



School of Natural Sciences and Mathematics  
Forensic Sciences Department

## FS 340L, Forensic Sciences

Henry Hall Lab 6/Crime Scene House, W 2:30P-5:20P  
Credits: 1      Section: 01      Term: Fall semester 2025

### Instructor Information



**Instructor:** Carlos A. Gutiérrez Ayala, Ph.D.

**Email:** [Carlos.gutierrez@chaminade.edu](mailto:Carlos.gutierrez@chaminade.edu)

**Phone:** (808) 739 8352

**Office Location:** 207A Eiben Hall

**Office Hours:** Tuesdays 12:30P – 3:30P

Thursdays 11:30A – 12:30P

Schedule your meetings during Office Hours:

<https://calendar.app.google/2Jfj1t1Mzs4XtLgf9>



### Communication

You can also request a meeting outside of Office Hours. To do so, send an email to [carlos.gutierrez@chaminade.edu](mailto:carlos.gutierrez@chaminade.edu). Include multiple dates and times that you are available to meet. (Will respond in 24hrs/48hrs)

### School & Department Information

#### School of Natural Sciences and Mathematics

Office Location: Wesselkamper, Room 116 [Building name and number can be found on each [Academic Schools' website](#).] Phone: (808) 440 4204 [Academic School's phone number can be found on School's website.]

If you have questions regarding the Forensic Sciences Department name, reach out to your Instructor or the School of Natural Sciences and Mathematics.

### Course Description & Materials

## Catalog Course Description

FS 340L Crime Scene Investigation (1)

Laboratory and field exercises to provide experience in crime scene search and processing, recognition, collection and preservation of different categories of evidence. Applications of photography to scene documentation. Use of proper personal safety precautions while at crime scene.

**Pre-Requisites:** EN-102, COM-101, FS-233L or FS-333L *with a grade of "C" or better.*

**Co-requisites:** FS-340

## Time Allocation

This one-credit course requires 45 clock hours of students' engagement per the official CUH Credit Hour Policy. Students enrolled in this course are expected to spend 37.5 hours in the Laboratory. These laboratory hours include Lab activities and exams. There will be an additional 7.5 hours of work required beyond what is listed here (course reading and homework assignments), averaging 0.5 hours each week.

## Required Materials

This lab requires a textbook that will complement laboratory exercises. The lab is based on the lectures (FS 340) and the textbook chapters, supplemented by additional materials from the recommended textbooks. My advice is to read the book chapters and listen to the lectures.

### **Textbooks**

Gardner R. M., Krouskup D., (2019) *Practical Crime Scene Processing and Investigation* CRC Press. Boca Raton, FL, USA. ISBN: 9781315170596

### **Recommended Textbooks**

Edward Robinson, *Crime Scene Photography*, 3<sup>rd</sup> Edition, Academic Press, 2016, ISBN: 9780128027646

### **Crime Scene Kit – Practical Assignments**

Crime scene investigation materials and supplies will be provided to complete your assignments. Specific assignments may require you to bring items from home.

### **Canvas**

Canvas will be used to store class materials, submit assignments, and access your grade. Canvas will also be used for email communication, but you can also email me directly at [carlos.gutierrez@chaminade.edu](mailto:carlos.gutierrez@chaminade.edu)

### **Google Drive**

This drive will be used to house larger files.

## Learning Outcomes

### Program Learning Outcomes (PLOs)

Forensic science is the natural science branch of the justice system. It is concerned with interpreting physical evidence. Investigations proceed by using physical evidence and testimonial evidence to reconstruct past events. Not surprisingly, forensic science comprises several disparate fields of study and the aim of this course is to introduce the use of physical evidence in the justice system.

Upon completion of the B.S. in Forensic Sciences, the student will be able to:

1. Apply the scientific method in an adaptive and mindful manner.
2. Use techniques for recognition, documentation, analysis, and interpretation of physical evidence.
3. Implement quality assurance programs, incorporating ethics and professional practice, to act as stewards of justice and peace throughout the broader community.
4. Communicate disciplinary knowledge to diverse audiences.

### Course Learning Outcomes (CLOs)

Forensic science is the natural science branch of the justice system. It is concerned with interpreting physical evidence. Investigations proceed by using physical evidence and testimonial evidence to reconstruct past events. Not surprisingly, forensic science comprises several disparate fields of study and the aim of this course is to introduce the use of physical evidence in the justice system.

Upon completion of the FS 340 course, the student will be able to:

1. Define the role of forensic science in criminal investigation.
2. Identify physical evidence and the information it can provide.
3. Describe quality assurance strategies in the forensic sciences, including the legal system, accreditation, and certification.
4. Describe acceptable professional conduct in the forensic sciences.

### Marianist Values

This class represents one component of your education at Chaminade University of Honolulu. An education in the Marianist Tradition is marked by five principles and you should take every opportunity possible to reflect upon the role of these characteristics in your education and development:

1. Education for formation in faith.

2. Provide an integral, quality education.
3. Educate in family spirit.
4. Educate for service, justice and peace, and integrity of creation.
5. Educate for adaptation and change.

### Native Hawaiian Values

Education is an integral value in both Marianist and Native Hawaiian culture. Both recognize the transformative effect of a well-rounded, value-centered education on society, particularly in seeking justice for the marginalized, the forgotten, and the oppressed, always with an eye toward God (Ke Akua). This is reflected in the 'Ōlelo No'eau (Hawaiian proverbs) and Marianist core beliefs:

1. Educate for Formation in Faith (Mana) E ola au i ke akua ('Ōlelo No'eau 364) May I live by God.
2. Provide an Integral, Quality Education (Na'auao) Lawe i ka ma'alea a kū'ono'ono ('Ōlelo No'eau 1957) Acquire skill and make it deep.
3. Educate in Family Spirit ('Ohana) 'Ike aku, 'ike mai, kōkua aku kōkua mai; pela iho la ka nohana 'ohana ('Ōlelo No'eau 1200) Recognize others, be recognized, help others, be helped; such is a family relationship.
4. Educate for Service, Justice and Peace (Aloha) Ka lama kū o ka no'eau ('Ōlelo No'eau 1430) Education is the standing torch of wisdom.
5. Educate for Adaptation and Change (Aina) 'A'ohe pau ka 'ike i ka hālau ho'okahi ('Ōlelo No'eau 203) All knowledge is not taught in the same school

### Alignment of Course Learning Outcomes

	CLO 1	CLO 2	CLO 3	CLO 4
<b>Marianist Values</b>	x	x	x	x
<b>PLOs</b>	x	x	x	X
<b>Native Hawaiian Values</b>	x	x	x	x
<b>Gen Ed Learning Outcomes (if applicable)</b>				

### Course Activities

### ***Evaluation of Student Performance***

All grades will be posted in Canvas within one week of assignment/exam submission.

Attendance grades will be posted to Canvas every week. Your grade will be kept current all semester. You are encouraged to contact me at [carlos.gutierrez@chaminade.edu](mailto:carlos.gutierrez@chaminade.edu) at any time to discuss your grades. I strongly encourage you to check your grades regularly. All assignments have firm due dates, and your score will be penalized 10 points for each day late.

### ***Evaluations (940 Total points)***

- ***Attendance & Participation (300 points)***

Laboratories are scheduled to meet in person every Wednesday unless indicated otherwise. You will earn **20 points** per laboratory attended starting Wednesday, 28 August. Please be aware that the total attendance points (300) will change if a class period is canceled due to illness, weather, or another reason.

At the beginning of this Lab, the class will be divided into CSI Teams. Each CSI team will remain until the end of the semester. ***THIS LABORATORY IS BASED ON CSI TEAMWORK.***

If you miss a lab and your absence is deemed “excused,” you will be given a substitute assignment (e.g., a 3–5-page review of journal articles related to the topic). If you are an athlete or in the military, you shall provide a letter from your coordinator before the class session.

***If you miss a lab and your absence is considered "unexcused," you will receive a 0 point for attendance and work for that lab session.***

- ***Examinations:***

- ***Laboratory activities: (240 points)***

You are required to complete all the laboratory activities. These weekly activities (12) are based on the knowledge obtained from the lecturers (FS 340).

After you and your CSI Team complete the weekly laboratory activities and report, you can earn up to 20 points per Lab.

- ***Laboratory Exams: (400 points)***

You will have two midterm lab exams (Night lab and Beach lab). Each exam is worth **100 points**. The final lab exam is a Crime Scene analysis and report, which could involve past scenes processed during the semester. The final exam is worth **200 points**.

***Unexcused missed exams will receive a grade of 0 points.***

## **Course Policies**

### **Extra Credit**

If any student needs an extra credit assignment, they should approach the instructor at least one month before finals lab week (November 26<sup>th</sup>) to discuss possible options. It won't be an

extra credit assignment for unexcused absences or other situations where students have shown a lack of interest in the course.

### **Lateness:**

Students should be in class on time. If a student is late by 2-10 minutes, they will lose 5 points from their attendance. If they are more than 10 minutes late, they will lose all 10 attendance points assigned for that lecture.

### **Changes to the Syllabus**

While the provisions of this syllabus are as accurate and complete as possible, your instructor reserves the right to change any provision herein at any time. Every effort will be made to keep you advised of such changes, and information about such changes will be available from your instructor.

### **Grades of Incomplete**

This is a very unique situation for this class. The only circumstances in which some students might find themselves in this situation are if they have an extra credit assignment pending for evaluation or submission. This will be discussed between the instructor and the student.

### **Final Grades**

Final grades are submitted to [Self-Service](#):

<b>Activity</b>	<b>Points</b>
1 <sup>st</sup> Exam	100
2 <sup>nd</sup> Exam	100
Final Exam	200
Attendance	300 (20 points per lab)
Lab. Activities	240 (20 points per lab)
<b>Total</b>	<b>940</b>

<b>Points</b>	<b>%</b>	<b>Letter Grade</b>
940 – 846	100 – 90	A
845 – 676	89 – 80	B
675 – 473	79 – 70	C*
472 – 283	69 – 60	D**
282 – 0	59 – 0	F

**\*This class is a prerequisite for FS 460/L, FS 480/L. The student should get a minimum C grade to be enrolled in the next FS course.**

**\* A student who receives a D as a final grade in this course is considered to have passed but cannot use this grade if they need to take the next FS course.**

## Important Information

### Academic Honesty

Academic honesty is an essential aspect of all learning, scholarship, and research. It is one of the values regarded most highly by academic communities throughout the world. Violations of the principle of academic honesty are extremely serious and will not be tolerated.

Students are responsible for promoting academic honesty at Chaminade by not participating in any act of dishonesty and by reporting any incidence of academic dishonesty to an instructor or to a University official. Academic dishonesty may include theft of records or examinations, alteration of grades, and plagiarism, in addition to more obvious dishonesty.

Questions of academic dishonesty in a particular class are first reviewed by the instructor, who must make a report with recommendations to the Dean of the Academic Division. Punishment for academic dishonesty will be determined by the instructor and the Dean of Academic Division and may include an "F" grade for the work in question, an "F" grade for the course, suspension, or dismissal from the University.

For the most up to date information, please refer to the [Academic Honesty Policy](#) on the Chaminade University Catalog website.

### Title IX and Nondiscrimination Statement

Chaminade University of Honolulu is committed to providing a learning, working and living environment that promotes the dignity of all people, inclusivity and mutual respect and is free of all forms of sex discrimination and gender-based violence, including sexual assault, sexual harassment, gender-based harassment, domestic violence, dating violence, and stalking. As a member of the University faculty, I am required to immediately report any incident of sex discrimination or gender-based violence to the campus Title IX Coordinator.

### Nondiscrimination Policy & Notice of Nondiscrimination

Chaminade University of Honolulu does not discriminate on the basis of sex and prohibits sex discrimination in any education program or activity that it operates, as required by Title IX and

its regulations, including in admission and employment. Inquiries about Title IX may be referred to the University's Title IX Coordinator, the U.S. Department of Education's Office for Civil Rights, or both and contact information may be found at the [Chaminade University Title IX Office Contact Information and Confidential Resources website](#). On-campus Confidential Resources may also be found here at [CAMPUS CONFIDENTIAL RESOURCES](#).

The University's Nondiscrimination Policy and Grievance Procedures can be located on the University webpage at: <https://chaminade.edu/compliance/title-ix-nondiscrimination-policies-procedures/>.

To report information about conduct that may constitute sex discrimination or make a complaint of sex discrimination under Title IX, please refer to the [Campus Incident Report form](#). Chaminade University of Honolulu prohibits sex discrimination in any education program or activity that it operates. The NOTICE of NONDISCRIMINATION can be found here: [Notice of Nondiscrimination](#).

### [CUH Alert Emergency Notification](#)

To get the latest emergency communication from Chaminade University, students' cell numbers will be connected to Chaminade's emergency notification text system. When you log in to the Chaminade portal, you will be asked to provide some emergency contact information. If you provide a cellphone number, you will receive a text from our emergency notification system asking you to confirm your number. You must respond to that message to complete your registration and get emergency notifications on your phone.

### [Assessment for Student Work](#)

With the goal of continuing to improve the quality of educational services offered to students, Chaminade University conducts assessments of student achievement of course, program, and institutional learning outcomes. Student work is used anonymously as the basis of these assessments, and the work you do in this course may be used in these assessment efforts.

### [Student with Disabilities Statement](#)

Chaminade University of Honolulu offers accommodations for all actively enrolled students with disabilities 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).

Students are responsible for contacting Kokua Ike: Center for Student Learning to schedule an appointment. Verification of their disability will be requested through appropriate documentation and once received it will take up to approximately 2–3 weeks to review them.



Appropriate paperwork will be completed by the student before notification will be sent out to their instructors. Accommodation paperwork will not be automatically sent out to instructors each semester, as the student is responsible to notify Kokua Ike via email at [ada@chaminade.edu](mailto:ada@chaminade.edu) each semester if changes or notifications are needed.

### **Kōkua 'Ike: Tutoring & Learning Services**

Chaminade is proud to offer free, one-on-one tutoring and writing assistance to all students. Tutoring and writing help is available on campus at Kōkua 'Ike: Center for Student Learning in a variety of subjects (including, but are not limited to biology, chemistry, math, nursing, English, etc.) from trained Peer and Professional Tutors. Please check [Kōkua 'Ike's](#) website for the latest times, list of drop-in hours, and information on scheduling an appointment. Free online tutoring is also available via TutorMe. Tutor Me can be accessed 24/7 from your Canvas account. Simply click on Account > TutorMe. For more information, please contact Kōkua 'Ike at [tutoring@chaminade.edu](mailto:tutoring@chaminade.edu) or 808-739-8305.

### ***Instructor and Student Communication***

Questions for this course can be emailed to the instructor at [carlos.gutierrez@chaminade.edu](mailto:carlos.gutierrez@chaminade.edu). Online, in-person and phone conferences can also be arranged.

### ***Use of IA Tools***

During this course, students are allowed to use any type of AI tools, such as ChatGPT, Bing AI, Grammarly, among others, only for study purposes. Using AI tools to answer or write midterm or final exams, extra credit papers, or other kinds of evaluations is strictly prohibited.

### ***United Nations Sustainable Development Goals "SDG"***



This course covers the UN *SDG 16: "Peace, Justice and Strong Institutions"*, Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

### ***Technical Assistance for Canvas Users***

- Get started and find help on specific topics at the [Canvas Community](#)
- Contact the Chaminade IT Helpdesk for technical issues: [helpdesk@chaminade.edu](mailto:helpdesk@chaminade.edu), or call (808) 735-4855

### ***Tutoring and Writing Services***

Chaminade is proud to offer free, one-on-one tutoring and writing assistance to all students. Tutoring and writing help is available on campus at Kōkua `Ike: Center for Student Learning in a variety of subjects (including, but are not limited to: biology, chemistry, math, nursing, English, etc.) from trained Peer and Professional Tutors. Please check Kōkua `Ike's website (<https://chaminade.edu/advising/kokua-ike/>) for the latest times, list of drop-in hours, and information on scheduling an appointment. Free online tutoring is also available via Smarthinking. Smarthinking can be accessed 24/7 from your Canvas account. Simply click Account – Notifications – Smarthinking. For more information, please contact Kōkua `Ike at [tutoring@chaminade.edu](mailto:tutoring@chaminade.edu) or 808-739-8305.

### ***Cell phones, tablets, and laptops***

Out of consideration for your classmates, please set your cell phone to silent mode during class. Students are encouraged to bring laptops or tablets to class as the instructor will assign online activities and readings that will require the use of a laptop or tablet. Laptops and tablets should not be misused, such as checking distracting websites. Use your best judgment and respect your classmates and instructor.

## **Readings & Due Dates**

### **TENTATIVE SCHEDULE**

<b>Week</b>	<b>Day</b>	<b>Lab</b>	<b>Subject</b>	<b>Notes</b>
1	27 Aug	Lab 6/CHS	Syllabus Review, Laboratory Safety, Introduction to CSI Lab, CSI Teams, CSH Tour.	Welcome!
2	3 Sep	CSH	Crime Scene kit and forms. Notetaking; Scene Arrival, Assessing, Observations, Evidence Identification.	
3	10 Sep	CSH	Observations, Searching the Scene, Documentation, Evidence Collection.	
4	17 Sep	CSH	Photography, sketch, and the body as scene.	
5	24 Sep	CSH	<b>Midterm Exam I</b>	
6	1 Oct	CSH	Fingerprints, Superspectral, Forensic Technology, ALS. Searching and collecting biological material, BlueStar	

and others test (STK, OBTI, Identi-Hem, PSA.)

7	8 Oct	CSH	Shoe Impressions and tool marks	
8	15 Oct	CSI	Bloodstain Pattern analysis and presumptive/confirmatory test	
9	22 Oct	CSH	Forensic Exhumation, Forensic Entomology, and Forensic Anthropology.	
10	29 Oct	CSH	Night crime scene investigation	<i>Night Lab</i>
11	5 Nov		Evidence analysis from night lab and lab report	
<b>12</b>	<b>12 Nov</b>	<b>CSH/Kaimana Beach</b>	<b>Midterm Exam II: Beach crime scene investigation</b>	<b>Beach Lab</b>
13	19 Nov	CSH/Lab 6	Evidence analysis from beach lab and final lab report	
14	26 Nov	CSH/ CSH/Lab 6	Final lab report submission.	
15	3 Dec	Lab 6	<b><u>Final CSI Lab Exam: Expert witness testimony in Court, about the Crime Scene Investigation Report</u></b>	<b>Final CSI Lab Exam</b>