

CIP Code: 40.0502

METROPOLITAN STATE COLLEGE OF DENVER
Office of Academic Affairs

REGULAR (Proposed) COURSE SYLLABUS

SCHOOL: Letters, Arts, and Sciences

DEPARTMENT: Chemistry

SEMESTER(S) OFFERED: Fall, Spring & Summer

PREFIX & COURSE NUMBER: CHE 4700

COURSE TITLE: Criminalistics Internship I

CREDIT HOURS: 5 (0 + 15)

CONTACT HOURS: Lecture Lab Internship 300 Practicum

RESTRICTIONS (VARIABLE TOPICS COURSES): None

PREREQUISITE(S): CHE 3710

COREQUISITE(S): None

CATALOG COURSE DESCRIPTION:

Laboratory internship experience for Criminalistics Majors.

REQUIRED READING MATERIALS (Title, Author, Publisher, Copyright Date):

To be assigned by the laboratory where the internship is done.

APPROVED:

Department Chair

Dean

V.P., Academic Affairs

Richard Lund
Paul Elisei
Freda Kosta Halley

DATE:

10/15/03

11/14/03

10/28/04

DISTRIBUTION: Original to Vice President for Academic Affairs
Copies retained by Dean and Department Chair

Revised 9/94: Academic Affairs-Curriculum-Regular Course Syllabus
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SPECIFIC (MEASURABLE) STUDENT BEHAVIORAL LEARNING OBJECTIVES:

Upon completion of this course the student should be able to:

Same as CHE 471, but may vary because of differing series offered by each crime laboratory.

1. Learn the day-to-day functioning of a modern crime laboratory.
2. Have received introductory training in each specialty area present in the selected laboratory.
3. Attend crime scenes and observe crime scene investigation and evidence collection techniques.
4. Listen to an expert from the laboratory testify in court.
5. Utilize instrumentation present in the laboratory while working on an assigned project.

OUTLINE OF COURSE CONTENT (Major Topics and Subtopics):

Same as CHE 471, but may vary because of differing series offered by each crime laboratory.

1. Crime Scene Investigation
 - a. videotaping techniques
 - b. photographic techniques
 - c. sketching techniques
2. Evidence
 - a. Collection at crime scene
 - b. chain of custody
 - c. evidence preservation
 - d. security within agency
3. Drug Identification
 - a. spot tests
 - b. instrumental methods
 - c. TLC
4. Fingerprints
 - a. development and preservation
 - b. visualization methods
 - c. fingerprint photography
5. Questioned Documents
 - a. ink analysis
 - b. handwriting comparison
6. Firearms
 - a. test firing
 - b. comparison microscope
7. Serology
 - a. blood typing

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- b. semen analysis
- c. electrophoresis
- 8. Arson
 - a. sample preparation
 - b. methods of analysis
- 9. Blood Alcohol
 - a. gas chromatograph
 - b. quantitation of alcohol in blood
- 10. Court
 - a. expert witness
 - b. testifying in court

EVALUATION OF STUDENT PERFORMANCE:

Students will be given periodic fifty minute examinations. These examinations will be supplemented by short quizzes. A final exam one hundred minutes long will terminate the course. The final grade determination will be based on the students performance on the examinations, quizzes, final exam, the instructors evaluation, and the performance in the laboratory if applicable.