Washtenaw Community College Comprehensive Report

ANT 245 Biological Anthropology
Effective Term: Winter 2025

Course Cover

College: Humanities, Social and Behavioral Sciences
Division: Humanities, Social and Behavioral Sciences
Department: Social Sciences
Discipline: Anthropology
Course Number: 245
Org Number: 11700
Full Course Title: Biological Anthropology
Transcript Title: Biological Anthropology
Is Consultation with other department(s) required: No
Publish in the Following: College Catalog
Reason for Submission:
Change Information:
Consultation with all departments affected by this course is required.
Rationale: Updating Math requirements due to elimination of Dev Ed Math courses
Proposed Start Semester: Winter 2025
Course Description: In this course, students will survey the concepts, theory, and methods of biological anthropology in lecture and laboratory. Emphasis is placed on the role of evolution in explaining past and present variation among non-human primates, human ancestors, and modern humans. In lab sections of the course, students will focus on data collection and analysis related to heredity, population genetics, skeletal and dental variation, evolutionary change, and modern physical variation.

Course Credit Hours

Variable hours: No
Credits: 4
Lecture Hours: Instructor: 45 **Student:** 45
Lab: Instructor: 45 **Student:** 45
Clinical: Instructor: 0 **Student:** 0

Total Contact Hours: Instructor: 90 **Student:** 90
Repeatable for Credit: NO
Grading Methods: Letter Grades
Audit
Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

Level 3

Requisites

Prerequisite
Academic Math Level 3
or

Prerequisite
MTH 125X minimum grade "C"; may enroll concurrently

General Education

General Education Area 4 - Natural Science
Assoc in Applied Sci - Area 4
Assoc in Science - Area 4
Assoc in Arts - Area 4
Michigan Transfer Agreement - MTA
MTA Lab Science

Request Course Transfer

Proposed For:
Eastern Michigan University
Ferris State University
Grand Valley State University
Jackson Community College
Michigan State University
Oakland University
University of Detroit - Mercy
University of Michigan
Wayne State University
Western Michigan University

Student Learning Outcomes

1. Recognize basic concepts relating to skeletal and dental anatomy, evolutionary theory, heredity, population genetics, primate ecology, human evolution, and modern human physical and/or genetic variability.
   Assessment 1
   Assessment Tool: Outcome-related exam questions
   Assessment Date: Fall 2024
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Departmentally-developed grading key and rubric
   Standard of success to be used for this assessment: 75% of students will score 75% or higher on the outcome-related exam questions.
   Who will score and analyze the data: Department faculty

2. Identify physical characteristics particular to non-human primates, human ancestors, and modern humans.
   Assessment 1
   Assessment Tool: Lab activities worksheet
   Assessment Date: Fall 2024
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Departmentally-developed grading key and rubric
   Standard of success to be used for this assessment: 75% of students will score 75% or higher on each of the labs.
   Who will score and analyze the data: Department faculty

3. Demonstrate proper collection and documentation of skeletal, dental, and biological data using instruments and software utilized by biological anthropologists.

Assessment 1

Assessment Tool: Data collection sheets
Assessment Date: Fall 2024
Assessment Cycle: Every Three Years
Course section(s)/other population: All
Number students to be assessed: All
How the assessment will be scored: Departmentally-developed rubric
Standard of success to be used for this assessment: 75% of students will score 75% or higher on the data collection sheets.
Who will score and analyze the data: Department faculty

Course Objectives

1. Demonstrate installation and proper use of software for data collection, citation management, and data analysis.
2. Identify the academic resources available to biological anthropologists.
3. Demonstrate the use of academic reference resources for identifying and retrieving information on a topic related to biological anthropology.
4. Define biological anthropology and describe how it differs from the other sub-disciplines of anthropology.
5. Demonstrate the arrangement of the human skeleton in the standard anatomical position.
6. Recognize the instruments used to measure skeletal material.
7. Identify human teeth.
8. Demonstrate the collection of metric and non-metric dental data.
9. Demonstrate the use of a data collection form to record metric and non-metric data from human skeletal remains.
10. Demonstrate the use of computer software to summarize observations of skeletal and dental variation and calculate measurement error.
11. Recognize the four forces of evolution.
12. Identify the major principles of heredity and population genetics.
13. Demonstrate how gene and allele frequencies can be estimated using Hardy-Weinberg equilibrium.
14. Describe the similarities and differences between primate taxa.
15. Describe how primate skeletal and dental traits are associated with ecology (diet and environment).
16. Explain the socioecological model for primate group behavior.
17. Identify the theories proposed to explain the divergence of hominins from hominoids.
18. Identify the major hominin genera.
19. Demonstrate the use of anthropometrics and craniometrics for documenting and differentiating various hominin genera.
20. Identify the skeletal, dental, and archaeological evidence for biocultural evolution.
21. Explain why “race”, as a biological concept, does not sufficiently explain modern human phenotypic variation.
22. Demonstrate how phenotypic data (such as blood type, skin color, etc…) can be used to document modern physical variation.

New Resources for Course

Instructor needs specialization in either Physical or Biological Anthropology

Course Textbooks/Resources

Textbooks
Manuals
Periodicals
Software

Equipment/Facilities

Level III classroom

Reviewer	Action	Date
Faculty Preparer:		
Christopher Barrett	*Faculty Preparer*	*Oct 10, 2024*
Department Chair/Area Director:		
Christopher Barrett	*Recommend Approval*	*Oct 10, 2024*
Dean:		
Anne Nichols	*Recommend Approval*	*Oct 11, 2024*
Curriculum Committee Chair:		
Randy Van Wagnen	*Recommend Approval*	*Oct 18, 2024*
Assessment Committee Chair:		
Jessica Hale	*Recommend Approval*	*Oct 18, 2024*
Vice President for Instruction:		
Brandon Tucker	*Approve*	*Oct 19, 2024*

Washtenaw Community College Comprehensive Report

ANT 245 Biological Anthropology
Effective Term: Fall 2021

Course Cover

Division: Humanities, Social and Behavioral Sciences
Department: Social Sciences
Discipline: Anthropology
Course Number: 245
Org Number: 11700
Full Course Title: Biological Anthropology
Transcript Title: Biological Anthropology
Is Consultation with other department(s) required: No
Publish in the Following: College Catalog
Reason for Submission: New Course
Change Information:
Rationale: This course serves as an introduction to physical/biological anthropology and provides an alternative means for students to fulfill requirements for a natural sciences course with a lab component.
Proposed Start Semester: Fall 2021
Course Description: In this course, concepts, theory, and methods of biological anthropology are surveyed in lecture and laboratory. Emphasis is placed on the role of evolution in explaining past and present variation among non-human primates, human ancestors, and modern humans. In lab sections of the course, students will focus on data collection and analysis related to heredity, population genetics, skeletal and dental variation, evolutionary change, and modern physical variation.

Course Credit Hours

Variable hours: No
Credits: 4
Lecture Hours: Instructor: 45 **Student:** 45
Lab: Instructor: 45 **Student:** 45
Clinical: Instructor: 0 **Student:** 0

Total Contact Hours: Instructor: 90 **Student:** 90
Repeatable for Credit: NO
Grading Methods: Letter Grades
Audit
Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

No Level Required

Requisites

Prerequisite ; may enroll concurrently
Academic Math Level 3 or MTH 094 or MTH 097, minimum grade "C", may enroll concurrently in MTH

General Education

General Education Area 4 - Natural Science

Assoc in Applied Sci - Area 4
Assoc in Science - Area 4
Assoc in Arts - Area 4

Michigan Transfer Agreement - MTA

MTA Science (no lab)

Request Course Transfer

Proposed For:

Eastern Michigan University
Ferris State University
Grand Valley State University
Jackson Community College
Michigan State University
Oakland University
University of Detroit - Mercy
University of Michigan
Wayne State University
Western Michigan University

Student Learning Outcomes

1. Recognize basic concepts relating to skeletal and dental anatomy, evolutionary theory, heredity, population genetics, primate ecology, human evolution, and modern human physical and/or genetic variability.

   Assessment 1

   Assessment Tool: Outcome-related exam questions
   Assessment Date: Fall 2024
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Departmentally-developed grading key and rubric
   Standard of success to be used for this assessment: 75% of students will score 75% or higher on the outcome-related exam questions.
   Who will score and analyze the data: Department faculty

2. Identify physical characteristics particular to non-human primates, human ancestors, and modern humans.

   Assessment 1

   Assessment Tool: Lab activities worksheet
   Assessment Date: Fall 2024
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Departmentally-developed grading key and rubric
   Standard of success to be used for this assessment: 75% of students will score 75% or higher on each of the labs.
   Who will score and analyze the data: Department faculty

3. Demonstrate proper collection and documentation of skeletal, dental, and biological data using instruments and software utilized by biological anthropologists.

   Assessment 1

   Assessment Tool: Data collection sheets

Assessment Date: Fall 2024
Assessment Cycle: Every Three Years
Course section(s)/other population: All
Number students to be assessed: All
How the assessment will be scored: Departmentally-developed rubric
Standard of success to be used for this assessment: 75% of students will score an average of 75% or higher on the data collection sheets.
Who will score and analyze the data: Department faculty

Course Objectives

1. Demonstrate installation and proper use of software for data collection, citation management, and data analysis.
2. Identify the academic resources available to biological anthropologists.
3. Demonstrate the use of academic reference resources for identifying and retrieving information on a topic related to biological anthropology.
4. Define biological anthropology and describe how it differs from the other sub-disciplines of anthropology.
5. Demonstrate the arrangement of the human skeleton in the standard anatomical position.
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17. Identify the theories proposed to explain the divergence of hominins from hominoids.
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New Resources for Course

Instructor needs specialization in either Physical or Biological Anthropology

Course Textbooks/Resources

Textbooks
Manuals
Periodicals
Software

Zotero. https://www.zotero.org, NA ed.
Zotero is a free, open-source citation manager compatible with PC, Mac, Chrome, and Linux.
R Statistics / R Studio. https://www.r-project.org, 4.0 or higher ed.
R is a free, open-source statistics package for PC, Mac, and Linux. R-studio is free of charge for personal use and is used in conjunction with R, either as downloaded software or through http://www.rstudio.cloud

Equipment/Facilities

Level III classroom

Reviewer	Action	Date
Faculty Preparer:		
Christopher Barrett	*Faculty Preparer*	*Oct 05, 2020*
Department Chair/Area Director:		
Gregg Heidebrink	*Recommend Approval*	*Oct 18, 2020*
Dean:		
Scott Britten	*Recommend Approval*	*Nov 02, 2020*
Curriculum Committee Chair:		
Lisa Veasey	*Recommend Approval*	*Dec 02, 2020*
Assessment Committee Chair:		
Shawn Deron	*Recommend Approval*	*Dec 04, 2020*
Vice President for Instruction:		
Kimberly Hurns	*Approve*	*Dec 07, 2020*