## **Course Syllabus**

**Department:** Environmental Conservation and Horticulture

**Date:** April 6, 2012

I. Course Prefix and Number: CON 240

**Course Name**: Wildlife Crime Scene Investigation and Forensics

**Credit Hours and Contact Hours**: 3 credit hours – 3 contact hours

Catalog Description including pre- and co-requisites:

This course introduces the student to the study of criminal investigative techniques and the analysis of evidence with an emphasis on crimes against wildlife and the environment. The focus throughout the course will be the collection, protection and preservation of evidence as it relates to the investigative process. Analysis of actual closed criminal cases and simulations with mock crime scenes will allow students to put into practice classroom discussions and readings.

#### II. Course Outcomes and Objectives

#### **Student Learning Outcomes:**

Students will:

- 1. Identify and describe the basics of a criminal investigation. (professional competency)
- 2. Describe the purpose and importance of documenting the investigative process. (professional competency)
- 3. Summarize the roles of different crime scene personnel. (professional competency)
- 4. Identify, describe and apply the laws associated with crime scene investigations. (professional competency, citizenship)
- 5. Apply investigative methods and critical thinking to process mock crime scenes, documenting their findings as if preparing for a possible courtroom trial. (professional competency, critical thinking)

#### **Relationship to Academic Programs and Curriculum:**

This course may be taken as a CON elective by AAS Natural Resource Conservation: Law Enforcement, AAS Natural Resources Conservation, AAS Fisheries Technology and AS Environmental Studies students. The course could also serve as a general elective.

| College Learning Outcomes Addressed by the Course.                   |   |
|--|---|
| writing writing  | computer literacy   |
| oral communications  | ethics/values   |
| reading  | X citizenship   |
| mathematics  | global concerns   |
| X critical thinking  | information resources   |
| III. Instructional Materials and Methods  Types of Course Materials: |   |
| Types of Course materials.   |   |
| Possible text: Animal Investigators saving endangered species. Laure | s: How the world's first forensics lab is solving crimes and let A. Neme, Ph.D. |

Methods of Instruction (e.g. Lecture, Lab, Seminar ...):

College Learning Outcomes Addressed by the Course:

The course will be lecture based but will include with multiple "mock" crime scene scenarios and hands-on activities.

# IV. Assessment Measures (Summarize how the college and student learning outcomes will be assessed):

Mastery of course content will be assessed through a midterm and final. Critical thinking skills will be evaluated as students work through a variety of mock crime scenarios. Citizenship will be addressed in specifically designed exam questions and discussions topics.

#### V. General Outline of Topics Covered:

- I. The basics of a criminal investigation
  - a) Determining if a crime has been committed
  - b) Securing a crime scene

- c) Determining what constitutes physical evidence
- d) Collecting physical evidence
- e) The role of photography
- f) Legal considerations at a crime scene
- g) Chain of custody requirements
- h) Interviewing witnesses and suspects
- i) Search warrants/NYS CPL
- j) The crime scene technician
- II. Crimes against wildlife
  - Poaching/ illegal trade in wildlife
  - Illegal use of pesticides/hazardous wastes
  - Endangered species protection
- III) Field techniques for crime scene investigation:
  - lead test
  - pupil dilation
  - body temperature/time of death
  - castings
  - hunter related shooting Incidences
  - timber thefts
  - Bullet trajectory
- IV. Cooperating agencies will be discussed throughout the course. Examples of such agencies follow:
  - The role of DEC officers/Investigators
  - State and local police
  - DEC state pathologist
  - USFWS wildlife crime lab

- Monroe County Crime lab
- US Attorney's Office
- NYS Attorney General's Office
- Federal Agencies, EPA, ATF, FBI

### V. The role of forensics

- a. What is forensics?
- b. What are the legal limitations of forensics?
- c. Forensic techniques discussed during the semester will be:
- Forensic entomology
- Ballistics
- DNA
- Fingerprint analysis
- Trace evidence: hair, fibers, etc.
- Bite mark analysis
- Tire treads/shoe prints

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