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Digital Photography – High School

COURSE DESCRIPTION:

In Digital Photography, students will learn the basics of photographic composition and lighting, the basics of using a digital camera and the basics of preparing a digital darkroom. Students will also learn basic color theory and the fundamentals of image processing. This course is designed for the student who has no background in photography.

COURSE OBJECTIVES:

- Successfully use a digital camera to make images.
- Explain and apply basic photographic composition to their images.
- Explain and apply the various characteristics of light in making their images.
- Explain and apply the fundamental tools of image processing to their work.
- Explain the hardware and software requirements for a digital darkroom and analyze their systems in terms of those requirements.
- Explain how a digital camera works.
- Explain how they can use photographs.

PREREQUISITES: None

COURSE LENGTH: One Semester

REQUIRED TEXT: No required text for this course.

MATERIALS LIST: The GIMP, Web Browser

Recommended Equipment:

- Camera: Any digital camera of 2 megapixels or more with a minimum 3x zoom lens.
- Digital only zooms are permitted but not recommended.
- Computer: (Minimum) Intel Pentium II / AMD K6-2 / Macintosh G-4 based @ 450MHz or greater with 256MB of RAM or better. Windows 2000 sp4, Windows XPsp1 (Home or Professional), Macintosh OS X, or Linux 2.6.02 or better operating system.
- Internet: 56K Internet connection or better

COURSE OUTLINE:

Unit 1: Introduction

Unit 2: How it All Works

- Section 1 - Introduction
- Section 2 - The System of Digital Photography
- Section 3 - How Digital Cameras Work
- Section 4 - How Lenses Work

Unit 3: Using your Digital Camera

- Section 1 - Introduction
- Section 2 - Handling the Camera
- Section 3 - Digital Exposure
- Section 4 - Moving Your Photos
- Section 5 - Archiving Your Photographs

Unit 4: The Subject

- Section 1 - Introduction
- Section 2 - Topic of the Photograph
- Section 3 - Using Supporting Details
- Section 4 - Subject, Details, and Context

Unit 5: Composition

- Section 1 - Introduction
- Section 2 - Photographic Composition

Unit 6: Light and Flash

- Section 1 - Introduction
- Section 2 - The Basics
- Section 3 - Natural Light
- Section 4 - Artificial Light

Unit 7: Image Processing

- Section 1 - Introduction
- Section 2 - The GIMP
- Section 3 - Working With Color
- Section 4 - Resizing Images

Unit 8: Black and White Photography

- Section 1 - Introduction
- Section 2 - Black and White Photography

Unit 9: Using Your Photographs

- Section 1 - Introduction
- Section 2 - Using Your Work