



## Course Syllabus

Chaminade University Honolulu

3140 Waiialae Avenue - Honolulu, HI 96816

[www.chaminade.edu](http://www.chaminade.edu)

**Course Number:** FS 460L  
**Course Title:** Forensic Taphonomy Laboratory  
**Department Name:** Forensic Sciences  
**School Name:** Natural Sciences and Mathematics  
**Term:** Fall 2024  
**Course Credits:** 1  
**Class Meeting Days:** Tuesday  
**Class Meeting Hours:** 2:30PM – 5:20PM  
**Class Location:** L6 Henry Hall



**Instructor Name:** David O. Carter  
**Email:** [david.carter@chaminade.edu](mailto:david.carter@chaminade.edu)  
**Phone:** 808.739.8352  
**Office Location:** 207A Eiben Hall

### Office Hours

Meetings during Office Hours can be scheduled [through my Google Calendar](#). My Office Hours are:

Wednesdays 10:00am – 12:00pm

Thursdays 1:30pm – 4:00pm

You can also schedule a meeting outside of Office Hours. To do so, send an email to [david.carter@chaminade.edu](mailto:david.carter@chaminade.edu). Provide the reason for the meeting and a list of multiple dates and times that you are available to meet. I will schedule with you as soon as possible.

### University Course Catalog Description

FS 460L Forensic Taphonomy Laboratory (1)

Quantitative and qualitative methods for investigating decomposition and its application in medicolegal death investigation. *Concurrent registration in FS 460 required.*

## Course Learning Outcomes & Program Learning Outcomes

Each student will finish this class with the ability to:	Program Learning Outcomes
Identify and measure processes of decomposition and postmortem changes	2. Use techniques for recognition, documentation, analysis, and interpretation of physical evidence
Design and conduct a decomposition study, including the analysis and presentation of data	1. Apply the scientific method in an adaptive and mindful manner 3. Implement quality assurance programs, incorporating ethics and professional practice, to act as stewards of justice and peace throughout the broader community

### Credit Hour Policy

FS 460L Forensic Taphonomy Laboratory is a one-credit hour course that requires a minimum of 45 hours of student engagement, per the official Credit Hour Policy. Student enrolled in FS 460L are expected to spend 39 hours in class. There will be an additional 6 hours of work required outside of class. This work includes readings, data collection, and data organization.

### Required Learning Materials

This class requires the use of several learning materials, both electronic and physical. This class will be managed electronically through Canvas and Google. All learning materials will be provided.

#### *Device*

Bring a device with you to every class. We will be looking at a lot of images and organizing a lot of data in spreadsheets.

#### *Reading Materials*

There are three publications that are vital to your success:

Carter DO, Orimoto A, Gutierrez CA, Ribéreau-Gayon A, Pecsí EL, Perrault KA, Peterson AJL (2023)

A synthesis of carcass decomposition studies conducted at a tropical (Aw) taphonomy facility: 2013 – 2022. *Forensic Science International: Synergy*. 7:100345.

Keough N, Myburgh J, Steyn M (2017) Scoring of decomposition: a proposed amendment to the method when using a pig model for human studies. *Journal of Forensic Sciences*. 62:986-993.

Megyesi MS, Nawrocki SP, Haskell NH (2005) Using accumulated degree days to estimate the postmortem interval from decomposed human remains. *Journal of Forensic Sciences*. 50:618-626.

#### *Canvas*

Canvas will serve as the primary repository for university documents and your grade, which will be updated each week. Canvas will also be used for email communication.

### Google Drive

You will receive a link to a shared Google Drive. This drive will be used to house larger files including publications, presentation files, images, and other files related to the class.

### Tentative Class Schedule

Week	Date	Subject	Notes
1	20 Aug	Introduction + Syllabus Review Health & Safety Guidelines	
2	27 Aug	What is a Decomposition Study? Long Term Goal – Estimating PMI Forensic Taphonomy Database	
3	3 Sep	Forensic Taphonomy Image Collection Image Exercise	
4	10 Sep	Decomposition Score Training Initial Experimental Availability	
5	17 Sep	Site Visit and Preparation Rearing Chamber Preparation	
6	24 Sep	Decomposition Study – Day 0	Meet at Crime Scene House
7	1 Oct	Decomposition Study – Day 7	Meet at Crime Scene House
8	8 Oct	Decomposition Study – Day 14 Site Visit, Wrap Up & Clean Up	Meet at Crime Scene House
9	15 Oct	Decomposition Study – Entomology Evidence Packaging	
10	22 Oct	<b>No Class</b>	<b>Caparica 2024 Lisbon, Portugal</b>
11	29 Oct	Decomposition Study – Data Organization & Review	
12	5 Nov	Testing Forensic Taphonomy Database – Estimating PMI	
13	12 Nov	Decomposition Study Reflection Psychopomp Preparation – Assigning Tasks	
14	19 Nov	Psychopomp Design	
15	26 Nov	Psychopomp Design	<b>Last Week of Classes Thanksgiving</b>

## **Assessment**

### *Attendance*

On time and prepared attendance is expected as a professional forensic scientist and it is expected here. You are expected to be in your seat by 2:30pm. A total of 28 attendance points are possible – two points per class period. Tardy attendance will be documented and every two tardies will subtract two attendance points. Leaving class to address an emergency is always acceptable but, in those cases, you are expected to schedule a meeting with me to discuss the scenario and why it should be excused. All known absences must be communicated in writing to [david.carter@chaminade.edu](mailto:david.carter@chaminade.edu) beforehand. See University Attendance Policy below.

### *Taphonomy Pre-Test*

You will complete a Pre-Test that will allow me to gauge your knowledge of taphonomy. Your answers will help me prepare the materials to best serve you.

### *Taphonomy Image Collection Exercise*

This is an exercise to get familiar with the Forensic Taphonomy Image Collection. You will answer a series of questions related to the images that comprise the collection. Bring a device that allows you to view images in high quality.

### *Carcass Decomposition Study*

You will be assigned decomposition metrics to collect, organize, and analyze. You are responsible for managing your datasets. You are required to submit an organized dataset in Google Sheets/Microsoft Excel format. You will earn 10 points per data set for a total of 100 points. Decomposition metrics will include:

- Total Body Score
  - Megyesi et al. (2005)
  - Keough et al. (2017)
- Skin Data
  - pH
  - Eh
  - Temperature
- Larval Mass Data
  - pH
  - Eh
  - Temperature
- Ambient Temperature & Accumulated Degree Days
- Ambient Relative Humidity & Accumulated Humidity Days

## Grading

Grades in this class are calculated using this scale:

Activity	Points	
Attendance	28	2 points class
Taphonomy Pre-Test	20	2 points per question
Taphonomy Image Collection Exercise	34	2 points per question
Taphonomy Dataset	100	10 points per data set
<b>Total</b>	<b>182</b>	

Points	%	Letter Grade
182 – 163	100 – 90	A
162 – 143	89 – 80	B
142 – 127	79 – 70	C
126 – 109	69 – 60	D
108 – 0	59 – 0	F

All grades will be posted in Canvas within one week of submission/exam completion. Your grade will be kept current all semester. You are encouraged to contact me at [david.carter@chaminade.edu](mailto:david.carter@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.

### Instructor and Student Communication

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

### Forensic Sciences Program Learning Outcomes (PLO)

Upon completion of the degree program in Forensic Sciences, students 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

### Marianist Characteristics & Native Hawaiian Values

Education is an integral value in both Marianist and Native Hawaiian culture and this class represents one component of your education at Chaminade University of Honolulu. 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 'Olelo 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, Peace and the Integrity of Creation (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

This class will focus on an education in the forensic sciences as an education in service, justice, and peace. This class will provide you with an opportunity to acquire an integral, quality set of skills that will help you to provide service, justice, and peace to the recently deceased and bereaved. You will also that most forensic scientists are public servants that conduct science for the benefit of society. Forensic scientists analyze, and speak for, evidence so that justice can be served and peaceful society can flourish.

### **University Attendance Policy**

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 main office. 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. **Unexcused absences may include (but are not limited to): work issues, travel, or illness without a doctor’s note.** 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.

Students with disabilities who have obtained accommodations from the Chaminade University of Honolulu ADA Coordinator may be considered for an exception when the accommodation does not materially alter the attainment of the learning outcomes. Federal regulations require continued attendance for continuing payment of financial aid. When illness or personal reasons necessitate continued absence, the student should communicate first with the instructor to review the options. Anyone who stops attending a course without official withdrawal may receive a failing grade or be withdrawn by the instructor at the instructor’s discretion.

### **Academic Conduct Policy**

Any community must have a set of rules and standards of conduct by which it operates. At Chaminade, these standards are outlined so as to reflect both the Catholic, Marianist values of the institution and to honor and respect students as responsible adults. All alleged violations of the community standards are handled through an established student conduct process, outlined in the Student Handbook, and operated within the guidelines set to honor both students’ rights and campus values.

Students should conduct themselves in a manner that reflects the ideals of the University. This includes knowing and respecting the intent of rules, regulations, and/or policies presented in the Student

Handbook, and realizing that students are subject to the University's jurisdiction from the time of their admission until their enrollment has been formally terminated. Please refer to the Student Handbook for more details. A copy of the Student Handbook is available on the Chaminade website.

### **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.

### **Mobile Devices**

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.

### **Disability Access**

Chaminade University of Honolulu is committed to providing reasonable accommodations for persons with documented disabilities. Any student who believes that they may need accommodations must first register with the Counseling Center. Registration with the Counseling Center begins the process of determining whether the student meets the requirements for a documented disability in accordance with the Americans with Disabilities Act (ADA), even if accommodations may not be needed for this particular class. The contact information for the Counseling Center is (808) 735-4845, 739-4603, or by email at [counselingcenter@chaminade.edu](mailto:counselingcenter@chaminade.edu). It is important for students to contact the Counseling Center as soon as possible so that accommodations are implemented in a timely fashion and to allow your instructor(s) to plan accordingly. Students will be required to provide written documentation to the Counseling Center in order for a determination to be made as to whether the requirements for a documented disability under the ADA are met.

Failure to provide written documentation through the Counseling Center will prevent your instructor from making the necessary accommodations, instructors cannot provide accommodations unless they have been prescribed by the Counseling Center. Once you have received an official notice of accommodations from the Counseling Center, it is also very important to discuss these accommodations directly with your instructor so that they can better support your needs. If you have specific questions regarding your individualized accommodations, you may speak directly with your instructor and/or you may contact the Counseling Center.

### **Title IX Compliance**

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. If you or someone you know has been harassed or assaulted, you can find the appropriate resources by visiting Campus

Ministry, the Dean of Students Office, the Counseling Center, or the Office for Compliance and Personnel Services.

### **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

### **Credit Hour Policy**

The unit of semester credit is defined as university-level credit that is awarded for the completion of coursework. One credit hour reflects the amount of work represented in the intended learning outcomes and verified by evidence of student achievement for those learning outcomes. Each credit hour earned at Chaminade University should result in 45 hours of engagement. This equates to one hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester, 10-week term, or equivalent amount of work over a different amount of time. Direct instructor engagement and out-of-class work result in total student engagement time of 45 hours for one credit.

The minimum 45 hours of engagement per credit hour can be satisfied in fully online, internship, or other specialized courses through several means, including (a) regular online instruction or interaction with the faculty member and fellow students and (b) academic engagement through extensive reading, research, online discussion, online quizzes or exams; instruction, collaborative group work, internships, laboratory work, practica, studio work, and preparation of papers, presentations, or other forms of assessment. This policy is in accordance with federal regulations and regional accrediting agencies.

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