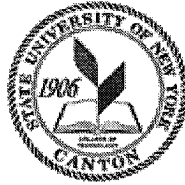


**STATE UNIVERSITY OF NEW YORK
COLLEGE OF TECHNOLOGY
CANTON, NEW YORK**



COURSE OUTLINE

JUST 412 – Firearm and Toolmark Identification

Prepared By: Stacey Hartman

**SCHOOL OF SCIENCE, HEALTH, AND CRIMINAL JUSTICE
CRIMINAL JUSTICE DEPARTMENT
APRIL 2016**

- A. **TITLE:** Firearm and Toolmark Identification
- B. **COURSE NUMBER:** JUST 412
- C. **CREDIT HOURS:** 3
- D. **WRITING INTENSIVE COURSE:** No
- E. **COURSE LENGTH:** 15 weeks
- F. **SEMESTER OFFERED:** Fall
- G. **HOURS OF LECTURE, LABORATORY, RECITATION, TUTORIAL, ACTIVITY:**
3 lecture hours per week
- H. **CATALOG DESCRIPTION:** This course is an in-depth look at the forensic analysis of Firearms Identification. Areas of concentration include the history and development of firearms and ammunition components, serial number restorations, toolmark examinations and distance determinations. Other areas discussed include evidence packaging, reporting results and utilizing the national ballistic database (NIBIN).
- I. **PRE-REQUISITES/CO-REQUISITES:** Pre-requisite: Completion of 45 credit hours or permission of instructor.
- J. **GOALS (STUDENT LEARNING OUTCOMES):**
By the end of this course, the student will be able to:

<u>Course Objective</u>	<u>Institutional SLO</u>
a. Differentiate between various categories of firearms.	2. Critical Thinking
b. Explain the cycle of fire for semiautomatic pistols.	2. Critical Thinking
c. Identify cartridge components.	2. Critical Thinking
d. Articulate the difference between class, subclass and individual characteristics.	2. Critical Thinking
e. Demonstrate the ability to correctly identify cartridge cases of a common origin.	2. Critical Thinking
f. Identify methods of serial number obliteration.	2. Critical Thinking
g. Describe the process of reproducing positive results in gunshot residue examinations.	2. Critical Thinking

K. **TEXTS:**

Heard, B. (2008). *Handbook of Firearm and Ballistics: Examining and Interpreting Forensic Evidence*. John Wiley & Sons: Hoboken, NJ.

L. REFERENCES:

www.projects.nfstc.org/firearms/

www.firearmsid.com

M. EQUIPMENT: None

N. GRADING METHOD: A-F

O. MEASUREMENT CRITERIA/METHODS:

- Exams
- Quizzes
- Papers
- Discussion Boards

P. DETAILED COURSE OUTLINE: (must use the outline format listed below)

- I Firearms
 - A. History
 - B. Development/Function
- II Cartridge (Cases)
 - A. History
 - B. Development
 - C. Function
- III Bullets
 - A. History
 - B. Development
 - C. Function
- IV Firearm Identification Analysis
 - A. Instrumentation
 - B. Comparison
 - C. Conclusions/Reporting
- V IBIS/NIBIN
- VI Toolmarks
 - A. Instrumentation
 - B. Comparison
 - C. Conclusions/Reporting
- VII Serial Number
 - A. Foundation
 - B. Restorations
- VIII Distance Determination/Gun Shot Residue
 - A. Foundation
 - B. Chemicals
 - C. Examinations
 - D. Interpretations

Q. LABORATORY OUTLINE: N/A