

INSTRUCTOR

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Office: 2 Henry Hall

Office Hours: Monday 1:30 PM – 3:30 PM,
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COURSE DESCRIPTION

FS 430L Forensic Chemistry Laboratory (1)

Laboratory exercises will concentrate on techniques and forensic methodologies for qualitative and quantitative analysis of chemical evidence. *Concurrent registration in FS 430 required. Prerequisites: CH 324/L, CH 334/L.*

LEARNING OBJECTIVES

Upon completion of this class students will understand the role of a forensic chemist in the judicial system and demonstrate the ability to:

- Apply quality control processes necessary in a forensic laboratory
- Use basic laboratory skills and procedures needed for work in a forensic laboratory
- Solve problems using independent, critical thinking
- Interpret the results of chemical testing
- Defend the quality of their work in an expert witness scenario

REQUIRED TEXT

Bell S (2013) Forensic Chemistry. 2nd Edition. Pearson: Boston, MA.

EVALUATION OF STUDENT PERFORMANCE*Professional Conduct Evaluation (PCE)*

You will be evaluated on your professional conduct in laboratory sessions including preparedness, safety, punctuality, collegiality, teamwork and focus. Evaluations may be distributed throughout the semester that will also count towards this component.

Expert Witness Presentation

Students will undergo a workshop to prepare to defend Case #1, present the case to the class, and be required to provide feedback for other students.

Case Files

Each assigned case will require a folder be submitted that includes your case report, case forms, scientist notes, and assigned questions.

Lab Final

Each student will be required to present and defend their work on one of the laboratory modules.

Activity	Weight
PCE	10%
Expert Witness Presentation	10%
Case Files	50%
Lab Final	30%

The grading scale is:

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

TENTATIVE TIMELINE

Week	Date	Subject	Notes
1	23 Aug	Introduction/Lab Safety	
2	30 Aug	Case 1: Fiber microscopy	Virtual Lab
3	6 Sept	Case 1: Preparation of Case Files	
4	13 Sept	Expert Witness Workshop	Henry 203, Case 1 due
5	20 Sept	Expert Witness Presentation	Henry 203
6	27 Sept	Case 2: TLC of Ballpoint Inks	
7	4 Oct	Case 3: Fire debris analysis	Case 2 due
8	11 Oct	Case 3: Fire debris analysis	
9	18 Oct	Drug Search Demonstration	Case 3 due
10	25 Oct	Case 4: Analysis of Drug Paraphernalia	
11	1 Nov	Case 4: Analysis of Drug Paraphernalia	
12	8 Nov	Case 5: Soil Analysis	Case 4 due
13	15 Nov	Field Trip or Guest Lecture	
14	22 Nov	No Lab – Thanksgiving	Case 5 due
15	29 Nov	Lab Final	Henry 203
Finals	11 Dec	No lab	

**Labs are subject to change due to availability of materials and instrumentation. Please check Canvas regularly for any updates.

ADDITIONAL POLICES*Academic Integrity*

You are required to sign and follow the Forensic Sciences Code of Conduct. Violation of the Code of Conduct will result in a hearing in front of the Forensic Sciences Ethics Committee. 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. Cheating in the form of plagiarism, collusion, deception and will not be tolerated.

Absences

Each unexcused absence will result in:

- 0 points for Professional Conduct Evaluation
- 0 points for any associated in-class assessments

Unexcused absences for two consecutive weeks may result in being withdrawn from the course by the instructor.

A planned, excused absence must be communicated to the instructor at least one week prior to the laboratory. Necessary arrangements will be made to meet student learning objectives.

An unplanned, excused absence must be communicated to the instructor within one week of the missed laboratory. Necessary arrangements will be made to meet student learning objectives.

Determination of valid excuses for missed classes is at the sole discretion of the instructor.

Laboratory Safety Information

The following guidelines are established to provide instructions in maintaining safety for students, staff, and faculty while using any of the science laboratories at Chaminade University. Students are required to sign a safety contract. In addition to adhering to the safety contract, students are required to follow these two rules:

1. Lab coats, closed-toed shoes, and goggles are required at all times within the laboratory.
2. The maintenance of your personal protective equipment (PPE) is your responsibility. Please inform us immediately if you have issues with your PPE.

The Division of Natural Sciences and Mathematics (NSM), along with the University Environmental Safety Office are responsible for enforcing the regulations set forth in the current Student Handbook. Queries should be addressed to: Dean of Natural Sciences and Mathematics (808) 440-4204; Environmental Safety Officer (808) 739-4811

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 Counselling Center at 808-735-4845 for further information.

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 Counselling Center at (808) 735-4845 or by email at counselingcenter@chaminade.edu. Please also be aware that the Chaminade Counselling Center also oversees the "De-Stress Zone", a resource center for all students, located in Henry Hall, Room 209, which is open from 10am to 1pm, Monday-Friday.

Electronic Devices

Use of mobile devices is prohibited during all Natural Science and Mathematics classes at Chaminade, unless specifically permitted by your instructor. Use of mobile devices in laboratories is a safety issue. In addition, use of mobile 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.