

Course Syllabus

Chaminade University Honolulu
3140 Waialae Avenue - Honolulu, HI 96816
www.chaminade.edu

Course Number: FS 460L

Course Title: Forensic Taphonomy Laboratory

Department Name: Forensic Sciences

School Name: Natural Sciences and Mathematics

Term: Spring 2022 **Course Credits**: 1

Class Meeting Days: Wednesday

Class Meeting Hours: 2:30PM – 5:20PM

Class Location: L0 Henry Hall

Instructor Name: David O. Carter Email: david.carter@chaminade.edu

Phone: 808.739.8352

Office Location: 207A Eiben Hall

Office Hours: Meetings can be scheduled through Google Calendar. My Office Hours are:

Mondays & Fridays 2:30PM – 4:30PM

Thursdays 10:00AM - 12:00PM

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 (CLO)

After completion of this class you will be able to:

- 1. Identify and discuss processes of decomposition.
- 2. Define and discuss the effect of environmental variables on decomposition.
- 3. Design and conduct a decomposition study.
- 4. Measure decomposition.
- 5. Analyze and interpret data generated by a decomposition study.



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.

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.

Class Meetings

Laboratories will be delivered online and asynchronously from 12 January through 26 January. You will be provided with exercises to complete each week. We will meet in person starting Wednesday, 2 February 2022.

Decomponauts T-Shirt

The world is sorely in need of forensic scientists that have a robust understanding of taphonomy. The great thing is that you are just the person to provide it. Completing this class successfully will provide you with the knowledge to serve as a diplomat of death and decomposition. You are a Decomponaut, which means you need a Decomponauts t-shirt. I need to know the size that you want by the end of the first week of classes and a link will be provided for this. I would like to place the order as soon as possible in case of delays.

Tentative Class Schedule

The first three weeks of the semester will be held online due to COVID-19. We will begin in person classes on Wednesday, 2 February.

Week	Date	Subject	Notes
1	12 Jan	Introduction, Syllabus Review	online
2	19 Jan	Experimental Overview, Site Visit, Availability	Online, Pre-Test
3	26 Jan	Forensic Taphonomy Image Collection	online
4	2 Feb	Health and Safety, Image Collection - Part 2	
5	9 Feb	Total Body Score Training – Keough, Megyesi	
6	16 Feb	Long Term Forensic Taphonomy Database	
7	23 Feb	Class Cancelled	AAFS – Seattle, WA
8	2 Mar	Forensic Entomology – fly collection	
9	9 Mar	Taphonomy Equipment – datalogger, probes, insect nets, kill jars	
10	16 Mar	Site Preparation, Confirm Availability	
11	23 Mar	Class Cancelled	Spring Break
12	30 Mar	Decomposition Study	
13	6 Apr	Decomposition Study	
14	13 Apr	Decomposition Study	
15	20 Apr	Data Organization and Analysis	
16	27 Apr	Forensic Entomology – Preservation & Collections	Lab Exam Week

Assessment

Taphonomy Pre-Test

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

Carcass Decomposition Study

You will be assigned decomposition metrics to collect, organize, and analyze. You are responsible for managing your datasets. Decomposition metrics will include:

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

You are required to submit an organized dataset in Microsoft Excel/Google Sheets format. You will earn 10 points per data set for a total of 100 points.

Grading

Letter grades are given in all courses except those conducted on a credit/no credit basis. Grades in this class are calculated from the assignments using this scale:

Activity		Points	
Attendance		110	10 points per in-person class
Taphonomy Pre-Test		50	
Experimental Data		100	10 points per data set
	Total	260	

Points	%	Letter Grade
260 - 233	100 - 90	A
232 - 207	89 - 80	В
206 - 181	79 - 70	C
180 - 155	69 - 60	D
154 - 0	59 - 0	F

Instructor and Student Communication

Questions for this course can be emailed to the instructor at <u>david.carter@chaminade.edu</u>. Online, inperson and phone conferences can also be arranged.

Program Learning Outcomes (PLO)

Upon completion of the undergraduate degree program in Forensic Sciences, students will have demonstrated the use of:

- 1. The scientific method as it is used in a forensic context,
- 2. Quality assurance programs, to include the legal system, ethics, and professional practice in the forensic sciences,
- 3. Knowledge from disciplines that comprise the forensic sciences, and
- 4. Techniques used for the recognition, documentation, and analysis of physical evidence

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.

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, 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

(<u>https://chaminade.edu/advising/kokua-ike/</u>) 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 <u>tutoring@chaminade.edu</u> 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.

ADA Policy

Statement from the New Student Handbook:

Pursuant to 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 the basis of disability and are eligible for reasonable accommodations or modifications in the academic environment to enable them to 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 in the Student Support Services Building, Room 101, by phone at (808) 735-4845 or email: counselingcenter@chamiande.edu for further information. Web: studentaffairs.chaminade.edu/counseling-center/counseling-services

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.

Attendance Policy

The following attendance policy is from the Undergraduate Catalog.

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. 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

From the Undergraduate Catalog:

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.

For further information, please refer to the Student Handbook.