

INSTRUCTOR

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Office: 2 Henry Hall

Office Hours: Tuesday 3:00PM – 5:00PM,
Friday 9:00AM – 11:00AM or by appointment

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COURSE DESCRIPTION

FS 630L 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 630 required.*

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 using statistics
- 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

Your evaluation is based on your performance in the laboratory exercises including professional practice, exams, and presentations.

Professional Conduct Evaluation (PCE)

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

Case files

Each laboratory module will require a folder be submitted that includes your laboratory notebook, laboratory assignment, and case report.

Lab Final

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

Activity	Points
PCE	20%
Case Files (x5)	50% (10% each)
Lab Final	30%

The grading scale is:

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

TENTATIVE TIMELINE (Subject to change, changes announced on Canvas)

Week	Date	Subject	Notes
1	19 Jan	Introduction/Lab Safety	
2	26 Jan	Prep week	
3	2 Feb	Examination of textile fibers by microscopy	Bring computer
4	9 Feb	Examination of textile fibers by microscopy	Bring computer
5	16 Feb	No lab – AAFS Meeting	
6	23 Feb	Ink comparison	Soil collection
7	2 Mar	Ink comparison	
8	9 Mar	Fire debris analysis	
9	16 Mar	Fire debris analysis	
10	23 Mar	No lab – Spring Recess	
11	30 Mar	Drug analysis	
12	6 Apr	Drug analysis	
13	13 Apr	Chemometrics workshop	
14	20 Apr	Analysis of gravesoils	
15	27 Apr	Analysis of gravesoils	
16	4 May	Lab final	
Finals	8 May	No lab	

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

ADDITIONAL DIVISIONAL AND UNIVERSITY POLICES*Electronic Devices*

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

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.

Attendance & Tardiness

Students are expected to attend regularly all courses for which they are registered. Students should notify their instructors when illness or other extenuating circumstances prevents them from attending class and make arrangements to complete missed assignments. Notification may be done by emailing the instructor's Chaminade email address, calling the instructor's campus extension or by leaving a message with the instructor's division office (Natural Sciences and Mathematics +1 (808) 440-4204). It is the instructor's prerogative to modify deadlines of course requirements accordingly. Any student who stops attending a course without officially **withdrawing** may receive a failing grade.

Unexcused absences equivalent to more than a week of classes may lead to a grade reduction for the course. Any unexcused absence of two consecutive weeks or more may result in being **withdrawn** from the course by the instructor, although the instructor is not required to **withdraw** students in that scenario. Repeated absences put students at risk of failing grades.

Policy on Make-Up Tests

Make-up exams will not be given.

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 only 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.

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. 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

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 following:

- Chaminade Counseling Center| 808 735-4845.
- Any priest serving as a sacramental confessor or any ordained religious leader serving in the sacred confidence role.

Academic Honesty

Students are expected to have read and to abide by the "Student Rules of Conduct" which are available in your copy of Chaminade University's Student Handbook. Cheating in the form of plagiarism, collusion, deception and will not be tolerated and will negatively affect your grade.

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