



ANTH-201: INTRODUCTION TO FORENSIC ANTHROPOLOGY

Effective Term

Fall 2024

BOT Approval Date

10/12/2023

Discipline

ANTH - Anthropology

Course Number

201

Course Title

Introduction to Forensic Anthropology

Short Title

Intro to Forensic Anthro

Credit Status (CB 04)

D - Credit - Degree applicable

Units**Lecture Units**

3.00

Total Units

3.00

Hours**Lecture Contact Hours**

48-54

Out of Class Hours Lecture

96-108

Total Contact Hours

48 - 54

Total Out of Class Hours

96 - 108

Total Student Learning Hours

144 - 162

Distance Education

No

Catalog Description

This course provides a basic overview of the field of forensic anthropology; human osteology; the techniques used to make estimations of age, sex, ancestry and stature; recovery techniques and the analytic techniques and procedures used in the medico-legal framework, as well as in human rights and mass disaster situations. Forensic Anthropology is the application of standard, scientific, anthropological techniques to identify human remains and to assist in the detection of a crime.



Requisites

Recommended Preparation

Recommended Preparation (note that students can enroll in the class even if they haven't take the recommended course)

ANTH-101.

Codes

TOP Code (CB 03)

2202.00 - Anthropology

CIP Code

45.0202 - Physical and Biological Anthropology.

Student Accountability Model (SAM) Priority Code (CB 09)

E - Non-Occupational

Noncredit Category (CB 22)

Y - Credit Course

Repeatability Code

No

Grading Option

Letter grade OR P/NP

Minimum Qualifications

Minimum Qualifications	And/Or
Anthropology (Masters Required)	End

GE Information

Check GE Types Requested

AA/AS A - Natural and Physical Sciences

CSU Area(s)

IGETC Area(s)

Learning Objectives

Learning Objectives

Learning Objective
1. Describe the development of forensic anthropology and its relationship to the field of anthropology
2. Demonstrate knowledge of human osteology and odontology.
3. Assess the forensic context and describe the recovery methods associated with a crime scene.
4. Identify appropriate methods for preparation and reconstruction of remains in the laboratory.
5. Evaluate the techniques used in estimating time since death, ancestry, sex, age at death, and stature from human remains.
6. Compare and contrast manner and cause of death
7. Assess different types of ante-, peri-, and postmortem changes to bone, including pathology, trauma, and natural anomalies
8. Evaluate techniques related to identifying individuals including radiography, facial reconstruction, and odontology.
9. Consider the ethical responsibilities of the Forensic Anthropologist
10. Relate the practical knowledge learned in the course to the writing of forensic analysis reports and courtroom testimonies.

11. Distinguish the sources of errors associated with making determinations of ancestry and sex , given the variable gender and racial identities that exist in our communities

Learning Outcome Information

Course Learning Outcomes

Learning Outcome

1. The student will recognize and apply the methods of estimating ancestry, sex, age, stature and health from skeletonized humans.
2. The student will describe the role of the forensic anthropologist within the medicolegal community.
3. The student will recognize the different types of trauma and determine the respective forces.

Program Learning Outcomes

Learning Outcome

- Analyze the interrelationship between humans and their physical environment.
- Apply the principles of cultural relativism to observations of human behavior.
- Recognize the validity of people's variable language histories and experiences.
- Abstract meaning (or Evaluate meaning) from the archaeological and fossil records.
- Relate Natural Selection to hominin evolution.
- Incorporate the scientific method in observations of human attributes (biology, behavior, language, artifacts).

Institutional Learning Outcomes

Communication: The student will effectively express and exchange ideas through listening, speaking, reading, writing, visual works, and other modes of interpersonal expression.

Critical Thinking: The student will analyze problems, gather and synthesize relevant information, evaluate ideas, information, and evaluate alternative points of view to create, innovate and implement effective solutions.

Cultural Awareness and Humility: The student will demonstrate knowledge of and sensitivity toward individuals of diverse ethnicity, age, gender, sexual orientation, and religious affiliations, as well as toward those individuals with diverse abilities and socio-economic classes to respectfully interact with individuals of diverse perspectives, beliefs and values while being mindful of the limitation of their own cultural frameworks.

Information and Technology Literacy: The student will access, interpret, evaluate, and apply relevant information sources and digital media effectively, and in an ethical and legal manner.

Scientific Awareness: The student will apply the scientific method of inquiry to assess potential solutions for real-life challenges by employing science-based knowledge and methodologies in daily life.

Civic

Personal

and Professional Responsibility

Content

Course Lecture Content

1. Introduction of Forensic Anthropology and the field of anthropology, and the use of the scientific method in anthropology.
2. Human Osteology and Odontology
 - a. Cranial element identification
 - b. Postcranial element identification
 - c. Odontological identification
3. Forensic context
 - a. Human vs. Nonhuman
 - b. Contemporary vs noncontemporary
4. Recovery Scene methods
 - a. Locating
 - b. Mapping
 - c. Excavation
 - d. Collecting
 - e. Mass Disasters
5. Preparation and reconstruction of remains in laboratory
6. Estimating time since death

7. Methods of skeletal assessment

- a. Ancestry - including discussion of the challenge with identifying and discussing race versus ancestry.
- b. Sex - including discussion of differences between sex and gender and how the analysis of sex may not correspond to the public's understanding of sex and gender.
- c. Age at Death
- d. Stature

8. Cause and manner of death

9. Trauma

- a. Projectile trauma
- b. Blunt trauma
- c. Sharp trauma

10. Pathology

11. Ante-, peri-, post mortem change to bone

12. Idiosyncratic features

13. Ethical and legal responsibility of the forensic anthropologist

- a. Report writing
- b. Courtroom testimonies

Methods of Instruction

Method

Activity

Integration

Hands on activities may be used to give students a chance to apply the concepts learned in the lecture portions of the class. For example, students may be given various long bones (or portions thereof) to measure and to then use the appropriate formulae to estimate stature.

Method

Discussion

Integration

Students will engage in large and small group discussions. For example, the class may be assigned two articles, one describing how biological anthropologists do not regard race as a biologically meaningful concept, and one article asking why if race is not biologically real, can forensic anthropologists assign skeletons to groups based on ancestry. In class the students will be asked to discuss these readings, first in small groups of 3-5 students and then as a whole class.

Method

Group Projects

Integration

For example a Mock Trial might be used, where the students may be broken into different groups (judge, jury, prosecuting and defending attorneys, and expert witnesses). They would then be given the pertinent information and asked to research based on that information and present their research in the trial.

Method

In-class Exercises

Integration

Case study analyses might be used as in-class exercises. For example, a real or hypothetical forensic case might be introduced and the students would then have to discuss the appropriate techniques that should be used to determine as much information as possible. Examples of cases that could be used are descriptions of mass burials marginalized groups from Darfur or El Salvador, with the idea that students would have to come up with methods to sort commingled remains, or consider how to estimate time since death for a description of human remains from high altitude.

Method

Lecture

Integration

Lectures, incorporating audio-visual presentations and demonstrations of current concepts in forensic anthropology will be used to present key concepts to the students. For example, lectures may be presented using PowerPoint to provide photographs, tables, charts, and diagrams to demonstrate appropriate methods of determination of sex from the skeleton or changes in bone in response to different types of projectile trauma.

Method

Papers and Reports

Integration

Students could research a particular concept, method, anthropologist, etc, and write a report on the information gathered. Alternatively, this report could be presented orally in class, simulating an expert testimony in court.

Methods of Evaluation**Method**

Class Participation

Integration

In-class participation can be used to promote student interaction on selected forensic methods such as estimating time since death or analysis of various types of trauma. Students will discuss out-of-class readings, for instance on issues surrounding the assessment of race on a skeleton. Participation points may be assessed in a number of different ways including short written assignments, answering instructor questions.

Method

Exams/Tests

Integration

Exams can be used to check student understanding of objective class content such as the history of the field of Forensic Anthropology or knowledge of osteology and odontology. Students will be evaluated on the accuracy of multiple choice, true false and definition answers, as well as the ability to synthesize and evaluate information in short answers and short essays. They will also be evaluated on their ability to apply class concepts in different scenarios presented in the exam;

Method

Oral Presentation

Integration

Oral presentations can be used to evaluate students on their appraisal of analytic techniques related to pathological identification as well their ability to effectively engage in courtroom style testimony. Presentations will be evaluated on the accuracy of the content, appropriate and effective use of images, and the ability to present the information in an effective manner.

MethodPapers

Integration

Papers can be used to evaluate students on reviewing the responsibilities of a forensic anthropologist or critiquing techniques shown in a popular culture version of the discipline. Papers will be evaluated on the inclusion of pertinent information to the topic, synthesizing and analyzing disparate information, and utilizing proper grammar, spelling and syntax.

Method

Projects

Integration

Projects such as a forensic case study describing a multiple gun shot wound victim or a mock trial will be evaluated based on the correct methods being employed or discussed and the correct interpretations being drawn from the material provided. Additionally, the student will be evaluated on the manner in which their information is presented.

Method

Class Work

Integration

Classwork can be used to evaluate students on their ability to apply methods of age, sex and ancestry determination to known skeletons. Classwork will be evaluated on the effectiveness of methods selected to solve the assigned problem or situation. While accuracy will be important, more weight will be given to effective critical thinking skills applied to the problem at hand.

Assignments**Assignment Type**

Other

In-class and/or outside of class

In-class

Formative or Summative

Summative

Assignment

As a group, you will be reconstructing a crime scene. The reconstruction will be based on a case report provided by the instructor. As an example, the case report may be about a victim who died of possible blunt force trauma and whose remains were excavated from a shallow grave, but the report does not clearly provide three dimensional proveniences of the individual bones. From this assignment you will learn the difficulties from working with poorly written or incomplete information. After your group has reconstructed the crime scene, the instructor will reconstruct the scene as intended and your group will then have to re-write the report.

Assignment Type

Writing

In-class and/or outside of class

Outside of class

Formative or Summative

Summative

Assignment

You will prepare a forensic anthropology report based on evidence given to you by the instructor. You will be given a set of circumstances, condition of a skeleton, skeletal inventory, and some objective observations about the condition of the bones (for instance a collection of bones were found at the base of a cliff with a series of injuries that could be considered antemortem trauma, perimortem trauma, or postmortem damage. The student will need to determine the demographic information about the skeleton



as well as the determination of specific types of injuries and then determine the timing of those injuries). You will need to write up a forensic case report and state conclusions concerning the case.

Assignment Type

Reading

In-class and/or outside of class

Outside of class

Formative or Summative

Formative

Assignment

Read a non-fiction book on forensic anthropology intended for a general audience (Dead Men Do Tell Tales, Bones, The Bone Lady, The Bone Woman, Witnesses From the Grave, etc.) and write a 2 - 3 page book review in the style of professional book reviews published in contemporary periodicals (Natural History, Discover, etc.).

Assignment Type

Reading

In-class and/or outside of class

In-class

Outside of class

Formative or Summative

Formative

Assignment

Read the assigned portion of the article titled "Race, Racism and Anthropology" (1998) by Armelagos and Goodman, and the article "Understanding Race and Human Variation: Why Forensic Anthropologists are Good at Identifying Race" (2009) by Ousley, Jantz and Fried. Prior to coming to class make sure to write your reflections about the two articles. In your reflections make sure to consider how does the debate about race and ancestry in biological anthropology affect the work of forensic anthropologists. Also make sure to write down two questions to ask the other students during the small group discussion, as well as two questions that you still have after reading the articles.

Course Materials**Textbooks**

Langley, N.R., M.A. Tersigni-Tarrant (eds.) (2021) Forensic Anthropology: A Comprehensive Introduction. 2nd ed. CRC Press. 9781032096940

Garvin H.M., N.R. Langley (2020) Case Studies in Forensic Anthropology. CRC Press. ISBN 9781032086569

Byers, S.N. (2017). Introduction to Forensic Anthropology Routledge. ISBN: 9781138188846

Burns, K.R. (2012). Forensic Anthropology Training Manual Routledge. ISBN: 9780205022595

White, T.D., P.A. Folkens (2005). The Human Bone Manual Academic Press. ISBN: 978-0-12-088467-4

Class Size Information**Class Size**

35

Class Size Category

B - Facilitated learning 35

Diversity and Inclusion

Explain how diversity and inclusion(e.g., gender, culture/race, sexuality, etc.) is infused into the course.

The class is focused more on the observation of data from the skeleton. However, in order to effectively do that, some discussion on broader concepts of race, racism, sex, sexuality and gender will have to be discussed. Students will be expected to consider the potential contradiction of biological anthropologists arguing that there is no evidence for the existence of biological races within the human species, and yet forensic anthropologists being able to effectively estimate ancestral populations from a skeleton. This discussion will also have to be couched in the overarching topic of how do forensic anthropologists then communicate their discoveries to medicolegal personnel (law enforcement, medical examiners, coroners, etc), and the broader public, both of whom may not have any grounding the conceptual discussion of race and ancestry and yet care very deeply about the status of their deceased or potentially missing loved one.

Likewise, conversations about sex, gender and sexuality will have to be addressed as students learn how to estimate sex from a skeleton. The data is clear that transgender and non-binary individuals are at a statistically higher likelihood of suffering injuries and death as a result of their identity than cisgender individuals. Therefore, students will have consider how these data may affect the future skeletons they will examine as forensic anthropologists and how the evidence they observe will be informed by these conversations.

Although the field of Forensic Anthropology itself is extremely white, care will be taken to also incorporate more studies and research written by individuals who are typically underrepresented in the Anthropological literature. Additionally, some focus on examples of genocide and other crimes against marginalized peoples will be discussed in order to help students understand the significance of an awareness of diversity within the field.

Describe how assignments, instruction, evaluation, course content, and interactions are contextualized for diverse learners promoting an equitable course.

To facilitate the instruction of diverse learners, assignments include both formative and summative assignments to help scaffold the approach of students with different learning styles to the array of information about human genetics and evolution and primate behavior and diversity. Many assignments also allow students to choose which specific topics that interest them such as specific anthropologists to read about, or methods to research and present on to the rest of the class.

Methods of instruction and methods of evaluation also present course information in a variety of ways in order to cater to different learning styles. While lecture and film present information through narrative, a significant portion of the class will focus on the doing of forensic anthropology, with hands-on activities with the skeleton, learning the bones and the various analytic techniques. Quizzes and exams will also incorporate practical questions, requiring students to apply what they have learned in a real, hands-on way. Oral presentations will also allow students to demonstrate their knowledge in creative and more visual ways. These projects also enable students to demonstrate their knowledge in a manner that allows them to take ownership of the material (by selecting the anthropologist or forensic method to investigate). In-class discussions of the issues of race and sex and the challenges with their estimation and subsequent interaction with the general public will help students to understand that how we think about our species and diversity has a direct impact upon humans' understanding of themselves. This allows students to connect with the material on a personal level, making it relevant to their own lives.

Interactions

Explain how the course will incorporate student-to-student interaction.

Students will engage in student-to-student interaction through the use of small group discussion about readings and other topics related to ethics of doing forensic anthropological work. Student-to-student interaction can also be achieved through in-class group activities (for instance putting the skeleton into anatomical position to assist with learning the bones and osteological features, or through activities related to analyzing the skeleton and estimating age, sex, ancestry and stature of one of the skeletons in our collection).

Explain how the course will incorporate instructor-to-student interaction.

Instructor-to-student interaction will be achieved through the use of lecture. Additionally, the presence of the instructor in large group discussions and by being present during the in-class activities to provide hands on experience and assistance in identifying skeletal features. Instructor-to-student interaction will also be achieved through the syllabus and the CMS (if used) by describing the structure of the class and sharing of background information about the instructor. Feedback on assignments and exams will also incorporate instructor-to-student interaction.

Explain how the course will incorporate student-to-content interaction.

Student-to-content interaction will be achieved through the assigned readings and assignments. Students will also interact with the content through the projects, papers and presentations such as the presentation on describing a particular forensic anthropological technique. Additionally, student to content interaction will be achieved through class activities such as the analysis of the skeleton for

the determination of sex, ancestry, age and stature Additional in-class activities and written assignments will also allow the student to interact with the content.

Explain how the course will incorporate student-to-self interaction (metacognitive).

Student-to-self interaction will be achieved through the use of in-class discussions where students will be expected to write their thoughts first before sharing them in both small group and large group discussions. Discussions about forensic anthropological ethics will also allow students to come to grips about their own thoughts and feelings about how to effectively interact with dead people as well as the medicolegal community involved in making determinations about the dead. Actively taking notes while watching relevant films, either in class or out of class, or lecture, will further allow student-to-self interaction.

Key: 165