

## DIGITAL IMAGING III

Instructors: Tom Shirley and Peter Thompson

### Course Information

Columbia College address	600 S. Michigan Avenue, Chicago, IL 60605
Document Date/Semester	Fall, 2011. Syllabus revised 20110828
Department	Photography
Course Numbers	23-3220-01
Credit Hours	3
Class Time and Day	Monday, 1PM
Add/Drop/Withdraw dates	<a href="http://www.colum.edu/Administrative_offices/Records/Registration">http://www.colum.edu/Administrative_offices/Records/Registration</a>
Classroom Location	600 South Michigan Avenue, room 1109
Additional facilities	Digital Imaging Lab, room 1100
Photo Department Website	<a href="http://www.colum.edu/undergraduate/photo/">http://www.colum.edu/undergraduate/photo/</a>
Digital Imaging Coordinator	Tom Shirley

### Instructor Information

Name	Tom Shirley
Department Phone	312 369-7320
Office Phone	312 369-7786
Email Address	<a href="mailto:tshirley@colum.edu">tshirley@colum.edu</a>
Office Hours	M+T, 12-1, 5-6, Main Campus building, room 1104, by appointment. Make all appointments through Oasis.
Office Location	600 S. Michigan Avenue, room 1104
Mailbox Location	600 S. Michigan Ave., room 1200

### Instructor Information

Name	Peter Thompson
Department Phone	312 344-7320
Office Phone	773 404-2002
Email Address	<a href="mailto:pthompson@colum.edu">pthompson@colum.edu</a>
Office Hours	Main Campus building, room 1106, Mondays, from 12-1, Tuesdays, from 11-1 PM, 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	N/A
Text	N/A
Supplies/Materials	<b>Required:</b> <ul style="list-style-type: none"><li>• DSLR camera capable of Camera Raw capture.</li><li>• External Hard Drive, 80 GB minimum. We <i>strongly</i> advise you to invest in <i>two</i> external hard drives for portability as well as for regular backup of your files. Said differently--hard drive malfunction is not an excuse for missing creative work. (Suggestion: avoid Western Digital Traveler and MyBooks HD's).</li><li>• Card Reader (Calument's brand: \$20)</li><li>• Digital Printing Paper</li><li>• Notebook for write ups.</li></ul>
Bibliography, supplemental and suggested readings	<ul style="list-style-type: none"><li>• All essential handouts are downloadable as PDF's from the class partition.</li></ul>
Instructional Fee	\$115. All Instructional Fees are used for the maintenance of the photography classrooms and labs.

### **Course description**

This advanced level course expands the student's digital expertise using photographic controls to manipulate and enhance photographic images. Emphasis is placed on color management, profiling, digital capture and workflow, image asset management, and printing. Note: This course requires that students must have a digital SLR camera capable of RAW capture, and an external hard drive.

### **Course rationale**

This course solidifies the digital imaging knowledge acquired in Digital Imaging 1 (or in Foundations of Digital Imaging), and Digital Imaging II, 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 II , "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 advanced level course, the student will demonstrate:

- An applied knowledge of color management.
- Ability to make custom printer/paper profiles.
- Ability to compare and evaluate color profiles and color spaces as they apply to digital devices and the reproduction of color.
- Ability to develop a working digital capture workflow.
- Ability to develop a file naming and archiving system.
- Knowledge of key wording and metadata.
- Synthesis of learned skills to produce as a final project, a cohesive photographic body of work that meets professional standards.

### Specifics:

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

*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*

√ *Lightroom 3*

√ *Adobe Profile Editor*

√ *Adobe Color Printer Utility*

√ *X-Rite iOne*

√ *Photomatix*

#### *Input Devices*

√ *Scanner: Imacon*

√ *Digital imaging sensors*

#### *Digital Image Capture and Processing*

√ *Camera handling techniques*

√ *Testing for optimum ISO*

√ *Camera Raw exposure, controls, global adjustments*

√ *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*
- 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)*
- 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.*
- 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*
- Photomerges*
  - √ *Panoramas*
  - √ *Autoalign*
  - √ *Autofocus*
  - √ *HDR*
- 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*
- Make fine digital prints of higher quality than your best analog prints*
  - √ *High end scanning for digital prints.*
  - √ *Black and White and color*
  - √ *Creating custom printer profiles*
  - √ *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 Asset Management*
  - √ *Develop specialized keyword sets*
  - √ *Develop archive strategies*
- Develop a Digital Final Project*

A lot to learn.... Therefore, we want to give you advice based on past experience--your success in learning these advanced photographic controls is predicated on your having learned all the **Learning Outcomes of the Digital Imaging II class** (for specifics, see Peter's syllabus on his website: <http://www.chicagomediaworks.com>). If you find yourself ill-prepared, you will know it during our first class session. If so, it is your responsibility to bring yourself up to digital speed. The following resources are available to help you: your textbook from Digital Imaging II, and the sequence of Photoshop tutorials accessible through lynda.com (go to the "Training" tab on your Oasis homepage and click on the link. The tutorials are extraordinary, available 24X7, and are free. **You have four weeks to remediate any deficiencies. After that, we move forward quickly. If you are not prepared to do so, it is quite probable that you will not do well in this class.**

We are *committed* to teaching you the digital knowledge that you need to survive as photographers in the real world. Reading the handouts, and the prepared notes that we 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.

**DO NOT ALLOW YOURSELF TO FALL BEHIND. WE MOVE QUICKLY IN THE FIRST FEW WEEKS AND IT IS *EXTREMELY* DIFFICULT TO CATCH UP ONCE YOU FALL BEHIND.**

**Grading policy and evaluation procedures**

Credit hours:	3
Grading scale:	<p>We grade <b>only</b> on the quality of your work as a professional-in-training and that your work has been handed in by each deadline. We do not grade for “effort” or for “improvement”—we assume both. We do not respond positively to explanations for lack of work other than for jury duty, jail or military duty, or to appeals to raise a grade in order to remain a Photography major or to graduate on time, etc. We give grades as follows (the percentages are approximations, and we reserve the right to alter them for individual students based on class performance):</p> <p><b>Assignments: (50% of grade).</b> You will be graded at each deadline and, like any professional deadline, if you miss it you may <b>NOT</b> make it up unless you have previously arranged to do so with us. Late assignments without such previous arrangements will <i>not</i> be graded. However, you may <i>always</i> hand in late assignment, but for <i>feedback</i>, only</p> <p>F for the assignment if you miss it; D, C, B, or A for quality of work if you meet it.</p> <p><b>Quizzes and Tech Exam: (25% of grade).</b> There will be one or more practicums and a final technical exam based on lectures, vocabulary, handouts and readings. No practicums, midterm or 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 us.</p> <p><b>Final Project: (25% of grade).</b> During the semester you will produce a fine portfolio of 12-15 prints. (6-8, if murals) The final project will be a cohesive body of work incorporating digital techniques and problem-solving skills learned during the course.</p>
Requirements and assignments:	<p>Assignments, practicums and final project are listed in the syllabus. You should 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 performance to date.</p>
Standards and proportions used:	<p><b>Grading Scale:</b></p> <p>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</p>

	<p>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.”</p> <p><b>F</b> If you are absent from your final presentation(s); incomplete course requirements, poor work quality. (Normally, some students receive this grade).</p> <p><b>D</b> Below average quality of work and with below average participation.</p> <p><b>C</b> Work of average quality and with average participation.</p> <p><b>B</b> Assignments presented on time, good participation, and steady significant efforts throughout. (Normally, a significant number of students receive this grade).</p> <p><b>A</b> “B” requirements, along with outstanding participation and work. (Normally, a small number of students receive this grade).</p> <p>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)</p>
Return student work	All prints will be returned to you by the last class period. After that, we do not have the storage space to retain prints, and they will be recycled.

### Classroom policies

Academic Integrity and Courtesy:	<p>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 or 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. We will follow those policies in any instance of academic dishonesty.</p> <p>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).</p> <p>Courtesy will be observed at all times in our classroom (this also means that texting and emailing may be done during class breaks, only).</p>
----------------------------------	--

Satisfactory Academic Progress:	<p><a href="http://students.colum.edu/handbook/entries/satisfactory-academic-progress-policy">http://students.colum.edu/handbook/entries/satisfactory-academic-progress-policy</a></p> <p>“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.</p> <p>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 indicators will be used by your teacher to make that determination:</p> <ul style="list-style-type: none"> <li>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).</li> <li>ii) Student arrives more than 15 minutes late or leaves more than 15 minutes early 3 out of 5 class sessions.</li> <li>iii) Student has earned a grade lower than C on the majority of graded assignments so far (including quizzes, homework, in-class activities, etc.).</li> <li>iv) Student has turned in the majority of assignments more than 1 day late.</li> <li>v) If the semester ended at week 5, the student would have a grade lower than C for the class.”</li> </ul>
Attendance policy:	We strongly advise against missing a single class because of the amount of information covered and the fact that almost every week <b>is</b> a work deadline. In a nutshell: our experience is that it is the rare student who misses three classes who still manages to pass the course. No student has ever passed having missed four classes.
Absences:	You must plan ahead for any absence by emailing us 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 changing 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 <b>NOT</b> make it up unless you have previously arranged it with us. Late assignments without previous arrangement will <i>not</i> be graded. You may always, however, hand in a late assignment <i>for feedback, only</i> . F for the assignment if you miss it; F, D, C, B, or A for quality of work if you meet it.

### **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](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](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. We will make every effort to keep you informed of changes in the schedule. Some items may change at our discretion, but the overall workload will not.

# SYLLABUS

## Class 1 [September 12] COURSE ORIENTATION, FILM BASED DIGITAL WORKFLOW

### Introduction

Questionnaire. Student Portraits: PhotoBooth, screenshots

Competency-based course, class partition, texts, readings, assignments, weekly student folder, final project, five-week review window, Lynda.com tutorials, hand cleanliness, copying class materials, backing up files and optimizing your home hard drive, multi-site archiving. Checking your eyesight acuity and camera focusing. Student email about internship + workflow.

Handout: Digital Imaging III questionnaire

Lecture: **Film-based Digital Imaging Workflow review**

Demo: **Film-based digital workflow steps**

(Specifically: Master file concept, Imacon scanning, preferences, color settings, resizing, correcting perspective and tilts, content-aware fill, using Transform tools, Adjusting perspective, setting black and white points, neutral gray point, semi-neutrals, adjusting layer masks, threshold adjustment layer, setting black point and white point and neutral gray in levels, curves adjustment layer, 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, naming convention, saving layered files, saving a copy, flattening and converting to appropriate file formats).

Dropping items into class "drop box".

Following directions about naming conventions.

Advice on hard drives, and on final projects.

Copy: Class One folder

(bridge\_photoshop\_prefs\_settings.pdf, digital imaging III questionnaire.pdf, digital\_imageterms\_alha\_2008.pdf, digital\_imageterms\_categories\_2008.pdf, f-stops.pdf, external\_hard\_drives.pdf, ace\_exam\_guide\_photoshop.pdf, filmbased\_digitalworkflow.pdf, fulltime\_studio\_manager.pdf, digitalcapture\_workflow\_2011.pdf, calibrating\_digital\_darkroom.pdf, linear\_gamma.pdf, non\_destructive\_imaging.pdf, understanding\_DigitalrawCapture.pdf, Linear Gamma.pdf, Shewe\_sharpening.pdf, semi-neutrals.pdf) maisel\_photoassistPosition.pdf, workflowinternship.pdf, sharpening\_shewe.pdf)

To do:

1. Download and read the Week One folder handouts.  
(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. Read and play the tutorials from Lynda.com corresponding to the digital imaging techniques you need to review:
3. Sign the "Statement of Understanding" on the last page of this syllabus and bring to Week Two.
4. Take the Typology profile that gives you (and us) a sense of how you best process information. Test is located at the following 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: "(YourlastnameFirstname)\_typology.png" and place it in the 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).
5. Memorize the steps of the film-based workflow.
6. Using the scan provided in the Week One folder, prepare for printing by following all steps of the film-based workflow. Leave all layers intact. Res down to 72ppi. Label it



*exactly* as follows: (YourlastnameFirstname)\_analog.psd” and place in the class Dropbox.

## **Class 2 [ September 19 ] CAMERA RAW BASED DIGITAL WORKFLOW**

**DUE: Statement of Understanding, Myers-Briggs typology profile, film-based digital file**

Lecture: **Digital Capture-based Workflow review**

**Converting TIFFs for camera raw development using Adobe ACR converter**

Demos: **Digital Capture-Based Workflow review.**

Copy: Class Two folder:

To do:

1. Download and read the Class Two folder handouts. *Read and memorize:* digitalcapture\_workflow\_2011.pdf. Read: digital\_imagterms\_categories\_2008.pdf, digital\_imagterms\_alpha\_2008.pdf, Mini-Projects.pdf , Understanding Digital Capture.pdf, DGIII\_LearnCamera\_D.pdf.
2. Read and play the tutorials from Lynda.com corresponding to the digital imaging techniques you need to review:
3. Bring 3-4 digital or analog prints of your work that you think are well printed or that illustrate your need for this class in order to print them better.
4. Using the camera raw file provided in the Week Two folder, prepare for printing by following all steps of the digital capture-based workflow. Label it *exactly* as follows: (YourlastnameFirstname)\_digital.psd” and place in the class Dropbox.
5. Read your digital camera manual. Know each item on the DGIII\_LearnCamera\_D.pdf checklist. Bring your camera and manual to Class Three.

## **Class 3 [ September 26 ] PRINTS, CAMERA RAW DIGITAL WORKFLOW, CAMERA KNOWLEDGE**

**DUE: Camera Raw file, 3-4 prints, digital camera manual**

**In class:**

- Review 3-4 prints, (1 hour)
- Review Camera Raw file + Intro to Smart objects (2 hrs.)
- Controlling your digital camera (Groups: 1 hour)

Demos: **Camera Knowledge**

(Items on Camera Knowledge checklist, holding techniques, panning while standing, using camera as defensive weapon).

**Digital Capture-Based Workflow, Smart Objects.**

Copy: Class Three folder

(Calibrating the Digital Darkroom.pdf, linear\_gamma, how about the article on pro photo?

To do:

1. Read and play the tutorials on Lynda.com that correspond to the techniques, above, and read the corresponding vocabulary in the Digital Imaging Terms.
2. View the following 12 minute BBB video on the relativity of color perception: <http://www.petapixel.com/2011/08/12/do-people-always-see-the-same-things-when-they-look-at-colors/>
2. Take the Online Color Challenge to test how well you see colors. Test is located at the following URL: [http://www.xrite.com/custom\\_page.aspx?PageID=77&Lang=en](http://www.xrite.com/custom_page.aspx?PageID=77&Lang=en) It will take approximately one-half hour to complete. Take a screenshot of the results page entitled “Online Color IQ Challenge Results”. ). Label it *exactly* as follows: “(YourlastnameYourfirstname\_color).png” and place it in the class Dropbox.
3. Lowligh Sensor test and check. Start at lowest ISO and move up to the highest. Pick best exposure from each ISO.
4. Using smart objects and masks, develop at least three smart object layers of the same file in order to make an expanded tonal image. Due Class Four.

#### **Week 4 [ October 3] COLOR AND COLOR MANAGEMENT**

**DUE: X-Rite Color Challenge, Lowlight Sensor Test, Smart Object File.**

In class: Results of color perception and Myers-Briggs profiles,

Lecture: **Color Management and Closed loop concept.**

(How your Eye/Film/digital sensor sees color

Video: <http://www.youtube.com/watch?v=Rab5I5SDm3I>)

Demo: **InDesign and mini-projects**

**Calibrating monitors** via System and Gretag MacBeth EyeOne software, using

Color Synch application, printing paper profile targets, head alignment, Mini-project Write-ups

Copy: Class Four folder

( .pdf, ) Mini-Projects.pdf, Digital Lab printing setup.pdf, iOne RGB targets, 3800, 4800, 4880 head alignment directions.

Handout: Printing paper #1

To do:

1. Mini-Project #1: Color Spaces. Compare two different monitors and their color spaces, and two different paper printing profiles. Compare one monitor space to Adobe RGB 1998, and compare one of your paper profiles to Adobe RGB 1998. Write down your steps and make screen shots to support what you are finding. Your analysis should include your understanding of how the devices differ from each other and how each compares to Adobe RGB 1998. Bring to Class 5.
2. Calibrate your own studio monitor by checking out the Gretag MacBeth Eye-One take-home calibration kits in the Digital Imaging Lab.
3. In case you need it: read the directions on head alignment for the 3800, 4800 and 4880 printers.
3. Print the two iOne RGB targets using the Adobe Color Printer Utility to open and print the profile. Bring to Class 5.

#### **Class 5 [ October 10 ] PROFILES AND PROOFING FOR PRINTS**

**DUE: Mini-Project Write-up #1: Color Spaces, iOne RGB Targets**

Lecture: **Rendering Intents, Black Point Compensation**

Demo: **Making paper profiles with X-Rite iOne Match**

**Soft proofing** (class breaks into groups and makes paper profile). Soft proofing 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), downloading and installing printer profiles. Downloading and installing factory profiles. Printer settings, platten gap, head alignment, roll paper.

Copy: Class Five folder

(Profile naming.pdf, headalignment

Handout: Printing paper #2

To do:

1. Mini-Project #2: Paper Profile. Create paper profile using X-Rite iOne Match for the paper that you have been given. Follow the profile naming convention. Use the following file: photodisktest.jpg. Enlarge the canvas. Using Text tool, with 12 pt Ariel, identify the following: name of paper, paper setting used to print, choose 1440 resolution, rendering intent used. Name the file as follows: (LastnameFirstname)\_iOne\_(papername).jpg. Print the same file using the manufacturer's profile and compare. Write down your steps and make screen shots to support what you are finding. Your analysis should include your understanding of how the profiles differ from each other. Due Class 6.

## **Class 6 [ October 17 ] PROFILES AND PROOFING FOR PRINTS**

### **DUE: Mini-Project #2**

In class: review prints

Demo: **Making paper profiles with Spyder3 Print**

Copy: Week 6 folder  
(final project guidelines)

To do:

1. Mini-Project #3: Paper Profile. Create paper profile using Spyder3Print for the paper that you have been given. Follow the profile naming convention. Use the following file: photodisktest.jpg. Print the same file using the manufacturer's profile and compare. Write down your steps and make screen shots to support what you are finding. Your analysis should include your understanding of how the profiles differ from each other. Due Class 7.
2. First draft of final project proposal due Class 8.

## **Class 7 [ October 24 ] VISITING PROFESSIONAL PRINTER, PRINTING WORKFLOWS**

### **DUE: Mini-Project #3**

In class: review prints, final project ideas.

Lecture: **Aaron Gent from Black Point Editions. BPE workflow**

Demo: **Making custom camera profile using DNG Profile Editor and X-rite color checker chart and passport.**

Copy: Week 7 folder  
(PT write up on using Profile editor)

To do:

1. Mini-Project #4: Work for Hire. Pick one of your own files that has been challenging to print. Using everything that you have learned (including sharpening, softproofing, etc), make the best print. Now give your printing partner the raw, unadjusted file to make the best print that they can from your file. At the edge of the image, identify the photographer and the printer's names. If raw we need the raw files in addition to the PSD layered file.
2. First draft of final project proposal due Class 8.

## **Week 8 [ October 31 ] DIGITAL ASSET MANAGEMENT**

### **DUE: Mini-Project #4, Final Project draft proposal**

In class: final project write-ups

Lecture: **Digital Asset Management**

Demo: **Lightroom and catalog handling**

Copy: Class 8 folder

Demos:

To do:

1. Choose final project paper and size. Buy that paper in order to profile it next week.

## **Class 9 [ November 7 ] DIGITAL ASSET MANAGEMENT**

### **DUE:**

In class:

Lecture: **Digital Asset Management**

Demo: **Lightroom and catalog handling**

Copy: Week 9 folder  
(Versergreyscale v2.tif, ink limit)

To do:

1. Mini-Project #5: Final Project Paper Profile. Profile the paper that you have chosen for

your final project. Now use that profile to print the Versergreyscale v2.tif gradient chart to identify your black and white points (ink limits).

**Class 10 [ November 14 ] DIGITAL ASSET MANAGEMENT, PHOTOMERGES (PANORAMAS, MERGES, ALIGNMENTS, ADVANCED MASKING)**

**DUE: Mini-Project #5: Final Project Paper Profile and Ink Limits**

In Class:

Lecture: **Digital Asset Management**

Demo:

Copy:

To do:

**Class 11 [ November 21 ] DIGITAL ASSET MANAGEMENT, PHOTOMERGES (PANORAMAS, MERGES, ALIGNMENTS, ADVANCED MASKING)**

Lecture: **Digital Asset Management**

Demo: HDR

Copy: Class 11 folder

(Photomatix: <http://www.hdrsoft.com/download.html>)

To do:

1. Choose a view with a huge dynamic range. Place camera on tripod. Bracket at least five exposures to encompass the entire dynamic range. Merge in Photoshop with HDR. Label it *exactly* as follows: (LastnameFirstname)\_hdr.psd and place it in the class Dropbox. Now merge the original files using Photomatix. Label it *exactly* as follows: (LastnameFirstname)\_photomatix.tif and place it in the class Dropbox. Due Class 12.

**Class 12 [ November 28 ] HIGH DYNAMIC RANGE IMAGES  
FINAL TECH EXAM**

**DUE: HDR Photo merge file**

In Class: Work on final portfolio prints

Demo:

Copy:

**Class 13 [ December 5 ]**

In class: Work on final portfolio prints

**Class 14 [ December 12 ]**

**DUE: FINAL PROJECT PRINTS, FINAL PRINT FILES WITH LAYERS INTACT, FINAL PROJECT DESCRIPTION, WEB GALLERY**

Critique and celebration

**TOM AND PETER HIGHLY RECOMMEND 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).
- Seth Resnick and Jamie Spritzer, THE PHOTOSHOP LIGHTROOM WORKBOOK, Focal Press; First Edition edition (October 31, 2008), \$28, 376 pages.
- 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, ADOBE 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. Black Point Editions, 1739 S. Halsted (drum scanning and b/w and color printing, by appointment), 312.491.8051. 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. Computer Discount 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](http://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. Utrecht, second floor, Champlain Building (watercolor paper, etc.), 312.629.6506. Pricewatch: [www.pricewatch.com](http://www.pricewatch.com), and Epinions: [www.epinions.com](http://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: [www.tshirley.com/links.html](http://www.tshirley.com/links.html).

**STUDENT UNDERSTANDING**

**(Please sign, date, cut from syllabus, and return at Week Two class session).**

I have read the Attendance and Grading Policies, Syllabus and Class Schedule for the Digital Imaging III 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.

NAME (PRINT) \_\_\_\_\_

SIGN \_\_\_\_\_

DATE \_\_\_\_\_