

Fall 2013
MWF 0930 - 1020
201 Eiben Hall

INSTRUCTOR

David O. Carter, PhD
Director and Associate Professor of Forensic Sciences

Office: 5 Henry Hall
Office Hours: TW 1430 – 1700 or by appointment
Mailbox: 115 Wesselkamper Science Center
Telephone: (808) 739 8352
email: david.carter@chaminade.edu



COURSE DESCRIPTION

FS 330 Forensic Sciences (3)

Scientific methods applied to the gathering and preservation of criminal evidence.

MEASURABLE LEARNING OBJECTIVES

Forensic science is the natural science branch of the justice system. The forensic sciences are concerned with interpreting physical evidence. Investigations proceed by using physical evidence and testimonial evidence to reconstruct past events. Victims, suspects, and witnesses provide testimonial evidence. While forensic science is used to resolve civil, criminal, and regulatory matters, this course will focus on criminal investigation. Not surprisingly, forensic science comprises several disparate fields of study. This course provides an introduction to the use of physical evidence in the criminal justice system.

Each student will finish this class with the ability to:

- Define forensic science and the value of physical evidence in a criminal investigation
- Describe the legal framework in which forensic science is conducted
- Discuss the value of common and recently developed forms of physical evidence
- Discuss the importance of ethics in forensic science

REQUIRED TEXTS

Houck MM, Siegel JA (2010) Fundamentals of Forensic Science. 2nd Edition. Academic Press, Burlington, MA.

TENTATIVE SCHEDULE

Week	Date	Chapter	Subject	Notes
1	26 Aug	-	Introduction	Ownership Document Sent
	28 Aug	1	Criminal Justice and Forensic Science	
	30 Aug	23	Legal Aspects of Forensic Science	
2	2 Sep	-	No Class	Labor Day
	4 Sep	23	Admissibility and Testimony	Ownership Document Due
	6 Sep	1	Ethics, Professional Practice	
3	9 Sep	3	Physical Evidence	
	11 Sep	2	Crime Scene Investigation	
	13 Sep	5	Light, Matter, and Photography	
4	16 Sep	4	Microscopy	Dr. Dale Purcell, PhD
	18 Sep	6	Separation Methods	
	20 Sep	-	EXAM 1	
	23 Sep	19	Friction Ridge Examination	
5	25 Sep	21	Firearms	Nicholas Harrison, MS
	27 Sep	21	Toolmarks	
	30 Sep	22	Footwear	
6	2 Oct	22	Tire Impressions	
	4 Oct	20	Questioned Documents	
	7 Oct	-	EXAM 2	
7	9 Oct	10	Forensic Biology	Dr. Joan Kuh, PhD
	11 Oct	11	Serology & Genetic Analysis	
	14 Oct	-	No Class	
8	16 Oct	10	Bloodstain Pattern Analysis	Discoverer's Day Wilson Sullivan, MS
	18 Oct	7	Pathology	
	21 Oct	-	Taphonomy	
9	23 Oct	9	Entomology	
	25 Oct	8	Anthropology	
	28 Oct	8	Odontology	
10	30 Oct	-	EXAM 3	
	1 Nov	-	Forensic Chemistry and Trace Evidence	
	4 Nov	13	Controlled Substances	
11	6 Nov	14	Toxicology	Dr. Dale Purcell, PhD
	8 Nov	12	Hair	
	11 Nov	15	Fibers	
12	13 Nov	16	Paint	Veteran's Day
	15 Nov	-	No Class	
	18 Nov	17	Soil	
13	20 Nov	17	Glass	
	22 Nov	18	Fires and Explosions	
	25 Nov	-	EXAM 4	
	27 Nov	-	No Class	
14	29 Nov	-	No Class	Thanksgiving
	2 Dec	-	Graduate Oral Presentations	Thanksgiving
	4 Dec	-	Graduate Oral Presentations	
6 Dec	-	Graduate Oral Presentations		
15	2 Dec	-	Graduate Oral Presentations	Monday, 1100 – 1300
4 Dec	-	Graduate Oral Presentations		
6 Dec	-	Graduate Oral Presentations		
16	9 Dec	-	FINAL EXAMINATION	

EVALUATION OF STUDENT PERFORMANCE***Examinations***

Assessment is based on the completion of the Ownership Document at the beginning of the semester along with five written examinations. The initial four examinations will cover discrete components of the content and be delivered as multiple-choice examinations with 50 questions. The final examination will be a cumulative examination delivered as a multiple-choice examination with 100 questions.

Ownership Document

You are also required to complete an Ownership Agreement that is designed to encourage you to think about your future and the reason why you are pursuing a career in forensic science. You are required to complete one Ownership Agreement worth 100 points.

Oral Presentations (required for graduate students)

Each student has the opportunity to conduct an oral presentation if they wish to augment their exam grade. An oral presentation can earn a maximum of 50 extra credit points. The oral presentation is your opportunity to critique current work in forensic taphonomy and show off your personality. Presentations will be a maximum of 15 minutes. You can use these 15 minutes to:

- Propose an experiment to improve forensic science,
- Highlight a current forensic science, or
- Propose a modification/improvement of a current technique.

All oral presentations will be graded using a rubric that focuses on technical proficiency, depth and breadth of knowledge, accuracy of synthesis, and clarity. Rubrics can be accessed on Blackboard.

Activity	Points
Ownership Documents	100
Written Examinations	200 @ 50 exam ⁻¹
Final Examination	100
Oral Presentation	100
Undergraduate Total	400
Graduate Total	500

The grading scale is:

100% - 90%	A
89% - 80%	B
79% - 70%	C
69% - 60%	D
≤ 59%	F

REMINDERS OF IMPORTANT UNIVERSITY-WIDE POLICIES

The following policies are summarized from the Student Handbook. Please be sure that you have reviewed these and the other policies that your Handbook contains.

Attendance

You will be treated as a forensic science professional employed at a forensic science agency. This means that you are expected to attend and participate in every class period. Like a professional, you must contact the instructor if you know that you will miss a future class. Absences can be excused for medical treatment and legal issues. Some personal issues can be excused, but that decision is completely at the discretion of the instructor. Please contact the instructor as soon as possible if you have missed class and were unable to communicate before the absence.

Academic Dishonesty

All confirmed academic dishonesty will result in a failing grade for the class.

ADA ACCOMMODATIONS

In compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA) of 1990, and the ADA Amendments Act (2008), Chaminade University of Honolulu offers accommodations for individuals with disabilities. If you would like to determine if you qualify for ADA accommodations, please contact the Counseling Center at (808) 735-4845. Once your documentation is submitted, the assessments will be reviewed and the student will be notified.

If one qualifies for ADA accommodations an ADA contract will be signed by the student. Please remember that once you have signed an ADA agreement, you need to contact the ADA coordinator each semester (including summer sessions) to identify which instructors you want notified of your accommodations. This is to ensure your privacy. Faculty will be informed of the accommodations you are to receive but not the nature of your disability.

From the time that appropriate documentation is received by the ADA Coordinator, please allow 2 to 3 weeks to process your paperwork. Processing time may vary pending the volume of requests received. You can find more information at http://www.chaminade.edu/student_life/sss/counseling_services.php