PHTO 205: ADVANCED IMAGING TECHNIQUES

Citrus College Course Outline of Record

Heading	Value
Effective Term:	Fall 2022
Credits:	3
Total Contact Hours:	108
Lecture Hours :	36
Lab Hours:	72
Hours Arranged:	0
Outside of Class Hours:	72
Prerequisite:	PHTO 101 or PHTO 202.
Transferable to CSU:	Yes
Transferable to UC:	No
Grading Method:	Standard Letter

Catalog Course Description

Established photo principles such as: proper use of cameras, filters, white balance, exposure, lighting equipment, and color analysis is emphasized in "Advanced Imaging Techniques." Students investigate advanced digital capture technologies to explore photographic image compositing, panoramic image production, High Dynamic Range (HDR) and aerial image capture. Students will acquire advanced postproduction digital workflow skills and advanced printing methods using Adobe Photoshop and ink jet printer technology. Material fee. 36 lecture hours, 72 lab hours.

Course Objectives

- Distinguish safe and appropriate procedures and practices utilized in a digital photography lightroom and print lab
- Acquire and apply advanced photography knowledge and skills including digital workflow practices encompassing image ingestion, image verification, preproduction, production and postproduction using Camera Raw and Photoshop. Students will demonstrate proficiency with acquisition techniques and output technologies.
- Uphold established photo principles while exploring new technologies.
- Recognize, analyze and isolate problems in the use of color balance, temperature and output.
- Utilize appropriate technologies for the given project or job assignment.

Major Course Content

1. Introduction to the visible light spectrum
2. Image compositing techniques
3. Kelvin color temperature, White balance techniques
4. The Kelvin color temperature scale
5. Panoramic image capture
6. Stitching of panoramic imager using Photo Merge
7. How to expose subjects under different light sources correctly
8. The photographic color wheel
9. Making prints, Evaluation of the color print, Mounting & framing color prints for presentation.
10. Ink Jet prints compared to light jet prints
11. Analysis and solution of common problems in color quality control
12. High Dynamic Range (HDR)
13. Aerial image capture
14. Professional uses of photographic service bureau labs

Lab Content

1. Color management techniques
2. Digital image manipulation
3. Illustration of digital software programs for image enhancements
4. Photographing for compositing
5. Photographing for panoramics
6. Aerial photography
7. Print presentation techniques
8. Evaluate finished prints
9. Print ink jet and light jet prints

Suggested Reading Other Than Required Textbook

Supplemental readings will be provided, also see the following web resources: http://kelbyone.com/ http://www.lynda.com/ http://dpbestflow.org/ http://xritephoto.com/

Examples of Required Writing Assignments

3-4 page research paper on a famous photographer.

Examples of Outside Assignments

1) Photograph a scene at different times of a 24-hour time frame. Use the same angle of view on all exposures. These pictures are to be exposed at least 4 hours apart to see how the Kelvin temperature changes the color of a picture.
2) Using the panoramic image capture method photograph a 6-10 images of landscape scene to stitch together
3) Produce 4 - 6 bracketed exposures to produce a High Dynamic Range (HDR) image.
4) Conceptualize an alternate reality, sketch or describe the alternate reality. Plan to photograph at least 6 - 10 different images to be used for an alternate reality image composite.
5) On campus, under your teacher's supervision use the drone camera to produce an aerial photograph of a specific part of the Citrus College campus. Use this image to produce an advertisement for Citrus College.
6) Use at least two different methods to create a perfect white balance for your image. You may want to consider the use of a color card, grey card or expo disc to produce a custom white balance setting to balance multiple color temperatures within your scene.

Instruction Type(s)

Lecture, Lab, Online Education Lecture, Online Education Lab