

COURSE COM3235: PHOTOGRAPHY – B/W DIGITAL TECHNIQUES

Level: Advanced

Prerequisite: COM1205: Photography – Introduction

Description: Students develop an understanding of various production and postproduction black-and-white digital techniques and the differences in mood and appeal between colour and monochrome.

Parameters: Access to a digital single-lens reflex (SLR) or Micro Four Thirds system camera with the ability to control aperture and shutter speed independently, and to processing and display equipment.

Note: The term photograph refers to either a physical or digital representation, depending on equipment available to the student.

Outcomes: The student will:

- 1. explain the differences between destructive and nondestructive black-and-white techniques**
 - 1.1 identify destructive black-and-white techniques inside the image-capture device; e.g., setting the device to capture only black-and-white, using specialized lenses such as infrared
 - 1.2 identify destructive black-and-white techniques inside the image-editing software; e.g., converting to grayscale colour space, desaturate command and changes to original image
 - 1.3 identify nondestructive techniques (e.g., not processed [raw] versus Joint Photographic Experts Group [JPEG]) inside the image-capture device
 - 1.4 identify nondestructive techniques inside the image-editing software e.g., include adjustment layers, duplicating original layers and compositing channels or images from separate sources
- 2. identify and describe the two main colour models (cyan, magenta, yellow and key black colour model) [CMYK] and red, green and blue colour model [RGB]**
 - 2.1 identify the purpose of each colour model in relationship to digital photography; e.g., print versus screen, no light versus addition of light
 - 2.2 identify how image-editing software reads and processes colour in the colour model; e.g., black, white and shades of gray
 - 2.3 identify the differences in black-and-white tonal qualities of individual channels—both in CMYK (four-channel) and RGB (three-channel) colour spaces
- 3. identify and demonstrate automatic black-and-white conversion techniques in image-editing software**
 - 3.1 identify the grayscale colour model and compare it to the main two colour models (CMYK and RGB)
 - 3.2 describe the advantages and disadvantages of using the grayscale colour space for black-and-white image conversion
 - 3.3 identify and compare the image software's default black-and-white conversion commands; e.g., grayscale, desaturate, channel mixer
- 4. identify and demonstrate manual techniques for black-and-white conversion in image-editing software**
 - 4.1 describe and demonstrate the infrared technique in image editing software
 - 4.2 describe and demonstrate manual channel selection to create, nondestructively, a finished black-and-white image
 - 4.3 describe and demonstrate layer blending modes in the image-editing software

- 5. present a selection of work completed in this course to an audience**
 - 5.1 create a display of photographs
 - 5.2 assess each photograph regarding:
 - 5.2.1 comparative examples of images that were produced using manual and automatic techniques
 - 5.2.2 the intent of the photographs and their success in meeting the intent
 - 5.2.3 the technical data; e.g., log sheet, picture properties
 - 5.2.4 how the composition guidelines help facilitate good arrangement in his or her work
 - 5.2.5 the technical and creative aspects of the work; e.g., quality, format, interest
 - 5.2.6 areas of challenge/difficulty (if applicable)
 - 5.2.7 meeting school and community standards; e.g., appropriate language
 - 5.2.8 the use of tools and equipment
 - 5.3 participate in peer/teacher assessment
 - 5.4 add the selected work to a portfolio
- 6. apply consistent and appropriate work station routines**
 - 6.1 demonstrate good health and safety practices; e.g., posture, positioning of hardware and furniture
 - 6.2 demonstrate security for hardware, software, supplies and personal work
- 7. demonstrate basic competencies**
 - 7.1 demonstrate fundamental skills to:
 - 7.1.1 communicate
 - 7.1.2 manage information
 - 7.1.3 use numbers
 - 7.1.4 think and solve problems
 - 7.2 demonstrate personal management skills to:
 - 7.2.1 demonstrate positive attitudes and behaviours
 - 7.2.2 be responsible
 - 7.2.3 be adaptable
 - 7.2.4 learn continuously
 - 7.2.5 work safely
 - 7.3 demonstrate teamwork skills to:
 - 7.3.1 work with others
 - 7.3.2 participate in projects and tasks
- 8. create a transitional strategy to accommodate personal changes and build personal values**
 - 8.1 identify short-term and long-term goals
 - 8.2 identify steps to achieve goals