GAVILAN COLLEGE
5055 Santa Teresa Blvd
Gilroy, CA 95020

Course Outline

COURSE: ART 80 DIVISION: 10 ALSO LISTED AS:

TERM EFFECTIVE: Spring 2014 **Inactive Course**

SHORT TITLE: DIGITAL PHOTOGRAPHY

LONG TITLE: Digital Photography

Units	Number of Weeks	Type	Contact Hours/Week	Total Contact Hours
3	18	Lecture:	2	36
		Lab:	4	72
		Other:	0	0
		Total:	6	108

COURSE DESCRIPTION:

The study of digital photography from digital camera to the computer-based printer or digital media. Artistic, theoretical, and technical aspects will be considered. Topics include information about types and purchasing of digital cameras; theory, mechanics, and art of digital imagery; digital darkroom; eccentricities of digital photo taking; stitching photos for virtual reality; and preparing digital images for print, World Wide Web and other digital media. This course has the option of a letter grade or pass/no pass. ADVISORY: CSIS 1 or CSIS 2/2L or ART 8A or equivalent computer experience.

PREREQUISITES:

COREQUISITES:

CREDIT STATUS: D - Credit - Degree Applicable

GRADING MODES
- L - Standard Letter Grade
- P - Pass/No Pass

REPEATABILITY: N - Course may not be repeated

SCHEDULE TYPES:
- 02 - Lecture and/or discussion
- 03 - Lecture/Laboratory
- 04 - Laboratory/Studio/Activity

STUDENT LEARNING OUTCOMES:

1. Create photographic artworks utilizing compositional considerations, and design elements and principles such as: line, shape, volume, balance, emphasis economy, variety, repetition, rhythm, space, texture, value, and color.
Measure: projects, exercises, performance, demonstration, homework, labwork, critique and presentation
ILO: 5,6,1,7,2
GE-LO: A1, A6, C1, C2, C5
2. Create a digital photographic portfolio in a variety of styles.
Measure: projects, exercises, performance, demonstration, homework, labwork, critique and presentation
ILO: 1,7,5,2,3,6,4
GE-LO: A1, A6, C1, C2, C5
3. Research and write essays dealing with photographic and digital history, artists, and digital photographic techniques and processes.
Measure: essays, critiques, discussions, homework, and exams.
ILO: 7,1,2,3
GE-LO: A1, A6, C1, C2, C5
4. Critique and discuss digital photographic ideas and concepts.
Measure: essays, critiques, discussions, homework, and exams.
ILO: 1,7,5,2,3,6,4
GE-LO: A1, A6, C1, C2, C5
5. Analyze and discuss digital photographic art theories.
Measure: essays, critiques, discussions, homework, and exams.
ILO: 1,7,5,2,3,6,4
GE-LO: A1, A6, C1, C2, C5
6. Use digital photographic cameras, computer equipment and digital programs utilizing digital techniques to create dynamic digital photographic images.
Measure: projects, exercises, performance, demonstration, homework, labwork, and presentation
ILO: 5,6,1,7,2
GE-LO: A1, A6, C1, C2, C5

CONTENT, STUDENT PERFORMANCE OBJECTIVES, OUT-OF-CLASS ASSIGNMENTS
Inactive Course: 03/25/2013
2 lecture / 4 lab per week (16 weeks) Hours CONTENT: WEEK 1-2
4 lecture / 8 lab
Lecture:
Introduction to the class. Define outcomes, grading, assignments, and lab hours. Why Use a Digital Camera: affordability and image quality, storage and duplication, availability and flexibility, speed and convenience, color and focus modifications. Types of Digital Cameras: entry-level digital cameras, who is using entry-level digital cameras? deluxe point-and-shoot digital cameras, professional digital cameras, who uses professional digital cameras?
Chronological history of the invention of digital photography.
History of digital photographic tools and media.
History of digital photographic artists from 1970 to present.
Digital photographic aesthetics, composition and design elements.

Digital photographic terminology.
Talking and writing about digital photography.
Digital photographic topics- may include but not limited to:
Nature, Photojournalism, Self-Portraiture, Studio, etc.
Week 1-2
Exercises / Reading / Homework:
Gallery or Exhibition review of photographic artwork.
Reading assignments from text and/ or handouts on photographic history, aesthetics, composition, design elements, terminology and writing & discussion for critiquing.
Research magazine or web for digital images. Read chapters on why to use a digital camera and the types of digital cameras.
Week 1-2
Lab assignments:
Group critique and discussion of various digital artworks. Go to lab, log in, and get acquainted. Go through the online tutorials. Search the net for digital pictures. Get a description of three digital cameras with at least one being a professional model.
Week 1-2
Performance Objectives:
Students can explain the circumstances that might require a digital photography and the level of camera required.
Students can identify different types of digital cameras.
Students can recall digital photographic timelines
Students can identify digital photographic processes
Students can identify digital photographic artists
Students can interpret and analyze digital photographic images
Students can discuss and critique digital photographic images.
WEEKS 3-4
4 lecture / 8 lab
Lecture:
How Digital Cameras Work: from lens to image sensor, diaphragm and shutter (or lack thereof), focal lengths, how the image sensor works, photosites, pixels and resolution, CCD versus CMOS, storing the image, image size and compression. The Mechanics of Digital Imagery: pixels and bits, converting between color modes, images for the web, print resolution, image file formats, compression.
Digital camera controls- may include but not limited to: apertures, shutter speeds, compensation dial, white balance, contrast, saturation, special effects, shutter release, lens, lens release, depth of field dial, depth of field preview, pc cord socket, sync flash, hot shoe, motor drive socket, lens release, meter, view finder, focus, etc.
Week 3-4
Exercises / Reading / Homework:
Reading assignments from text and/ or handouts on digital camera controls.
Practice using digital camera controls.
Complete digital camera controls assignment.

Written analysis of various digital photographic artworks.
Go into the field and shoot 3 images: each at 2 different focal lengths. Read chapters on How Digital Cameras Work and The Mechanics of Digital Imagery.
Week 3-4
Lab:
Digital camera controls assignments which incorporate the following as hands on exercises- may include but not limited to: apertures, shutter speeds, white balance, saturation adjust, contrast adjustment, special effects,
compensation dial, shutter release, lens, lens release, depth of field dial, depth of field preview, pc cord socket, sync flash, hot shoe, motor drive socket, lens release, meter, view finder, focus dial, etc.
Group critique and discussion of various digital photographic artworks.
Download the images in the computer. Arrange them by shortest to longest focal length used to take the pictures. Print the set. Save the images in different file types. Compress two of the images using different quality settings. Compare the file size before and after compression.
Week 3-4
Performance objectives:
Students will be able to explain the concept of focal length. They will be able explain how a digital camera takes and stores images. They will be able to analyze a digital picture save it in the best file format and compression for a certain situation.
Students can identify digital camera controls.
Students can demonstrate use of digital camera controls.
WEEK 5-6
4 lecture / 8 lab
Lecture:
The Digital Camera Interface: viewfinder and LCD, rangefinder versus SLR, media and connectivity, USB. Shopping for a Digital Camera: what will you be using the camera for, minimum image-quality standards, what features do you really want, lens performance.
Basic zone system.
Photographic lighting equipment.
Photographic lighting techniques.
Available light versus studio lighting.
The Desktop Studio: the set, light, flash equipment, light meters.
Week 5-6 Exercises / Reading / Homework:
Reading assignments from text and/ or handouts on lighting.
Practice using various lighting techniques.
Read chapters on the digital camera interface and shopping for a camera. Analyze your photographic interests and determine what camera and accessories would fit those needs. Analyze the web pictures of the camera to get a thorough understanding of the user interface. Written work addressing these issues.
Week 5-6

Lab assignment:
Research on the web for cameras that would fill your needs. Print out the information.
Exercises using the basic zone system.
Exercises using photographic lighting equipment.
Exercises using photographic lighting techniques.
Exercises using available light and studio light.
Week 5-6
Performance objectives:
Student will be able to analyze their photographic style and needs in order to make an accurate assessment as to what camera and accessories they should purchase.
Students will be able to explain the camera's user interface in detail.
Students can identify lighting equipment.
Students can choose and apply lighting techniques.
Students can set up and use lighting equipment.
Students can make digital image utilizing various lighting techniques and procedures.
WEEK 7-8
4 lecture / 8 lab
Lecture:
The Digital Darkroom: the computer, Mac versus Windows: which OS is better, software, memory, monitor and video card, gamma adjustment, and printer types. Equipment setup. Digitally processed images evaluation.
Midterm review.
Week 7-8
Exercises / Reading / Homework:
Read chapters on the digital darkroom and studio.
Research on the web and design your own desktop studio.
Reading assignments from text and/ or handouts on digital image processing.
Practice digital processing procedures.
Week 7-8
Lab assignment:
List the equipment in the Digital Media Center and research the items on the web. Write down the costs and determine from the specification if the equipment meets the needs of the digital photography class. Work on designs for Digital Darkrooms.
Week 7-8
Performance objectives:
Students will be able to specify equipment for use in a digital darkroom and studio. They will be able to set up a small studio.
Students can identify various digital processing equipment.
WEEK 9-10
4 lecture / 8 lab
Lecture:
Essentials of Digital Photography: Creating with Light, The Digital

Zone System, Exposure Partners: ISO, Aperture, and Shutter Speed, Creative Exposure Techniques, Aperture and Depth of Field, Lenses, White Balance, Saturation, Contrast.
Midterm exam- multiple choice, compare and contrast, and short essay.
Week 9-10
Exercises / Reading / Homework:
Read chapter on the essentials of photography. In the field, shoot pictures in at least 3 different light conditions. Note and log the settings of the camera. Shoot one picture that has an eerie or very emotional lighting to it. Write a short statement as to your emotion at the time of taking the picture.
Reading assignments from text and/ or handouts on digital photographic printing.
Practice digital photographic shooting and processing procedures.
Week 9-10
Lab assignment:
Print your pictures in the lab in both black and white and color. Do not retouch the images using the software. Save all your files.
Practice digital photographic shooting and processing.
Practice camera controls.
Week 9-10
Performance objectives:
Student will be able to explain settings for good picture taking.
Students will be able to analyze a picture in terms of light quality.
Students will be able to use light as a creative/design element.
Students will be able to set up files for printing and print to color and black and white.
WEEK 11-12
4 Lecture / 8 lab
Lecture:
Correcting Your Photographs: straightening and cropping, brightness and contrast, correcting the levels, correcting color, restoring saturation, using unsharp mask, suppressing noise and artifacts.
Dodging and burning.
Dust and scratch removal techniques.
Printing formats and methods. Demonstrate what makes a good photograph to print and the steps needed to make it so.
Week 11-12
Exercises / Reading / Homework:
Read chapter on correcting your photographs. Study of pictures from the previous assignment and identification of artifacts, color correction, and/or sharpening.
Reading assignments from text and/ or handouts on photographic printing techniques.
Practice dodging and burning digital photographic images.
Week 11-12
Lab assignments:
Digital processing corrections to photographs. Make a composite of all

the images, adjusting each image so that they work together in one layout.
Practice digital photographic printing.
Practice dodging and burning, color correction, sharpening digital images.
Practice dust and scratch removal techniques.
Practice different printing formats and methods.
Week 13-14
4 lecture / 8 lab
Lecture:
Preparing Images for Print: RGB and converting to CMYK, color matching, using a personal printer, preparing for professional output. Preparing Images for the Web: putting the squeeze on file size, choice of file formats (i.e., JPEG, GIF, PNG), indexing colors for GIF. Archiving Digital Images: burning CD-ROMs for Macintosh and Windows, compression utilities, cataloging your archives, creating thumbnails, creating a web catalog, creating a print catalog, creating a DVD slide show. Alternative and experimental digital photographic methods. Handcoloring, filters, and collage.
Week 13-14
Exercises / Reading / Homework:
Read chapter about Preparing Images for Print and the Web. Analyze your pictures and determine what steps to take to improve them for print and what steps to take to improve them for the web (screen).
Reading assignments from text and/ or handouts on alternative and experimental digital photographic techniques.
Practice using alternative and experimental techniques.
Week 13-14
Lab assignment:
Using the computer, prepare and print images from the previous assignment. Archive all photos on a CD. Create a web catalog and a DVD slide show of selected images.
Practice alternative and experimental digital photographic printing.
Practice Handcoloring, filters, and collage.
Week 13-14
Performance objectives:
Students will be able to analyze images and determine what techniques to use to make them better for print or display on a computer or TV screen.
Students will be able to produce a web catalog of images and a slide show on DVD.
Students can identify alternative and experimental digital photographic methods.
Students can create collages, apply filter applications and digitally handcolor prints.
Week 15-16
2 lecture / 2 hour final / 4 hour lab
Lecture:
Art and Design using Composite Images: creating the design, shooting

images that work together, modifying and compositing the images.
Immersive Imaging and QuickTime VR: making panoramic movies, setting up the camera on a tripod, stitching the panos, adding interactivity and hotspots, putting the movie together, stitching, embedding immersive images in a web page.
Studio lighting equipment, tools, and setup for Still life and Portrait photography. Photographic studio safety.
Final Exam review.
Week 15-16
Exercises / Reading / Homework:
Read handouts on compositing images for art. Sketch a composite art project. Read chapter about immersive imaging and QuickTime VR. Plan a VR project. Write down the steps and photos needed to create it.
Reading assignments from text and/ or handouts on studio techniques, still life photography techniques, and portrait photography techniques.
Practice studio photography.
Week 15-16
Lab assignment:
Shoot pictures for the composite art project. Using the computer, construct the composite artwork. Shoot pictures for the VR project. Prepare the images and stitch them together to make the movie. Add interactivity. Make a web version.
Practice studio still life photography techniques.
Practice studio portrait photography techniques.
Work with studio equipment and tools.
Practice setting up and breaking down studio equipment.
Practice safe studio management.
Week 15-16
Performance objectives:
Students will be able to create a single piece of art by compositing multiple images. They will understand the planning and steps needed to design a VR movie. They will be able to perform these steps: shooting the images, preparing and stitching them together on the computer.
Students can identify and use studio equipment and tools.
Students can properly identify and create still lives, portraits, and other studio photographic work.
Students can demonstrate studio safety procedures.
Presentation of more digital image art. Discussion of VR, using digital images in movies/video, and the possibilities for the future.
Preparation for the final exam. Last class, take the final exam.
Digital photographic bodies of work and portfolios.
Digital photographic presentation, installation, and exhibition.
Final Exam: multiple choice, compare and contrast, and short essay.
Final Critique portfolio critique and discussion. / Reading / Homework:
Read the handouts on digital photo art.
Reading assignments from text and/ or handouts on digital photographic selection, digital photographic matting techniques, and digital photographic portfolios.

Study for final exam.
Students will be able to discuss issues about digital photographic art.
They will be able to understand what techniques may be useful in creating digital photographic art.
Students can identify and prepare digital photographic artworks suitable for a body of work designed as a portfolio.
Students can properly mat and frame digital photographic artwork.
Students can design a digital photographic presentation.
Students can install digital photographic artwork.
They will be able to pass the final exam
Finish the project from last class.
Select digital photographic artworks for body of work.
Mat and mount digital photographs.
Prepare digital photographic portfolio.
Take the Final Exam / critique (2 hours).

METHODS OF INSTRUCTION:
Lecture, video, cd/dvd, slides, computer presentations, Internet, examples, demonstrations, lab critiques, exercises and projects, digital camera and computer demonstration, web and other media examples. Over-the-shoulder instruction in digital media lab.

METHODS OF EVALUATION:
The types of writing assignments required:
Written homework
Reading reports
Term papers
The problem-solving assignments required:
Homework problems
Field work
Exams
The types of skill demonstrations required:
Class performance
Field work
Performance exams
Other: Lab Projects
The types of objective examinations used in the course:
Multiple choice
True/false
Completion
Other: Short essay
Other category:
None
The basis for assigning students grades in the course:
Writing assignments: 10% - 30%
Problem-solving demonstrations: 20% - 30%
Skill demonstrations: 20% - 30%
Objective examinations: 10% - 30%

Other methods of evaluation: 0% - 0%

REPRESENTATIVE TEXTBOOKS:

Required:

Joseph Ciaglia, "Introduction to Digital Photography", Prentice Hall, 2005, or other appropriate college level text.

ISBN: 0131175157

Reading Level of Text: 12, Verified by: dvt

ARTICULATION and CERTIFICATE INFORMATION

Associate Degree:

GAV C1, effective 200530

CSU GE:

IGETC:

CSU TRANSFER:

Transferable CSU, effective 200530

UC TRANSFER:

Transferable UC, effective 200530

SUPPLEMENTAL DATA:

Basic Skills: N
Classification: A
Noncredit Category: Y
Cooperative Education:
Program Status: 1 Program Applicable
Special Class Status: N
CAN:
CAN Sequence:
CSU Crosswalk Course Department: ART
CSU Crosswalk Course Number: 80
Prior to College Level: Y
Non Credit Enhanced Funding: N
Funding Agency Code: Y
In-Service: N
Occupational Course: D
Maximum Hours:
Minimum Hours:
Course Control Number: CCC000233984
Sports/Physical Education Course: N
Taxonomy of Program: 061460