



**FS 625 - TRACE EVIDENCE
SPRING 2012**

Instructor: Dr. Shari Forbes

Contact: shari.forbes@chaminade.edu

Office: HENR 2

Office Hours: Open Door Policy

Lecture: MWF; 8:30-9:20am

Room: HENR L6

COURSE OBJECTIVE:

Trace evidence is often the primary type of evidence used to link a suspect to a victim and/or a crime scene. It is essential that every individual involved in the processing of a crime scene be aware of the different categories of trace evidence that may be present and its potential significance to the subsequent analysis. This is an introductory course in Trace Evidence. It is designed to build on the groundwork laid in undergraduate Forensic Sciences courses. The focus of this course will be in the recognition, collection and analyses of different categories of trace evidence including paint, glass, hairs, fibers, soils, and other microscopic evidence. There will be an extensive use of different types of microscopy during this course. The laboratory exercises will parallel the lecture topics.

COURSE LEARNING OUTCOMES:

At the end of this course, the student will be able to demonstrate:

1. an understanding of the different categories of trace evidence commonly encountered in scene investigations;
2. an understanding of the methods for recognition and collection of trace evidence;
3. an understanding of the different **microscopic** and **spectroscopic** techniques involved in analysis of trace evidence;
4. an understanding of the documentation required for the submission of trace evidence reports for trial purposes.

TEXT:

Blackledge, Robert D., Forensic Analysis on the Cutting Edge: New Methods for Trace Evidence Analysis, John Wiley & Sons, Inc., Hoboken, NJ; 2007

ATTENDANCE:

Attendance is mandatory and repeated absences will be reported to counseling and will result in possible removal from the course, as per the CUH Student Handbook. Absences may be excused if documentation is provided, or if approved prior to the class period. Repeated tardiness and/or absences will be reflected in the “participation” portion of your grade.

MUSIC DEVICES AND CELL PHONES:

Cell phones will either be off or on silent while in the classroom. If I see your phone out during the lecture period, you will receive a zero for the participation portion of your grade. If there is a legitimate reason for you to have your phone on, please see me prior to class. Unless specifically permitted by your instructor, use of music devices and cell phones is prohibited during all Natural Science and Mathematics classes at Chaminade, as it is discourteous and may lead to suspicion of academic misconduct. Students unable to comply will be asked to leave class.

COMPUTERS:

The use of computers in this class is encouraged, provided they are used for the class. Using computers for other purposes such as other class work or surfing the Internet is not acceptable, and will consequently be reflected in the “participation” portion of your grade.

ADA ACCOMMODATIONS:

Students with special needs who meet criteria for the Americans with Disabilities Act (ADA) provisions must provide written documentation of the need for accommodations from CUH Counseling Center by the end of the third week of classes. Failure to provide written documentation will prevent your instructor from making necessary accommodations. Please refer any questions to the Dean of Students and review procedures at www.chaminade.edu/student_life/ssc/counseling_services.php

ASSIGNMENTS:

Reading assignments are to be completed *prior* to the next lecture. The reading will come from the required book, as well as supplemental readings provided by the instructor. Students will be required to submit an academic proposal about a research question relating to trace evidence during this course. In addition, students will present a lecture on a specific type of trace evidence which is chosen in consultation with the instructor.

GRADING:

Attendance	15%
Mid-term Exam	20%
Academic Proposal	20%
Class Presentation	15%
Final Exam	30%

The grading scale is as follows:

90% +	=	A
80-89%	=	B
70-79%	=	C
< 69%	=	F

SCHEDULE:

Week Beginning	Mon LECTURE	Wed LECTURE	Fri LECTURE
January 16 th	No Class	Intro to Course	Microscopy
January 23	Alternative Light Sources	Spectroscopy	Spectroscopy
January 30 th	Introduction to Trace Evidence	Vehicle Examination	Vehicle Examination
February 6 th	Introduction to Fiber Evidence	Fiber Evidence	Fiber Evidence
February 13 th	Introduction to Paint Evidence	Paint Evidence	Paint Evidence
February 20 th	No class – AAFS Meeting	No class – AAFS Meeting	No class – AAFS Meeting
February 27 th	Introduction to Glass Evidence	Glass Evidence	Glass Bulb Evidence
March 5 th	Review	Midterm Exam	Body Fluid Examination
March 12 th	Body Fluid Examination	Hair Evidence	Hair Evidence
March 19 th	Textile Damage	Textile Damage	Case Study
March 26 th	Spring Break	Spring Break	Spring Break
April 2 nd	Death Investigation	Examination of Human Remains	Good Friday – No Class
April 9 th	Soil Evidence	Botanical Evidence	Palynological Evidence
April 16 th	Combustion Evidence	Combustion Evidence	Combustion Evidence
April 23 rd	Miscellaneous Evidence	Miscellaneous Evidence	Miscellaneous Evidence
April 30 th	Miscellaneous Evidence	Miscellaneous Evidence	Miscellaneous Evidence
May 7 th	Miscellaneous Evidence	Review	No class