neutral gray in levels, making selections on separate layers, layer sets, using levels and curves on individual selections, choosing correct blending mode before making changes to adjustment layers, painting on adjustment layer masks, auto-dodging techniques for dodging and burning, normal, low key and high key images, next week's project guidelines, checking your eyesight and lens sharpness.

To do:

1. Read chapters 2 (Selections), 3 (Curves), 8 (Color Correction) from the Evening text.

2. Read and play the Digital Imaging Professor tutorials corresponding to techniques you need to review.

3. Shoot and bring three **perfectly-exposed, sharply focussed** color negatives to Week Three to scan in class. One must be **normal** *key*, one **low** *key*, one **high** *key* (NOT normally *exposed*, under-*exposed*, and over-*exposed*). Bracket in half-stops so you are able to choose a technically perfect image for each key. To avoid problems, do **not** use films with high ISO numbers, or amateur films such as Kodak Gold; rather, use professional grade films with low ISO numbers such as Kodak Professional Portra 160 NC, or Fujicolor Pro 160S. Lastly, do **not** shoot with Diana, Holga or disposable film cameras. In sum: perfectly exposed, sharply focussed, low grain.

5. Calibrate your own studio monitor over the next three weeks by checking out the Gretag MacBeth Eye-One take-home calibration kits from the Digital Imaging Lab.

6. Download and play the Imacon Scanner tutorials located in the Advanced>Imacon Tutorials folder on our class partition. Play each of the twenty Imacon Quicktime movie tutorials at home to learn the Imacon functions. We will work on the Imacon scanner Week Three.

Week 3 [January 31, February 2]
DUE: Three perfectly exposed and sharply focused color negatives, one high key, one normal key, one low key
In class:

- Color Perception and Typology results
- Scan one color chrome or color negative
- Res-ing down scans

Demos:

- Imacon scanner
- Advanced digital workflow methods: adjusting resolution and resizing, spotting, input sharpening, luminosity, color and saturation blending modes, curves adjustment layers.

Handouts:

- Jeff Schewe: "sharpening_schewe.pdf "

To do:

1. Read and play the tutorials that correspond to the techniques, above, and read the corresponding vocabulary in the Digital Imaging Terms.

2. Scan your three **color** negatives using the Imacon scanners in the Advanced Scanning room. One image must be **normal** key, one **low** key, one **high** key. Scan each so that its physical dimensions will be at least 13"X17".

3. Create project folders for each of your key images, then apply the tonal corrections and retouching techniques learned thus far and follow the digital workflow. When finished, make a copy of each file *with layers intact and resize to 72 ppi.* **(Note: I will not accept files at higher resolution than 72ppi past Week Four; never place a file larger than 40 mb into the Drop Box**). Label as follows: (your last name)_(type of key).psd. Place each inside a folder labeled "keys_(yourlastname)" and place the folder inside the class Drop box.**.**   Due Week Five.

4 Download Digital Workflow Imaging Practicum 1 folder and files, and follow the written instructions. Due Week Four.

5. Reminder: Final Project proposal due Week 8.

6. Read pages 1-7 of the Schewe sharpening article, and memorize the input (first) sharpening technique.

7. Read chapter 5 (Image Editing Essentials) in the Evening text.

Week 4 [February 7, 9]
DUE: Digital Imaging Workflow Practicum 1
In class:
- Final projects by previous Digital Imaging II students
- Review everything learned so far
- Advanced local corrections.
- Neutrals
- Curves examples covering the entire range of correction options
- Imacon settings as a conceptual set
- Selections with adjustment layers versus selecting with pixels
- Masks: Gaussian blur versus Refine masks

Week 5 [February 14, 16]
DUE: Files of three color negatives using advanced tonal corrections and retouching techniques
Review and/or quiz
In class:
- Feedback on Digital Imaging Workflow Practicum 1 files
- Review scans
- Reviewing entire workflow
Demos:
- Advanced retouching techniques, continued: actions, adjusting global and local parts of images with appropriate adjustment layers and appropriate color blending modes, creating numerically neutral and semi-neutral blacks and whites, interpretive and output sharpening techniques, final project, color selections and adjustments.
- Printing workflow: output sharpening, soft proofing workflow, test strips and prints, compensation with curves and hue & saturation adjustment layers, test strips, bracket proofing with posterize, increasing canvas size, rendering intents (saturation, perceptual, relative & absolute colorimetric).
Handout:
- John Paul Caponigro, "Semi-Neutrals,pdf"
- Digital Lab printing setup.pdf
To do:
1. Read and play the tutorials that correspond to the techniques, above.
2. Download the "printing_instructions.pdf" file. Read pages 1, 2.
3. Make three (3) RGB color prints, at least 13"X19" each, from your color scans files,

one using the **normal** key file, one using the **low** key file, one using the **high** key file. Try to make the absolutely best quality prints possible. Incorporate local adjustments and output sharpening into the workflow. Due Week Six.
4.   Reminder: Final Project proposal draft due Week 8.
5.   Read the entire Schewe article on sharpening, paying special attention to interpretive and output sharpening. **Memorize** input, interpretive and output sharpening methods.

Week 6 [February 21, 23]
DUE: Three color prints of same files you have been working on with gradient test file embedded in the margins and printed on Luster and Matte papers (6 prints)
In class:
- Feedback on Week Five files.
- Review RGB prints under controlled viewing conditions.

Demos:
- Evaluating test prints (color cast? 5% intervals? 1% intervals?). Addressing (in this order): hue and neutrals, saturation, luminosity, details, sharpening, noise and banding. Rendering intents (saturation, perceptual, relative and absolute colorimetric), gamuts, bracket proofing with posterized gradient, viewing light compensation with curves preset, saving adjustment layer presets, screenshots of all printing decisions, notes tool, annotations, presets for standard viewing lights in Digital Lab (3660° Kelvin), BAT master file.
- Eraser tools (snapshots, history brush, eraser, magic eraser, background eraser), Liquify filter.
- How to save documents as PDF files.

Handouts:
- Peter Thompson, "Final Project Proposal"
  http://www.chicagomediaworks.com/2instructworks/3digital2/digitalimaging2finalproj.html

To do:

1.   Read and play the tutorials that correspond to the techniques, above.

2.   Redo (and/or reshoot with sharp, perfectly focused exposures) your three (3) color prints, at least 13"X19" each, from your color scans files, one using the **normal** key file, one using the **low** key file, one using the **high** key file. Try to make the absolutely best quality prints possible. Apply local adjustments and softproofing. Take screenshots of every decision you make when printing. Import screenshots into Photoshop and drop them into a new folder in the layers palette for each of your three files. Label the folder "Print". Download "printing_gradient_testfile_rgb.tif" and print it in the margin of your images. Print on both Luster and Matte papers. When finished, make a copy of each file *with layers intact and resize to 72 ppi*. Place them inside a folder labeled "rgbprints2_(yourlastname)" and place the folder inside the class Drop Box. Due Week Seven.
3. Final Project proposal draft due Week 7 as PDF or Word doc.

Week 7 [February 28, March 1]
DUE: Re-done three RGB color prints with accompanying three digital files, and final project proposal draft
In class:
- Review RGB and gradient test file prints under controlled viewing conditions from Week Six
- Assess color prints and image files
- Thinking "Big": effect of scale on the contrast of mural prints
- Assess final project drafts

Demos:
- Advanced retouching techniques, continued: compensating for scale
- Color to grayscale conversion methods: (IMAGE/MODE/Grayscale, IMAGE/ADJUSTMENTS/Desaturate, Channel Mixer, IMAGE/MODE/LAB (throw away

channels "a" and "b"), Channel Mixer and Hue & Saturation adjustment layers together, Black and White adjustment layer, colorizing b/w images.

Handout: Download "MuralPrintingProcPrices.pdf" from Advanced>Mural folder and follow directions.

To do:

1. Read and play the tutorials that correspond to the techniques, above, and read the corresponding vocabulary in the Digital Imaging Terms.

2. Type, spell-checked final draft of your Final Project Proposal in Word format and "export" it as a **PDF document** by accessing the "Print" dialog box and then choosing PDF>Save as PDF.   Label your exported PDF document as follows: "(yourlastname)_finaldraft1.pdf" and drop it into the class Drop Box. Due Week Eight.

3. Convert your "normal" color neg or chrome to grayscale using two of your preferred conversion methods, and make two prints with different interpretations of that file each with full dynamic range and no color casts. When finished, make a copy of each file *with layers intact and resize to 72 ppi*. Place them inside a folder labeled "(yourlastname)_grayscale.psd" and place the folder inside the class Drop Box.

4. Prepare for Midterm practicum on Week 8 by reviewing everything you have learned thus far.

5. Make one color or b/w mural print on any topic using the Epson 9600 printer. Use your scanned color negatives or color transparencies **or digital captures** of your choosing. Resolution: 180 ppi is fine. **Minimum paper size: 24"x30"** (maximum size: 44" X 100 feet). Take your finished file on a CD, thumbdrive or DVD to the Cage. Fill out the appropriate print order form that you will find there. They will then print your work and give you the opportunity to OK a printed test strip. This process takes approximately 24 hours. PLAN AHEAD for this turnaround time. Bring the finished mural print to **Week Ten**.

PART TWO: *DIGITAL CAPTURE-BASED* WORKFLOW

Week 8 [March 6, 8]
DUE: two grayscale print interpretations of same image, typed/spell-checked final draft of Final Project Proposal as a PDF document.
MIDTERM PRACTICUM
In Class:
    • Midterm Practicum
    • Exposing for Camera Raw format and developing in the Adobe Camera Raw Converter
    • Discuss Final Projects
Demo:
    • Camera RAW exposure and controls, ProPhoto RGB color space, global settings.
Handout: "Digital_Exposure-Based_Workflow.pdf"
To do:

1. Read and play the tutorials that correspond to the techniques, above, and read the corresponding vocabulary in the Digital Imaging Terms.

2. Read chapter 4 (Sharpening and Noise Reduction) in the text.

3. Read "Digital_Exposure-Based_Workflow.pdf"

Week 9 [March 13, 15]
In class:
- Midterm Practicum results
- Discuss Final Projects

Demo:
- Camera RAW exposure and controls (continued), camera RAW workflow.
- Solving a spectrum of Camera RAW exposure and development problems.

To do:

1. Reminder--Mural print due Week Ten.

Week 10 [March 20, 22]
DUE: : **Mural print (minimum paper size: 24"x30")**
In Class:
- View mural prints
- Camera RAW exposure and controls (continued), camera RAW workflow from DCIM to external HD, DNG format, Digital Workflow (use of Bridge, custom workspaces, job folders, batch renaming of digital files)

- Solving a spectrum of Camera RAW exposure and development problems including opening as Smart Objects in Photoshop.

- Camera Raw: keywords, metadata, keywords, writing actions for batch processing, JPEGS, TIFFS, Smart Objects

- Solving a spectrum of Camera RAW exposure and development problems.

- Work on Final Projects

To do:

1. Read and play the tutorials that correspond to the techniques, above, and read the corresponding vocabulary in the Digital Imaging Terms..

2. Prepare to **show** an update on your final project. Due Week Eleven.

3. Prepare for Final Tech Exam on Week Fourteen.

Week 11 [April 3, 5]
In class:
- Camera RAW exposure and controls (continued): camera RAW workflow from DCIM to external HD, DNG format, Digital Workflow (use of Bridge, custom workspaces, job folders, batch renaming of digital files)In Class:
- Working with Service Bureaus: compressing image files, uploading to FTP sites with Fetch
- Work on your final project.

To do:

1. Using a tripod and shooting either in camera RAW or in analog, shoot a single scene with an enormous dynamic range. Take from five to seven separate shots, bracketing each by two exposure stops separating each shot. If shooting in analog, scan your exposures.
All: using Bridge, assign your metadata and keywords to the files, then batch rename them according to your preferred naming convention. Create a high dynamic range image utilizing all your exposures. When finished, make a folder and place your files within it. Name the folder (yourlastname)_imageharvest_1. Due Week Twelve.

2. For every remaining week in the semester, bring your final project files to class to work on with Peter's input.

PART THREE: IMAGE HARVESTING

Week 12 [April 10, 12]
DUE: Image Harvest #1 files

Demos:
- Image Harvesting, part 1: Extending the tonal and color range of the photographic print through merging more than one *scan* of the same negative or transparency
- Making multiple-toned prints: duotone, tritone, quadtone, grayscale.

In class
- Work on your final project.

To do:

1. Read and play the tutorials that correspond to the techniques, above, and read the corresponding vocabulary in the Digital Imaging Terms.

2. Image Harvest project #1, cont'd: Combine one or more elements from the files and bring them into a "mother" file. For digital-exposure originated files, process in Adobe Camera Raw Converter and output sharpen in Photoshop. For analog originated files, process and sharpen in Photoshop. **Now make a print of at least 11"X17".**   Due Week Thirteen.

3. Prepare for Final Tech Exam on Week Fourteen.

Week 13   [April 17, 19]
DUE: Print of image harvest project #1

In class:
- Review Image Harvest Project #1 prints.
- Contemporary photo-graphic design and Digital Fonts issues
- Work on your final project.

Demos
- Image Harvesting, part 2: Extending the tonal and color range of the photographic print through merging more than one *exposure* of the same scene, and applying luminosity masks and IMAGE/ADJUST/Shadow/Highlight to bring detail into highlights and shadows.
- Digital Fonts issues: text tool, serif and sans-serif fonts, tracking, leading, rasterizing

To do:
1. Read and play the tutorials that correspond to the techniques, above, and read the corresponding vocabulary in the Digital Imaging Terms.

2. Prepare for Final Tech Exam on Week Fourteen.

Week 14 [April 24, 26]
FINAL TECH EXAM

In class:
- Final Tech Exam (1 hour duration)
- Work on your final project.

Week 15 [May 1, 3]
DUE: FINAL PROJECT PRINTS, FINAL PRINT FILES WITH LAYERS INTACT, FINAL PROJECT DESCRIPTION, WEB GALLERY

Critique and celebration.

PETER HIGHLY RECOMMENDS THESE BOOKS ON DIGITAL IMAGING
• Bruce Fraser and Jeff Schewe, REAL WORLD CAMERA RAW WITH ADOBE PHOTOSHOP CS5, Peachpit Press, Berkeley, 2010. 427 pages, ISBN-10: 0-321-58013-3, $45. (THE book on all aspects of the Camera Raw digital format).
• Katrin Eismann, PHOTOSHOP RESTORATION AND RETOUCHING: THIRD EDITION, New Riders Press, 2005, 450 pages. ISBN: 0321316274. $34.99. Available at many bookstores and through Amazon.com. (Terrific job dealing with practical, real-world retouching challenges.)
• John Paul Caponigro, ABOBE PHOTOSHOP MASTER CLASS, SECOND EDITION.

DIGITAL SUPPLY SOURCES
Helix, 310 S. Racine (slide duping, processing, and digital prints), 312.421.6000. Calumet, (photo supplies, equipment), 312.440.4920. Central Camera, 230 S. Wabash (used equipment, photo supplies – has student discount), 312.427.5580. Gamma, 314 W. Superior (color and digital prints), 312.337.0020. Image Studio Ltd., 223 W. Erie St, Suite 6NE (outputting large scale B&W film negatives from digital files, drum scanning and color printing), 312.944.2600. Best Buy, 1000 W. North Ave (zip disks, VHS tapes, etc.), 312.988.4067. Micro Center, 2645 Elston Ave (computer supplies, zip disks, recordable CD's, etc.), 773.292.1700. MacMall, 1.800.222.6227. Mac Warehouse, 1.800.255.6227. Paper Source, 232 W. Chicago Ave (alternative papers for inkjet printing), 312.337.0798. IT Supplies, (800 238-6050, www.itsupplies.com (outlet for Epson digital papers. Give student discounts). New York Central Art Supply, (largest stock of fine art papers), 1.800.950.6111. Pearl, 225 W. Chicago (paper and general art supplies), 312.915.020. Utrecht, second floor, Champlain Building (zip disks, watercolor paper, etc.), 312.629.6506. Pricewatch: www.pricewatch.com, and Epinions: www.epinions.com to find the best prices on computer supplies, digital cameras, etc. David Adamson Editions (Washington, DC), Fine Arts Iris prints, 1.202.347.0090 – ask about student discount. A good site for printing resources on the web: photoweb.colum.edu/tshirley/syllabus/printingresources.

STUDENT'S UNDERSTANDING
(Please sign, date, cut from syllabus, and return to Peter at Week Two class session).
I have read the Attendance and Grading Policies, Syllabus and Class Schedule for the Digital Imaging II class and understand what will be expected of me throughout the semester. I also understand that the sequence and content of individual class sections are subject to change.

I understand that the digital media used in this class, other than my own, are protected by copyright laws and are for use as in-class exercises only. I will therefore refrain from any public or private distribution of the images.

I will not upload the aforementioned media created by others to Internet sites, whether public or private, such as *YouTube*, *MySpace*, or the *Columbia College Chicago Portfolio Center Web Publish System*, and I will not exhibit any of the edited exercises in any public venue, or include the images in any compilation of my work.

All images created by me are my sole responsibility. Neither Columbia College Chicago nor any of its agents or employees assume responsibility or guarantee or warranty the storage devices utilized throughout the course of the class. My digital class materials and the backup of my materials are my sole responsibility. Media storage of images will not be provided after the end of the semester. Storage of prints will not be provided after the end of the semester.

NAME (PRINT)_____

SIGN _____

SECTION (circle one)   TUESDAY   THURSDAY   DATE_____