



Course Syllabus

Chaminade University Honolulu

3140 Waiialae 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: Spring 2020

Course Credits: 3

Class Meeting Days: Monday, Wednesday, Friday

Class Meeting Hours: 11:30AM – 12:20AM

Class Location: 202 Eiben Hall



Instructor Name: David O. Carter

Email: david.carter@chaminade.edu

Phone: 808.739.8352

Office Location: 207A Eiben Hall

Office Hours: Tuesday 10:30AM – 12:30PM, 2:30PM – 4:30PM; Friday 1:30PM – 4:30PM

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)

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. Discuss the application of taphonomy to medicolegal death investigation, and
4. Discuss the value of common and recently developed techniques in forensic taphonomy.

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

Alignment of Learning Outcomes

| | PLO 1 | PLO 2 | PLO 3 | PLO 4 |
|-------|-------|-------|-------|-------|
| CLO 1 | | | X | X |
| CLO 2 | | | X | X |
| CLO 3 | | X | X | X |
| CLO 4 | | | X | X |

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
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 '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 kuu'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

Required Learning Materials

All materials will be provided.

Course Website

Course materials will be made available through Canvas. Students are required to use the Canvas course for this class.

Tentative Class Schedule

| Week | Monday | Subject | Notes |
|------|--------|--|---|
| 1 | 13 Jan | Introduction, Syllabus, and Roster Review Intro to Medicolegal Death Investigation | |
| 2 | 20 Jan | Intro to Taphonomy | Martin Luther King Day Founders Day Mass |
| 3 | 27 Jan | What is decomposition? | |
| 4 | 3 Feb | Factors that regulate decomposition | |
| 5 | 10 Feb | Measuring decomposition: Total Body Score and Mass Loss (Chun, Keough, Megyesi, Dibner) | |
| 6 | 17 Feb | Class Cancelled – Identify Presentation Topics, read journal articles | AAFS – Anaheim, USA Presidents’ Day |
| 7 | 24 Feb | Submit Presentation Topics Writing Workshop | Exam 1 Due |
| 8 | 2 Mar | Identification of the deceased | |
| 9 | 9 Mar | Class Cancelled – Collect and Submit Carcass Images | OSAC – Norman, USA |
| 10 | 16 Mar | Cause and Manner of Death | |
| 11 | 23 Mar | Class Cancelled – Relax and Prepare for Experiment | Spring Break Prince Kuhio Day |
| 12 | 30 Mar | Forensic Entomology and Microbiology | Experiment in Progress |
| 13 | 6 Apr | Estimating postmortem interval (PMI) Forensic Geosciences – soil analysis | Experiment in Progress Good Friday |
| 14 | 13 Apr | Locating clandestine graves Volatile Organic Compounds (VOCs) | |
| 15 | 20 Apr | Class Cancelled – Complete and Submit Exam 2 | ECCMID – Paris, France Exam 2 Due |
| 16 | 27 Apr | Student Presentations | |
| 17 | 4 May | Student Presentations: Wednesday, 6 May, 11:00AM | Finals Week |

Assessment

Writing Workshops & Written Exams

This class requires you to complete 3 written exams. However, we will take the exams in class over multiple class periods. The primary goal is to develop professional scientific writing skills. The ideal answer is a concise paragraph that references relevant scientific literature. Each exam is worth 100 points and your grade will be based on content, citations, and formatting.

Carcass Collection

Each student must submit 10 images of carcasses observed in nature. Carcasses must be animals, e.g. mammals, insects, reptiles, fish. Images can be captured via smartphone and submitted via email. All images are due before Spring Break.

Oral Presentations

Each student will be required to deliver an oral presentation on a relevant class topic. Each presentation will be 10 – 15 minutes and will comprise a review of a journal publication in forensic taphonomy since 2000. Publications must be from the peer-reviewed literature and approved by the instructor.

Target Audience: medicolegal death investigators, crime scene investigators, forensic pathologists, Medical Examiners, Coroners

Primary Question of Interest: Why is this research important?

| Activity | Points |
|-------------------------|---------------------------------|
| Writing Workshop x 2 | 200 @ 100 points per workshop |
| Carcass Collection x 10 | 50 @ 5 points per carcass image |
| Oral Presentation | 100 |
| Total | 350 |

Grading Scale

Letter grades are given in all courses except those conducted on a credit/no credit basis. Grades are calculated from the student's daily work, class participation, quizzes, tests, term papers, reports and the final examination. They are interpreted as follows:

| | |
|------------|---|
| 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 given |

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.

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.

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.