



Course Syllabus

Chaminade University Honolulu

3140 Waiālae Avenue - Honolulu, HI 96816

www.chaminade.edu

Course Number: FS 460
Course Title: Forensic Taphonomy
Department Name: Forensic Sciences
School Name: Natural Sciences and Mathematics
Term: Fall 2020
Course Credits: 3
Class Meeting Days: Monday, Wednesday, Friday
Class Meeting Hours: 10:20AM – 11:20AM
Class Location: Online through 11 September
102 Hale Hoaloa 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 460 Forensic Taphonomy (3)

Processes associated with the decomposition and preservation of organic materials with an emphasis placed on human remains. *Prerequisites:* CH 323/L. *Concurrent registration in FS 460L required.*

Course Learning Outcomes (CLO)

You are now a Decomponaut. As a Decomponaut you are a member of an elite team of scientist diplomats that specialize in death and decomposition. Kind of like the A-Team, if they were significantly more awesome. This class will teach you the importance of death and decomposition to our planet. You will also learn how nature, including human activity, affects decomposition and how decomposition can be used as evidence in medicolegal death investigation. As a result, you will finish this class with the ability to:

1. Identify and discuss processes of decomposition.
2. Define and discuss the effect of environmental variables on decomposition.
3. Discuss the application of taphonomy to medicolegal death investigation.

4. Discuss the value of common and recently developed techniques in forensic taphonomy.

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 Course and Program Learning Outcomes

	PLO 1	PLO 2	PLO 3	PLO 4
CLO 1		X		
CLO 2		X		
CLO 3	X	X	X	
CLO 4			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. 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 named FS 460 Forensic Sciences [Fall 2020]. This drive will be used to house larger files including publications, presentation files, images, and other files related to the class.

Lectures & Class Meetings

We will meet live during the first week of classes. This will allow us to review the syllabus and address any issues that develop. Starting in week 2, lectures will be delivered asynchronously so that you can watch them at the time that best serves you and we will meet live every Friday thereafter at the normally scheduled class time. You will earn two points per class attended. 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.

T-Shirt

You need a Decomponauts t-shirt to be successful in this class. 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 SCHEDULE

Week	Date	Subject	Notes
1	24 Aug	Module I: Introduction to Taphonomy Syllabus and Roster Review Medicolegal Death Investigation	T-shirt Size Due
2	31 Aug	What is decomposition? Decomposition processes Why do organic materials decompose?	
3	7 Sep	Factors that regulate decomposition: Decomposer community, physicochemical environment, resource quality	Labor Day
Module II: Decomposer Organisms			
4	14 Sep	The postmortem food web Scavengers and predators	Exam 1
5	21 Sep	Arthropods and insects, microorganisms	Decomponaut Identity Due
Module III: Physicochemical Environment			
6	28 Sep	Temperature and Accumulated Degree Days Moisture, adipocere, and desiccation	Exam 2 Decomponaut Response Due
7	5 Oct	Soil, burial, and other concealments Volatile organic compounds (VOCs)	
Module IV: Resource Quality			
8	12 Oct	Biological profile trauma	Discoverers' Day Exam 3
9	19 Oct	Change in decomposition as remains lose quality Decomposition study begins (FS 460L)	
Module V: Forensic Applications			
10	26 Oct	Estimating postmortem interval (PMI)	Exam 4
11	2 Nov	Locating clandestine graves	
12	9 Nov	Identification of the deceased	Veterans Day
13	16 Nov	Cause and Manner of Death	Carcass Collection Due
14	23 Nov	Final Exam – Wednesday, 25 November.	Final Exam

EVALUATION OF STUDENT PERFORMANCE

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

Lectures will be delivered asynchronously so that you can watch them at the time that best serves you. We will, however, have regular live meetings via Zoom to discuss the lecture topics and content. We will meet on the first day of classes and every Friday thereafter at the normally scheduled class time. You will earn two point per class attended. Zoom invitations will be provided.

Exams

You are required to complete four exams via Google Forms. These exams are modelled after forensic science certification and accreditation exams, which means they are in multiple choice format including true/false. Each exam is worth 50 points.

The Decomponauts – Diplomats of Death and Decomposition

The world is sorely in need of forensic scientists that have a robust understanding of medicolegal death investigation and taphonomy in particular. The great thing is that you are just the person to provide it. First step – we need to establish your identity, which will be shared using the Canvas Discussion Board. Your initial post will answer these questions:

1. What is your Decomponaut codename?
2. Why did you choose that codename?
3. In which area of taphonomy do you want to specialize:
 - a. Anthropology
 - b. Chemistry
 - c. Entomology
 - d. Microbiology
 - e. Scavenger Ecology

You must then reply to at least one classmate by telling them (1) why you like their codename and why you think their area of expertise is (2) interesting and (3) valuable to medicolegal death investigation. By the way, my codename is Doc. This assignment will occur during weeks 5 and 6 of the semester. Late posts and late replies will be penalized 10 points per day late.

Carcass Image Collection – Long Term Project

Carcasses are everywhere, you probably just don't realize it. To foster your appreciation of carcass ubiquity, you must collect 10 images of carcasses that you have encountered during the semester. You will then be placed into groups of 2 – 3 students and your job is to develop a slide show of your Top 10 Carcasses. Each of your Top 10 must have a brief note explaining why it made the Top 10. You will include the remaining 10 – 20 carcasses as the runners up.

Carcasses must be animals (e.g. mammals, birds, insects, reptiles, fish) and images can be captured using your smartphone. You will probably find most carcasses around your home or while you are outside. You must (1) identify each carcass to the best of your ability, (2) document the location where you found it and (3) present them as a slideshow in Google Slides. An example slideshow will be provided to you. Your Carcass Image Collection is due on Friday, 20 November. Late assignments will be penalized 10 points per day late.

Grading

Activity	Points
Attendance	~30 @ 2 points per class
Exams	250 @ 50 points per exam
Decomponaut Identity	60 @ 10 points per item
Carcass Collection	50 @ 5 points per documented image
Total 390	

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.