

Course Outline for: ANTH 1145 Introduction to Forensic Anthropology

A. Course Description:

1. Number of credits: 3
2. Lecture hours per week: 3
3. Prerequisites: None
4. Corequisites: None
5. MnTC Goals: Goal #5 - History and the Social and Behavioral Sciences

This course examines the physical diversity of human populations – the young and old, male and female, large and small, and people of broadly varying ancestry. Scientific study of differences among human populations in skeletal anatomy, dentition, hair, certain soft tissue and DNA can be useful in understanding and debunking historical prejudices, understanding how natural selection operates, and to identify victims from their remains. Students will examine actual human bones and gain understanding of how physical evidence can be applied to subjects ranging from archaeology to judicial proceedings.

B. Date Last Reviewed/updated: May 2025

C. Outline of Major Content Areas:

1. The nature, scope, and history of bio-anthropology and forensic anthropology
2. Application of the scientific methods and statistical analysis to studying human variance
3. Human osteology and odontology
4. Recovery and analysis of human remains, fossil and contemporary
5. Principles of osteology and odontology
6. Determination of sex and understanding human sexual dimorphism
7. Determination of ancestry and understanding the origin of ethnic differences and
8. Why the social construct of "race" has no real value in studying human variation
9. Determination of age and understanding human growth and age-based deterioration
10. Determination of stature and body morphology
11. Study of human hair and the link to ancestral variance
12. Trauma and disease as seen through skeletal modification
13. Methods of personal identification
14. DNA and applications of genetic analysis
15. Forensic reconstruction techniques
16. Ethical and legal issues in the study of human remains

D. Course Learning Outcomes:

Upon successful completion of the course, the student will be able to:

1. Apply the nature and statistical degree of variance displayed within and between human groups. (Goal 2a, 2b, 2c, 2d, 5a)
2. Explain the biological origins of human variance. (Goal 2a, 2b, 2c, 2d)
3. Evaluate the various techniques used in determining sex, age, ancestry, and stature from human remains. (Goal 2a, 2b, 2c, 2d, 5a, 5c)
4. Identify the techniques used in determining trauma and/or pathological conditions of the human skeleton. (Goal 2a, 2d)
5. Analyze how general and specific identification of victims can be made from skeletal evidence. (Goal 2a, 2b, 2c)
6. Comply with the ethical and legal obligations of those involved in the study of human remains, both in contemporary criminal investigations and in an archeological setting. (Goal 2a, 2d, 5a, 5b)

E. Methods for Assessing Student Learning:

Methods for assessment may include, but are not limited to, the following:

1. Exams and quizzes
2. Journals
3. Research papers
4. Oral presentation
5. Written assignments including reflection essays
6. Group work

F. Special Information:

None