

# Syllabus

## ART 234 - Introduction to Digital Photography

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Spring Term 2017    March – May 13, 6:00-10:00pm    Monday classes

### Course Description:

This class is designed to provide students with the fundamentals of digital photography, from capturing images digitally and editing those images to using the images for display, presentation and sharing. The basic principles of photography will be discussed as well: digital camera operation, controls, function and purpose, lighting, composition, available (recommended) hardware and software

### Learning Outcomes:

Upon completion of the requirements of this course, the student should be able to:

1. Understand the basic principles of photography, including: exposure, shutter speed, aperture, ISO, depth of field, lighting and composition. Understand the camera, lenses and other accessories.
2. Understand technology as applied to digital imaging, including: white balance, file formats (.jpeg, .tiff, RAW, NEFF, etc.), dynamic range, file transfer, file storage, care of digital storage media, image resolution, working with digital images and various image editing software.
3. Use digital images in presentations.
4. Capture digital images for class discussion.

### Materials Required:

1. A Digital camera –Digital Single Lens Reflex Camera (SLR, interchangeable lenses) *Examples: Nikon D5100, D300, Canon 60D, Digital Rebel, Sony Alpha, Pentax D100, Olympus 300, etc.* or an adjustable Point-and-Shoot digital camera(Must be able to adjust SHUTTER SPEED, APERTURE and ISO) (and have fresh/charged batteries).
2. Digital media – e.g. – Compact Flash (CF) card, Secure Digital (SD) card, or other appropriate media for the camera in use.
3. Tripod (optional, but very useful!).
4. Electronic Flash (optional, but useful!).
5. Access to printer or ability to have prints made for some assignments.
6. Please always bring the manual, memory card(s) and freshly charged batteries for your camera to every class!

### Text:

“[The Beginner's Photography Guide](#)” 2<sup>nd</sup> Edition (Chris Gatum,  
©2016 DK, ISBN-13: 978-1-4654-4966-5

## Detailed Content:

An introduction to the fundamentals of digital photography, including the operation of digital cameras and related hardware, the uses of the various digital media, and the basic functions of image editing software. Additional topics will include basic principles of photographic aesthetics and composition, and the history of photography. Course content will consist of lectures and demonstrations, with an emphasis on hands-on learning through the application of digital techniques to sample photographs and to the student's own work. Upon satisfactory completion of the course, the student will have the requisite knowledge to determine the appropriate equipment, materials, and software to meet their basic photographic requirements. The student will know the basic functions and capabilities of common digital devices and software, and the skills required to utilize those functions and capabilities.

## Course Schedule

### ☛☛☛ **Week 1 Assignment: Bring six (6) photos taken within a week of the first class:**

**Two (2) “people” pictures**

**Two (2) pictures of a tall building**

**Two (2) pictures of something moving fast**

☛ **Leave all six pictures on your memory card and bring with your camera to the first class and with a charged battery!**

Introductions. Discussion of course content, goals and objectives, expectations and grading structure.

Brief history of photography, including digital. Discussion of camera types, lenses, accessories.

Getting to know your camera – the controls & what they mean.

Discussion of the “tools” and fundamentals of capturing an image. exposure, shutter speed, aperture and the lens, light meter, camera care, sensor care. Media and care of digital media. Transferring images – the “Computer-camera interface”. Computer programs used in imaging. Discussion of six assignment photos.

**Assignment for Week 2: Automatic and Program exposure modes.**

**See Assignment Handout: “The Alphabet” & other shots**

**Reading: Text: 9-41, 102-119, Equipment & lenses**

### **Week 2: MODES**

**Modes:** Exploring the Program, Shutter Priority, Aperture Priority and Manual modes, as well as discussing the other fully automatic modes. When and why to use each of the selectable modes. Exposure Compensation - how and when to use. White Balance and Picture/Color Controls.

**Assignment for Week 3: Shooting in the various modes.**

**Reading: Text: 40-79, Modes, Histogram**

**Week 3:** Review of Assignment 2. Critique and evaluate student photos of “**MODES**” assignment. **Shutter Speed:** Capturing motion, stopping action, how shutter speed affects capturing images. Creative uses of varying the shutter speed. Using tripods and/or other means of stabilizing the camera. Introduction to image editing & file manipulation.  
**SHUTTER SPEED**  
**Assignment for Week 4:** **Shutter Speed, White Balance and Picture style/color control exercises.**  
**Reading:** **Text: 62-73, 122-129. Shutter Speed & White Balance/Color Temperature**

**Week 4:** Review **shutter speed** assignment. Critique and evaluate student Photos from Week 2. Aperture, lenses and depth of field. Isolating the subject by using the aperture, lenses and depth of field. Focal length and use of lenses.  
**APERTURE PRIORITY**  
**Assignment for Week 5:** **Aperture.**  
**Reading:** **Text: 54-61**

**Week 5:** Review **aperture** assignment. Critique and evaluate student photos from Week 4. Exposure – how shutter speed and aperture are related, varying exposure in automatic modes and in manual modes. More on Exposure Compensation. **Mid-Term Quiz.**  
**MANUAL MODE**  
**Assignment for Week 6 :** **Shooting photos in the manual mode & Using Exposure Compensation**  
**Reading:** **Text: 74-5, 80-85**

**Week 6:** Review of Manual Mode/Exposure Compensaton Assignment. Critique and evaluate student photos from Week 5. Composition and composition Techniques. Electronic Flash – using flash For main light and fill flash. Balancing existing (ambient) light with flash.  
**Composition & Flash**  
**Assignment for Week 7:** **Composition assignment Electronic flash assignment**  
**Reading:** **Text: 122-163 ,**

**Week 7:** Review Composiiton & Flash assignment. Critique and evaluate Student photos from Week 6. Storing digital images. Transferring, emailing and manipulating digital images, working with various file types on the computer. Review of topics covered in course. Basic Editing and image manipulation. Various “types” of pictures.  
**Assignment for Week 8:** **Final Assignment images – Portfolio, & Creative Shot(s)**  
**Reading:** **Text: 164-181**

**Week 8:** Review final assignment. Critique and evaluate student photos from Week 7. Advanced techniques - overview. Discussion of uses of digital images. Overview and discussion of major elements of previous sessions and Q & A session. Review of new photography equipment & accessories.  
**Final Exam**

**Course Grade** will be based on a point system:

<b>1). Weekly shooting assignments</b>		<b>413 points</b>
<b>2). Mid-term Quiz</b>	-	<b>90 points</b>
<b>3). Final Exam</b>	-	<b>105 points</b>
<b>4). Class participation &amp; attendance</b>	-	<b>160 points</b>

**Total Possible Points: 768 points**