### **INSTRUCTOR**

David O. Carter, PhD

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Sciences

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Office Hours: Tuesdays 10:00AM - 12:00PM, 1:00PM - 3:30PM

Wednesdays 10:00AM – 12:00PM Fridays 11:00AM – 12:30PM

### **COURSE DESCRIPTION**

## FS 230 Forensic Sciences (3)

Survey of scientific methods applied to the collection, analysis and preservation of physical evidence as it is used from the crime scene to the courtroom; quality assurance, ethics, professional practice.

### LEARNING OBJECTIVES

Forensic science is the natural science branch of the justice system that is 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 and the aim of this course is to provide an introduction to the use of physical evidence in the justice system.

Each student will finish this class with the ability to:

- Define the role of forensic science in civil and criminal investigations (Program Learning Outcome 3)
- Identify and define the various quality assurance strategies in the forensic sciences, including the legal system, ethical conduct, accreditation, and certification (Program Learning Outcome 2)
- Identify the value of physical evidence in a criminal investigation (Program Learning Outcome 3)
- Interpret the data generated from commonly used techniques to analyse physical evidence (Program Learning Outcome 4)

# **REQUIRED TEXT**

Houck MM, Siegel JA (2015) Fundamentals of Forensic Science. 3<sup>rd</sup> Edition. Academic Press, Burlington, MA.

# **EVALUATION OF STUDENT PERFORMANCE**

### **Examinations**

Assessment is based on the completion of the Ownership Document at the beginning of the semester along with four examinations. These examinations (Zam Time!!!) will cover discrete components of the content and be delivered as oral examinations.

# 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. Late submissions will be penalized one letter grade per day late.

Activity		Points
Attendance		360 (10 points per class)
Ownership Document		100
Exams: Zam Time!		400 (100 points per exam)
	Total	860

# The grading scale is:

100% - 90%	A
89% - 80%	В
79% - 70%	С
69% - 60%	D
<u>&lt;</u> 59%	F

# TENTATIVE SCHEDULE

	TATIVE S			Nutra
Week	Monday	Chapter	Subject	Notes
1	20 Aug	1	Introduction, Syllabus & Roster Review	
	22 Aug		Crime Scene House Tour	
	24 Aug	3	The Nature of Evidence	
2	27 Aug	24	Legal Aspects of Forensic Science	
	29 Aug	25	Quality Assurance	
	31 Aug	25	Quality Assurance	Ownership Document Due
3	2 Can		CLASS CANCELLED	Labor Day
3	3 Sep 5 Sep	25	Ethical and Professional Issues	Labor Day
	7 Sep	2	Crime Scene Investigation	
	7 3 <b>c</b> p	2	Crime Seeme investigation	
4	10 Sep	2	Crime Scene Investigation	
	12 Sep		Guest Lecture – Carlos Gutierrez, MSFS	
	14 Sep		Zam Time Rehearsal	
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5	17 Sep		ZAM TIME 1	
	19 Sep	19	Friction Ridge Impressions	
	21 Sep	19	Friction Ridge Impressions	
	240	21	P: 0.TE 1 1	
6	24 Sep	21	Firearms & Toolmarks	
	26 Sep	21	Firearms & Toolmarks	
	28 Sep	22	Impression Evidence	
7	1 Oct		CLASS CANCELLED	Carter AAFS
,	3 Sep	22	Impression Evidence	Curter Titte o
	5 Sep	10	Bloodstain Pattern Analysis	
	···r			
8	8 Oct		CLASS CANCELLED	Discoverer's Day
	10 Oct	10	Bloodstain Pattern Analysis	
	12 Oct		ZAM TIME 2	
	4-0			
9	15 Oct	10,11	Serology & DNA Analysis	
	17 Oct	10,11	Serology & DNA Analysis	
	19 Oct	7	Medicolegal Death Investigation	
10	22 Oct	7	Medicolegal Death Investigation	
	24 Oct	7	Pathology	
	26 Oct	8,9	Taphonomy	
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11	29 Oct	9	Entomology	
	31 Oct	8	Anthropology	Halloween
	2 Nov		ZAM TIME 3	
1.0	<b>5.3</b> 7	4.7	F . Cl	
12	5 Nov	4,6	Forensic Chemistry Trace Evidence	
	7 Nov 9 Nov	4,6 14	1 race Evidence Guest Lecturer – Kate Perrault, PhD	
	9 INOV	14	Guesi Lecturer - Ruie Pettaull, PhD	
13	12 Nov		CLASS CANCELLED	Veteran's Day
-	14 Nov	12	Hairs	
	16 Nov	14	Guest Lecturer – Kate Perrault, PhD	

14	19 Nov	15	Fibers		
	21 Nov		CLASS CANCELLED	Thanksgiving	
	23 Nov		CLASS CANCELLED	Thanksgiving	
15	26 Nov	16	Soil and Glass		
	28 Nov	17	Glass and Paint		
	30 Nov	25	Expert Testimony		
16	4 Dec		ZAM TIME 4	11:00AM - 1:00PM	

### ADDITIONAL DIVISIONAL AND UNIVERSITY POLICES

## Academic Integrity

Students are expected to follow the Forensic Sciences Code of Conduct. In addition, students are expected to read and abide by the Student Rules of Conduct which are available in your copy of the Student Handbook. Academic dishonesty, in any form, will not be tolerated.

## Absences

- A planned, excused absence must be communicated to the instructor at least one
  week prior to class. Necessary arrangements will be made to meet student learning
  objectives.
- Unexcused absences for two consecutive weeks may result in being withdrawn from the course by the instructor.
- All Zam Team members will earn the same grade, whether present or absent.
- An unplanned, excusable absence must be communicated to the instructor within one week of the missed class. Necessary arrangements will be made to meet student learning objectives.
  - o Excused absences include but are not limited to
    - Documented illness or illness
    - Documented family emergency parent or guardian communication required
    - Determination of other valid excuses for missed classes is at the sole discretion of the instructor.

### ADAA Statement

Pursuant to several federal and state laws, including the Americans with Disabilities Act of 1990, as amended by the ADA Amendments Act of 2008, and Section 504 of the Rehabilitation Act of 1973, all qualified students with disabilities are protected from discrimination on basis of disability and are eligible for reasonable accommodations or modifications in the academic environment to enable them to enjoy equal access to academic programs, services, or activities. If a student would like to determine if they meet the criteria for accommodations, they should contact the Counseling Center at 808-735-4845 for further information.

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# Policy on Communication

The University provides a Chaminade email address for all students. Official Chaminade communications will be sent to the students' Chaminade email address and instructors will use this email to communicate with students. It is the responsibility of the student to check their email frequently. Report email-related problems to the Helpdesk at 808-735-4855 or helpdesk@chaminade.edu.

### Title IX Declaration

Chaminade University of Honolulu recognizes the inherent dignity of all individuals and promotes respect for all people. Sexual misconduct, physical and/or psychological abuse will NOT be tolerated at CUH. If you have been the victim of sexual misconduct, physical and/or psychological abuse, we encourage you to report this matter promptly. As a faculty member, I am interested in promoting a safe and healthy environment, and should I learn of any sexual misconduct, physical and/or psychological abuse, I must report the matter to the Title IX Coordinator. Should you want to speak to a confidential source you may contact the Chaminade Counseling Center at (808) 735-4845.

### Electronic Devices

Use of music devices is prohibited during all Natural Science and Mathematics classes at Chaminade, unless specifically permitted by your instructor. Use of music devices in laboratories is a safety issue. In addition, use of music devices in any class is discourteous and may lead to suspicion of academic misconduct. Students who cannot comply with this rule will be asked to leave class and may be subject to laboratory safety violation fines. You will be asked to leave class and marked absent if you do not comply. This will negatively affect your grade. Please refer any questions to the Dean of Natural Sciences and Mathematics.

The instructor may modify elements of this syllabus according to the operational needs of the class.

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