CJC 114
INVESTIGATIVE PHOTOGRAPHY

COURSE DESCRIPTION:

Prerequisites: ENG 090 and RED 090 or DRE 098; or satisfactory score on placement test, CJC 111 and CJC 112
Corequisites: None

This course covers the operation of various photographic equipment and its application to criminal justice. Topics include using various cameras, proper exposure of film, developing film and prints, and preparing photographic evidence. Upon completion, students should be able to demonstrate and explain the role of photography and proper film exposure as well as development techniques. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

LEARNING OUTCOMES:

Upon successful completion of this course, the student will be able to:

1. Explain the basic theory of recording images on a light sensitive medium.
2. Explain the ASA/ISO film speed rating system and the characteristics of various film speeds.
3. Explain the relationship between F-stop and shutter speed and how each effect exposure and depth-of-field.
4. Discuss how the below listed factors determine proper exposure: (Traditional film and digital)
   a.) Film Speed
   b.) Shutter Speed
   c.) F-stop
   d.) Lighting Conditions
5. Incorporate theory and technique of traditional photography in a digital environment
6. Successfully photograph a variety of subjects under the following conditions:
   a.) Daylight
   b.) Daylight using flash
   c.) Inside using available light
   d.) Inside using flash
   e.) Night using available light
   f.) Night using flash
7. Develop a plan allowing comprehensive recording of the scene.
8. Explain the purpose of overall, mid range, and close up photographs.
10. Recognize the proper use of lighting required to obtain acceptable evidential photographs.

OUTLINE OF INSTRUCTION:
I. Principles of photography
   A. What is photography?
   B. Camera components and their functions
   C. Film

II. Still photography for fire/crime scenes
   A. Why take photos?
   B. Comparison of equipment
   C. Recommended equipment features
   D. Film and electronic flash batteries
   E. Training, safety and equipment care
   F. Public relations and standard operating phot procedure
   G. Photographing the fire/crime scene

III. Videography for fire/crime scenes
   A. Why video?
   B. Comparison of equipment categories/recommended features
   C. Training, safety and equipment care
   D. Public relations
   E. Types of videotaping
   F. Taping tips
   G. Postrecording procedures
   H. High-speed and courtroom video

IV. Motor vehicle accident scene
   A. Introductory considerations
   B. Circumstances encountered in motor vehicle accidents
   C. Equipment
   D. Documentation of the scene
   E. Related documentation concerns
   F. Problems situations
   G. Photographic mapping

V. Aerial and underwater photography
   A. Aerial photography
      (1) Equipment
      (2) Safety
      (3) Weather and atmosphere
      (4) Procedures
   B. Underwater photography
      (1) Requirements and categories
      (2) Equipment
      (3) Procedures

VI. Surveillance photography
   A. Equipment
B. Techniques

VII. Photographic aspects of physical injuries and fatalities
   A. Factors to consider
   B. General methodologies
   C. Methodologies for specific injuries and fatalities

VIII. Evidence documentation
   A. Magnification, illumination, and evaluation
   B. Metallurgy
   C. Thermographic imaging
   D. Basic radiometrics
   E. Artifactual evidence
   F. High-speed photography

IX. Legal aspects of visual evidence
   A. Historical foundation
   B. Points of objection
   C. Presentation strategy