



Course Syllabus

Chaminade University Honolulu

3140 Waiālae 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 2020

Course Credits: 1

Class Meeting Days: Monday

Class Meeting Hours: 1:50PM – 5:10PM

Class Location: Online through 11 September
Henry Lab 0 from 14 September



Instructor Name: David O. Carter

Email: david.carter@chaminade.edu

Phone: 808.739.8352

Office Location: 207A Eiben Hall

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

Hours are: Wednesdays 2:00PM – 4:30PM

Thursdays 10:00AM – 1:00PM

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)

The purpose of this class is to learn how to conduct an experiment from beginning to end. This is a key skill for every Decomponaut. We will conduct a decomposition experiment that you can refer to as a carcass decomposition study – we are going to measure the decomposition of three pig carcasses. After completion of this class you will be able to:

1. Identify and discuss processes of decomposition.
2. Design and conduct a decomposition study.
3. Collect, analyze, and interpret data generated during a decomposition study.

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

Alignment of Learning Outcomes

	PLO 1	PLO 2	PLO 3	PLO 4
CLO 1				X
CLO 2	X	X	X	
CLO 3	X	X		

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 ('Olelo 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 ('Olelo 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 ('Olelo 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 ('Olelo 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 ('Olelo 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.

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. You are required to access Microsoft Excel and Google Sheets. All other 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 named FS 460L Forensic Sciences [Fall 2020]. This drive will be used to house larger files including presentation files, images, videos, and other files related to the class.

Lectures, Tutorial, Videos, & Class Meetings

Most material will be provided to you as asynchronous videos. Classes will still be held via Zoom as scheduled however, some of these classes will be used to review the content of these videos. Zoom invitations will be provided.

Asynchronous attendance – it is possible that you may not be able to attend some or all classes at the regularly scheduled time. Contact me at david.carter@chaminade.edu to schedule a time to meet outside of regularly scheduled class or make another acceptable arrangement.

Tentative Class Schedule

Week	Date	Subject	Notes
Module I: Introduction & Orientation			
1	24 Aug	Introduction, Orientation, Health & Safety	
2	31 Aug	Experimental Overview, Availability, Site Visit	
3	7 Sep	Class Cancelled	Labor Day
Module II: Taphonomy Training & Experimental Design			
4	14 Sep	Total Body Score Training – Keough	
5	21 Sep	Total Body Score Training – Megyesi	
6	28 Sep	Equipment inventory, probe training, datalogger training	
Module III: Decomposition Study			
7	5 Oct	Site Preparation, Confirm availability	1st Post: Decomponauts Go!
8	12 Oct	Class Cancelled	Discoverers' Day
9	19 Oct	Taphonomy Experiment	Reply: Decomponauts Go!
10	26 Oct	Taphonomy Experiment	
Module IV: Data Organization and Analysis			
11	2 Nov	Data Organization and Analysis	Datasets Due
12	9 Nov	Forensic Entomology – Preservation, Collection, and Maggot Gifts	
13	16 Nov	Experimental Reflection	
14	23 Nov	Finalize Data & Thanksgiving Celebration	Due: Experimental Data

EVALUATION OF STUDENT PERFORMANCE

All grades will be posted in Canvas within one week of submission. Attendance grades will be posted to Canvas on a weekly basis. Your grade will be kept current all semester. You are encouraged to contact me at 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.

Attendance & Participation

You will earn two points per class participated or asynchronous class period completed. Some class periods will be used to review the asynchronous material. Other class periods will be used to deliver new material. For example, Weeks 9 – 10 will be used to learn the Total Body Score systems. These class periods will be recorded and provided to you.

Decomponauts Go!

Most decomposition is carried out by decomposer organisms and let's be honest, there are a lot of decomposer organisms out there. Decomposers range from microbes to birds to fish to mammals to

reptiles and more! Odds are that you have a decomposer organism that you feel most drawn to, like a spirit animal. I feel most drawn to the bacteria, for example, and I will explain why during the semester. The purpose of Decomponauts Go! is to identify your spirit decomposer so that we can complete our Decomponaut team. Perhaps you feel drawn to vultures, tigers, flesh flies, or hagfish? You need to identify the decomposer that most resonates with you and tell us about it in the Canvas Discussion Board. Your initial post will identify your spirit decomposer and tell us why you are kindred spirits. You must also reply to at least one classmate by telling them why you like their spirit decomposer. These responses must be 200 words or less.

Total Body Score, Decomposition Chemistry, and Environmental Data

You will be provided data from the following measurements:

- Total Body Score – Megyesi
- Total Body Score – Keough
- 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 responsible for organizing, analyzing, and submitting all of these experimental data via Google Sheets/Microsoft Excel. Tutorial videos will be provided to guide you through this process. Upon completion, you will have worked through an entire experiment from start to finish. That experience is invaluable to every Decomponaut. These datasets are due by the last week of class.

Grading

Activity	Points
Attendance & Participation	24 @ 2 points per class
Decomponauts Go!	15 @ 5 points per item
Total Body Score Data	84 @ 2 points per carcass per day
Chemistry & Environmental Data	84 @ 2 points per carcass per day
Total	207

100% - 90%	A – Outstanding scholarship and an unusual degree of intellectual initiative
89% - 80%	B – Superior work done in a consistent and intellectual manner
79% - 70%	C – Average grade indicating a competent grasp of subject matter
69% - 60%	D – Inferior work of the lowest passing grade, not satisfactory for fulfillment of prerequisite course work
≤ 59%	F – Failed to grasp the minimum subject matter; no credit earned

Instructor and Student Communication

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

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.

Technical Assistance for Canvas Users

- Search for help on specific topics at help.instructure.com
- [Chat live with Canvas Support 24/7/365](#)
- Watch this [video to get you started](#) with online guides and tutorials
- 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 (<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 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.

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. 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.

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.