

GENERAL STUDIES COURSE PROPOSAL COVER FORM

Course information:

Copy and paste **current** course information from Class Search/Course Catalog.

College/School	College of Liberal Arts and Sciences	Department/School	School of Human Evolution and Social Change
Prefix: AS	Number: 450	Title: Bioarchaeology	Units: 3
	M		

Course description: **Surveys archaeological and physical anthropological methods and theories for evaluating skeletal and burial remains to reconstruct biocultural adaptation and lifeways. Prerequisite: ASM 101 or instructor approval.**

Is this a cross-listed course? **No** If yes, please identify course(s):

Is this a shared course? **No** If so, list all academic units offering this course:

*Note- For courses that are crosslisted and/or shared, a letter of support from the chair/director of **each** department that offers the course is required for **each** designation requested. By submitting this letter of support, the chair/director agrees to ensure that all faculty teaching the course are aware of the General Studies designation(s) and will teach the course in a manner that meets the criteria for each approved designation.*

Is this a permanent-numbered course with topics? **No**

If yes, all topics under this permanent-numbered course must be taught in a manner that meets the criteria for the approved designation(s). It is the responsibility of the chair/director to ensure that all faculty teaching the course are aware of the General Studies designation(s) and adhere to the above guidelines. _____ (Required)

Requested designation: Global Awareness—G **Mandatory Review:** (Choose one)

*Note- a **separate** proposal is required for each designation.*

Eligibility: Permanent numbered courses **must** have completed the university’s review and approval process. For the rules governing approval of omnibus courses, contact Phyllis.Lucie@asu.edu.

Submission deadlines dates are as follow:

For Fall 2018 Effective Date: **October 1, 2017**

For Spring 2019 Effective Date: **March 10, 2018**

Area(s) proposed course will serve:

A single course may be proposed for more than one core or awareness area. A course may satisfy a core area requirement and more than one awareness area requirements concurrently, but may not satisfy requirements in two core areas simultaneously, even if approved for those areas. With departmental consent, an approved General Studies course may be counted toward both the General Studies requirement and the major program of study.

Checklists for general studies designations:

Complete and attach the appropriate checklist

- [Literacy and Critical Inquiry core courses \(L\)](#)
- [Mathematics core courses \(MA\)](#)
- [Computer/statistics/quantitative applications core courses \(CS\)](#)
- [Humanities, Arts and Design core courses \(HU\)](#)
- [Social-Behavioral Sciences core courses \(SB\)](#)
- [Natural Sciences core courses \(SQ/SG\)](#)
- [Cultural Diversity in the United States courses \(C\)](#)
- [Global Awareness courses \(G\)](#)
- [Historical Awareness courses \(H\)](#)

A complete proposal should include:

- Signed course proposal cover form
- [Criteria checklist](#) for General Studies designation being requested
- Course catalog description
- Sample syllabus for the course
- Copy of table of contents from the textbook and list of required readings/books

It is respectfully requested that proposals are submitted electronically with all files compiled into one PDF.

Contact information:

Name Chris Stojanowski E-mail christopher.stojanowski@asu.edu Phone 480-727-0768

Department Chair/Director approval: (Required)

Chair/Director name (Typed): Kaye Reed, Acting Director Chris Stojanowski Date: 3/9/2018

Chair/Director (Signature): 

Arizona State University Criteria Checklist for

GLOBAL AWARENESS [G]

Rationale and Objectives

Human organizations and relationships have evolved from being family and village centered to modern global interdependence. The greatest challenge in the nuclear age is developing and maintaining a global perspective which fosters international cooperation. While the modern world is comprised of politically independent states, people must transcend nationalism and recognize the significant interdependence among peoples of the world. The exposure of students to different cultural systems provides the background of thought necessary to developing a global perspective.

Cultural learning is present in many disciplines. Exposure to perspectives on art, business, engineering, music, and the natural and social sciences that lead to an understanding of the contemporary world supports the view that intercultural interaction has become a daily necessity. The complexity of American society forces people to balance regional and national goals with global concerns. Many of the most serious problems are world issues and require solutions which exhibit mutuality and reciprocity. No longer are hunger, ecology, health care delivery, language planning, information exchanges, economic and social developments, law, technology transfer, philosophy, and the arts solely national concerns; they affect all the people of the world. Survival may be dependent on the ability to generate global solutions to some of the most pressing problems.

The word university, from universitas, implies that knowledge comes from many sources and is not restricted to local, regional, or national perspectives. The Global Awareness Area recognizes the need for an understanding of the values, elements, and social processes of cultures other than the culture of the United States. Learning which recognizes the nature of others cultures and the relationship of America's cultural system to generic human goals and welfare will help create the multicultural and global perspective necessary for effective interaction in the human community.

Courses which meet the requirement in global awareness are of one or more of the following types: (1) in-depth area studies which are concerned with an examination of culture-specific elements of a region of the world, country, or culture group, (2) the study of contemporary non-English language courses that have a significant cultural component, (3) comparative cultural studies with an emphasis on non-U.S. areas, and (4) in-depth studies of non-U.S. centered cultural interrelationships of global scope such as the global interdependence produced by problems of world ecology, multinational corporations, migration, and the threat of nuclear war.

Reviewed 4/2014

Proposer: Please complete the following section and attach appropriate documentation.

ASU--[G] CRITERIA			
GLOBAL AWARENESS [G]			
YES	NO		Identify Documentation Submitted
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. Studies must be composed of subject matter that addresses or leads to an understanding of the contemporary world outside the U.S.	
		2. The course must match at least one of the following descriptions: (check all which may apply):	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. In-depth area studies which are concerned with an examination of culture-specific elements of a region, country or culture group. The area or culture studied must be non-U.S. and the study must contribute to an understanding of the contemporary world.	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. The course is a language course for a contemporary non-English language, and has a significant cultural component.	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	c. The course is a comparative cultural study in which most, i.e., more than half, of the material is devoted to non-U.S. areas.	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. The course is a study of the cultural significance of a non-U.S.-centered global issue. The course examines the role of its target issue within each culture and the interrelatedness of various global cultures on that issue. It looks at the cultural significance of its issue in various cultures outside the U.S., both examining the issue's place within each culture and the effects of that issue on world cultures."	

Course Prefix	Number	Title	Designation
ASM	450	Bioarchaeology	Global Awareness (G)

Explain in detail which student activities correspond to the **specific** designation criteria.

Please use the following organizer to explain how the criteria are being met.

Criteria (from checklist)	How course meets spirit (contextualize specific examples in next column)	Please provide detailed evidence of how course meets criteria (i.e., where in syllabus)
SAMPLE: 2d: study the cultural significance of a non-U.S. centered global issue	SAMPLE: The course examines the cultural significance of financial markets Japan, Korea, and the UK.	SAMPLE: Module 2 shows how Japanese literature has shaped how Japanese people understand world markets. Module 3 shows how Japanese popular culture has been changed by the world financial market system. Modules 4 & 5 do the same for Korea and modules 6 & 7 do the same for the UK.
1. Subject matter that addresses or leads to an understanding of contemporary world outside of US.	see below	see below
2c. Comparative cultural study in which more than half is devoted to non-US areas.	see below	see below

ASM 450: Bioarchaeology
Application for G Designation
March 10, 2018
Christopher M. Stojanowski

1. Subject matter addresses or leads to an understanding of the contemporary world outside of the U.S.

Documentation: Syllabus: see yellow highlighted, Readings: see yellow highlighted.

How Course Meets Spirit: This course focuses on reconstructing the lifestyles, behaviors, and cultural practices of past peoples using data generated from archaeology and skeletal biology. The course is global in scope in considering the following major themes: diet, mobility, demography, lifestyle, health and disease experience, age and gender identity, ethnic and community identity, patterns of inter-relatedness, and funerary practices.

Specific Examples: This course covers major changes in human societies and institutions, but does so in contexts for which standard historical methods are not available (i.e., prehistory). These topics are explored primarily through the lens of past human biologies reflected in the remains of humans excavated from archaeological sites. The course is global in scope and considers data from roughly 15,000 years ago to the present. Data are generated on population relationships, mobility and migration, diet and health, and lifestyle and activity patterns that are couched within a specific historical or archaeological context. Problem orientations are context-dependent and seek to understand the effects of major lifestyle transitions on human institutions and lifestyles through time, and in so doing provide important context for understanding the current state of the contemporary world as a product of a specific set of historical circumstances.

The course specifically addresses the following topics:

- 1) The history of human migration around the planet, which speaks to concepts of race and human variation, prejudice, xenophobia, and nationalism. These topics engender consideration of human variation in a global perspective. This material is literally global in scope, beginning with African origins and tracking the human story throughout the Old World, into Oceania, to the tip of South America.
- 2) The history of warfare and inter-personal violence, including assessment of when warfare began, what social function it fulfilled, and what precursors need to be in place for it to begin. Cases studies are drawn primarily from European, Africa, and South American contexts where there is a rich record of warfare iconography and burial sites associated with battles. This material provides important historical context for understanding the nature of warfare today.
- 3) The development of complex societies throughout the Holocene beginning with forager band level groups and ending with complex states that developed in specific parts of the world. The issue here is why complexity developed in certain regions but not others, which speaks to understanding of development and current political status. Emphasis is placed on European, African, and East Asian contexts, in addition to South American examples from the Andes.

4) The origins of food production as a major transition in social institutions that was distinct from foraging as a human form of social organization; food production also manifest at different times and in different places requiring an historical approach to understand why these changes occurred. Emphasis is placed on European, African, and East Asian contexts, in addition to South American examples from the Andes.

5) The relationship between demography, diet and population health, including assessment of how health is measured and how these factors relate to broad lifestyle changed that humans experienced throughout the globe. Emphasis is placed on the Near East, Nile Valley, and Europe, with North American examples focusing on pre-Columbian Native American societies. This aspect of the class is important for exposing students to the breadth of demographic and health conditions that humans experiences in the past, and makes an important point that many non-Western peoples continue to struggle with similar issues.

6) The effects of colonialism on indigenous communities during both the Age of Discovery and in previous imperial settings (Andes, Rome, Egypt). The 16th and 17th centuries set the stage for the modern world and one focus of this section is on the Africa slave trade and diasporic communities.

7) The history of human burial and funerary practices, tracking the development of early religious beliefs based on funerary behaviors. This section of the class also adopts a global perspective in tracing the origins of intentional burial, the origins of cemeteries as landscape structuring agents, and how burials practices and conceptions of death and “the dead” varies through time and space.

2c. A comparative cultural study in which most of the material is devoted to non-US areas.

Documentation: Syllabus: see green highlighted, Readings: see green highlighted. See also yellow highlights in the textbook list of figures and tables.

How Course Meets Spirit: This course brings data from human skeletal remains to questions about the history of human lifestyles, interactions, and organizations. Although the principal data are biological in origin, interpretations invoke environmental, demographic, social, and political phenomena within the context of understanding major changes in human societies through time. The course is global in scope and comparative in structure, seeking to understand why human societies have varied through time and space and to understand what the repercussions of these variations were for the people who lived through them.

Specific Examples: The syllabus has been highlighted to show all examples of non-US areas discussed in this class. We have done the same with the course textbook, which focuses on European contexts but does consider African, Asian, Australian and South American data sets as well. In addition to these numerous highlighted examples from non-US contexts, the lectures will be woven with examples from almost every major prehistoric culture and every inhabited continent. Some examples to be included in the class that are classic bioarchaeological case studies but not included in the list of readings are listed below.

- 1) Oceania – the peoples of Oceania are discussed in the context of human variation and peopling of the world, ancestor veneration, and early domestication. This include Polynesian and Papuan case studies. Australian aboriginal data are also incorporated into the class through discussions of body modification and modern forager societies.
- 2) East Asia – the origins of rice agriculture are discussed in the unit of dietary transitions, which includes mainland China and Southeast Asia. Japanese prehistory is particularly developed in this class where Jomon and Yayoi peoples are discussed with respect to lifestyles transitions and compared with modern Ainu peoples.
- 3) Indian subcontinent – the peoples of this area are incorporated through discussion of early agricultural populations and provide an important point of comparison with East Asia and the Near East.
- 4) The Near East – data are incorporated into almost every unit of the class given the depth of research on the region.
- 5) Europe – European data are incorporated into almost every unit of the class given the depth of research on the continent
- 6) South America – bioarchaeological research in the Andes is highly visible in the literature and will be discussed in the context of dietary change, social complexity, ethnicity, urbanism, colonialism, trophy taking, and mortuary practices. In addition, data from Brazil will be incorporated into discussion of forager lifestyles.
- 7) Africa – In addition to Nile Valley populations (and not just Egyptian) the class will also use data from Saharan and Maghrebi sites, East Africa sites, and South African sites. These data will be thoroughly woven throughout the class.

In terms of the “comparative cultural study” part of the criterion, we note that the course is an anthropology class that is, by definition, comparative and cultural in focus. The goal of this class is to explore major transitions in human societies and lifestyles and determine what the effects of these transitions were for the people who lived through them. From this, we generate information from the past that can be used to either explain modern phenomenon (why something is the way it is) or be put to direct use in helping people today (cultural determinants of health).

ASM 450 Bioarchaeology – Course Catalog Description

Surveys archaeological and physical anthropological methods and theories for evaluating skeletal and burial remains to reconstruct biocultural adaptation and lifeways. Prerequisite: ASM 101 or instructor approval.

Note: this syllabus is not a contract. It is subject to further change or revision, to best realize the educational goals of the course. Revisions will be announced in class or in course materials online with appropriate prior notice.

Session B: October 10 – November 30

Course Number: ASM450

Course Title: Bioarchaeology

Credits: 3 Credit Hours,

Faculty Name: Christopher Stojanowski, PhD

Office: SHESC (ANTH) 310

Phone: (480) 727-0768

Email address: cstojano@asu.edu

Office hours: Arranged via email

Teaching Assistant: TBD

Office: TBD

Phone: na

Email address: TBD

Office hours: by email appointment

PRE-REQUISITES/CO-REQUISITES/ANTI-REQUISITES

Prerequisite: ASM 101 or instructor approval.

REQUIRED COURSE TEXTS/ READINGS

Mays, S. (2010). *The archaeology of human bones*, 2nd edition. New York: Routledge. *Please note this book is freely available as a e-book through the ASU libraries.*

Additional readings are listed in the course schedule below, which will be provided as PDFs through the course website.

COURSE DESCRIPTION

Bioarchaeology is a subfield of physical anthropology and archaeology that studies the lives of ancient peoples through their biological remains. This often includes analysis of human skeletal remains but other ancient biological materials are also part of bioarchaeological inquiry, including ancient DNA, ancient pathogens, and mummified soft tissues. **Through cross-cultural comparative study of human biology and behaviors, bioarchaeologists seek to understand our common humanity and unique local histories.** This course provides an overview of bioarchaeology's history, methodologies, "big questions", and relationship to the broader social and historical sciences. We will learn how to "read" a person's life history and experiences from their skeletal remains, which includes estimation of age, sex, stature, childhood health, disease experience, diet, injuries, and activity levels.

COURSE GOALS

A primary goal of bioarchaeology is to reconstruct how human societies have changed through time, varied throughout the world, and how this variation impacted the lives of individuals and whole communities in ways that still impact the global world. Using these data we will consider the following big questions:

- 1) How and when did humans come to populate the planet?
- 2) What is the evidence for the history of warfare and inter-personal violence? Is war inevitable, even in non state level societies?
- 3) What are the major lifestyles transitions that have occurred in human history, and what were the consequences of these transitions for human health and well-being?
- 4) What was the effect of colonialism on indigenous populations?
- 5) When did inequality arise and what were its effects on human well-being?
- 6) How did people express grief and mourning in the past? Are there universals to this aspect of the human lifecourse?
- 7) What factors of human experience were different from today? And what factors were similar?

Although many of these questions are posed by other social sciences this course adopts a unique perspective in viewing them through the lens of human skeletal biology. Although a trope, your life story is “written in your bones.”

LEARNING OUTCOMES

By the end of this course, each student will have demonstrated that they are able to:

- Visually identify the bones of the human skeleton and describe basic anatomical terminology and bone biology. [Assessment: lab practical]
- Describe proficiencies and best practices with regard to field and laboratory analysis of human mortuary sites. [Assessment: mid-term exam]
- Apply osteological standards of age and sex assessment to skeletal material. [Assessment: lab practical, mid-term exam]
- Discuss the methodological toolkit of bioarchaeology, including assessments of diet, health, mobility, and disease experience. [Assessment: lab practical, mid-term exam]
- Define the goals of paleopathology and distinguish non-specific and specific indicators of stress and growth disruption. [Assessment: mid-term exam]
- Apply the concept of differential diagnosis to medical case studies. [Assessment: analytical practical]
- Analyze bioarchaeological data to address questions about diet, disease, and lifestyle in human societies; to include analyses of light stable isotopes, pathology, phenotypic data, or age and sex tables. [Assessment: analytical practical]
- Evaluate ethical arguments surrounding human remains research. [Assessment: paper]
- Read and critically evaluate published research articles and case studies in bioarchaeology. [Assessment: paper]
- Develop multifactorial models for analyzing development of human institutions as product of biocultural evolution, environment, local histories, and global processes [Assessment: final exam, paper].
- Evaluate effectiveness of cross-cultural studies of human biology and cultural practices [Assessment: final exam, paper].
- Distinguish different social theoretical perspectives used in bioarchaeology and evaluate the middle-range linkages between data and social science interpretations in past societies. [Assessment: final exam].
- Evaluate current health and lifestyle differences throughout the world as the product of a specific set of historical circumstances using a deep time archaeological perspective. [Assessment: final exam, paper].

COURSE FORMAT

The course curriculum is structured into four units each with a specific desired learning outcome. The four intellectual units are as follows:

1) Establishing the Research Context – The student will learn the history of bioarcheology as a field of practice and its relationship to anthropology. The student will gain a basic understanding of bone cellular and macroscopic biology and become familiar with the names of different bones in the human body; learn the standards used for skeletal age and sex estimation; learn basic field and lab protocols, and discuss the ethical aspects of research involving human remains.

2) The Methodological Toolkit of Bioarchaeology - Students will learn the variety of data types and analyses used to infer aspects of lifestyle in past human communities. Topics to be covered include: stress and growth, paleopathology, dental disease and wear, trauma analysis, musculo-skeletal stress markers and cross-sectional geometry, light stable isotopes, biological distance, and biomolecular approaches.

3) Research Topics in Bioarchaeology – The student will learn about the major research topics addressed in bioarchaeological research. Topics include: diet and mobility, paleodemographic estimation, cultural body modification, mortuary and funerary practices, trophy taking, sex and gender, age identity, ethnicity and community, and osteobiography.

4) Answering the Big Questions in Bioarchaeology – The final course unit synthesizes the practical aspects of bioarchaeology and links them to major issues in the social sciences. In this unit the focus is on synthesis and big picture issues that relate the historical dimensions of bioarchaeology to modern problems and conditions. The primary focus of this unit is exploring why human remains research is valuable in the modern world.

COURSE REQUIREMENTS

Final grades for the course will be assigned on basis of the assignments described below. Detailed step-by-step instructions for each assignment are posted on the course site. Due dates are posted in the Course Schedule.

The course grade will be based on 100 points earned as follows:

1) **Mid-term exam** – 25 points. This exam covers topics covered in unit 1 and 2 of the class. The exam will consist of a series of short answer questions. DUE Friday November 2

2) **Practical Exam** – 15 points. This practical will cover the basics of bone biology, human osteology, and basic methods related to the biological profile. DUE Friday November 2

3) **Analytical Final Exam** – 25 points. This exam covers topics covered in unit 3 and 4 of the class. The exam will consist of a series of short answer questions and analytical problems for you to solve. The emphasis on this exam is interpretation of archaeological data sets. DUE Friday November 30

4) **Paper** – 35 points. DUE Friday November 30

Final Paper Prompt – Throughout this class we have discussed ethical concerns surrounding research on human remains from archaeological sites. Based on what you have learned throughout the semester, do you feel the benefits of archaeological research on human remains outweigh the potential ethical concerns with destructive sampling and excavation of prehistoric cemeteries. In your response please consider what the public good of bioarchaeology is with respect to social scientific understanding of human societies, humanistic aspects of bioarchaeology, and benefits to the natural sciences and medical fields. Please weigh these benefits against the concerns of descendant communities. In particular, your response should address the historical dimension of what a descendant community is.

FINAL GRADES

Final course grades are assessed as follows:

A	90-100	Excellent
B	80-89.99	Good
C	70-79.99	Average
D	60-69.99	Passing
E	<60	Failure
XE		Failure due to Academic Dishonesty

GRADING PROCEDURE

Grades reflect your performance on assignments and adherence to deadlines. Graded assignments will be available within 48 hours of the due date via the Gradebook. Exam grades will be posted on Blackboard.

GRADING DISPUTES

If a grade has been posted in error the student has 3 days from the date of posting to address this with the faculty member teaching the course. It is your responsibility to keep track of your grades as they post. This rule was put in place based on past years when students would challenge a grade from unit 1 on the last day of class to try to earn a new grade level.

EXTRA CREDIT

There will be no extra credit opportunities assigned for this course.

INCOMPLETES

A mark of "I" (incomplete) is given by the instructor when you have completed most of the course and are otherwise doing acceptable work but are unable to complete the course because of illness or other conditions beyond your control. You are required to arrange with the instructor for the completion of the course requirements. The arrangement must be recorded on the [Request for Grade of Incomplete form](http://students.asu.edu/forms/incomplete-grade-request) (<http://students.asu.edu/forms/incomplete-grade-request>).

LATE ASSIGNMENTS

Excuses for an assignment must be made and approved in advance of the due date of the assignment. Requests for excuses must be written, either on paper or email, and approval must be obtained, either by an email reply or by having the paper excuse signed. In order to get credit, with the late assignment you must turn in a copy of the email approval or signed written excuse. Notify the instructor BEFORE an assignment is due if an urgent situation arises and the assignment will not be submitted on time. Published assignment due dates (Arizona Mountain Standard time) are firm. Please follow the appropriate University policies to request an [accommodation for religious practices](#) or to accommodate a missed assignment [due to University-sanctioned activities](#).

GRADE APPEALS

ASU has formal and informal channels to appeal a grade. If you wish to appeal any grading decisions, please see <http://catalog.asu.edu/appeal>.

COMMUNICATING WITH THE INSTRUCTOR

This course uses a discussion board called "Hallway Conversations" for general questions about the course. Prior to posting a question, please check the syllabus, announcements, and existing posts. If you do not find an answer, post your question. You are encouraged to respond to the questions of your classmates. Email questions of a personal nature to your instructor or assigned TA. You can expect a response within 48 hours.

ONLINE COURSE

This is an online course. There are no face-to-face meetings. You can log into your course via MyASU or <https://my.asu.edu>.

EMAIL COMMUNICATIONS AND INTERNET

"THIS CONTENT IS PROTECTED AND MAY NOT BE SHARED, UPLOADED, SOLD, OR DISTRIBUTED."

ASU email is an [official means of communication](#) among students, faculty, and staff. All email communication for this class will be done through your ASU email account. Students are expected to read and act upon email in a timely fashion. Your email communications should be [professional](#) and succinct. Students bear the responsibility of missed messages and should check their ASU-assigned email regularly. All instructor correspondence will be sent to your ASU email account. For help with your email contact the [help desk](#).

COURSE TIME COMMITMENT

This four-credit course requires approximately 135 hours of work. Please expect to spend around 18 hours each week preparing for and actively participating in this course.

SUBMITTING ASSIGNMENTS

All assignments, unless otherwise announced, **MUST** be submitted to the designated area of Blackboard. Do not submit an assignment via email.

STUDENT STANDARDS

Students are required to read and act in accordance with university and Arizona Board of Regents policies, including:

The ABOR Code of Conduct: Arizona Board of Regents Policies 5-301 through 5-308:
<https://students.asu.edu/srr>

STUDENT CONDUCT

Required behavior standards are listed in the [Student Code of Conduct and Student Disciplinary Procedures, Computer, Internet, and Electronic Communications policy](#), and outlined by the [Office of Student Rights & Responsibilities](#). Anyone in violation of these policies is subject to sanctions. [Students are entitled to receive instruction free from interference](#) by other members of the class. An instructor may withdraw a student from the course when the student's behavior disrupts the educational process per [Instructor Withdrawal of a Student for Disruptive Classroom Behavior](#). Appropriate online behavior (also known as netiquette) is defined by the instructor and includes keeping course discussion posts focused on the assigned topics. Students must maintain a cordial atmosphere and use tact in expressing differences of opinion. Inappropriate discussion board posts may be deleted by the instructor. The Office of Student Rights and Responsibilities accepts [incident reports](#) from students, faculty, staff, or other persons who believe that a student or a student organization may have violated the Student Code of Conduct.

POLICY AGAINST THREATENING BEHAVIOR

All incidents and allegations of violent or threatening conduct by an ASU student (whether on-or off campus) must be reported to the ASU Police Department (ASU PD) and the Office of the Dean of Students. If either office determines that the behavior poses or has posed a serious threat to personal safety or to the welfare of the campus, the student will not be permitted to return to campus or reside in any ASU residence hall until an appropriate threat assessment has been completed and, if necessary, conditions for return are imposed. ASU PD, the Office of the Dean of Students, and other appropriate offices will coordinate the assessment in light of the relevant circumstances.

If you have any questions, please refer to [ACD-304-10 Course Syllabus](#) or contact P.F. Lengel or Jenny Smith in the CLAS Dean's Office at (480) 965-6506.

SEXUAL VIOLENCE/HARASSMENT

Title IX is a federal law that provides that no person be excluded on the basis of sex from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity. Both Title IX and university policy make clear that sexual violence and harassment based on sex is prohibited. An individual who believes they have been subjected to sexual violence or harassed on the basis of sex can seek support, including counseling and academic support, from the university. If you or someone you know has been harassed on the basis of sex or sexually assaulted, you can find information and resources at <https://sexualviolenceprevention.asu.edu/faqs>.

As a mandated reporter, I am obligated to report any information I become aware of regarding alleged acts of sexual discrimination, including sexual violence and dating violence. ASU Counseling Services, <https://eoss.asu.edu/counseling>, is available if you wish discuss any concerns confidentially and privately.

ACADEMIC INTEGRITY

Academic honesty is expected of all students in all examinations, papers, laboratory work, academic transactions and records. The possible sanctions include, but are not limited to, appropriate grade penalties, course failure (indicated on the transcript as a grade of E), course failure due to academic dishonesty (indicated on the transcript as a grade of XE), loss of registration privileges, disqualification and dismissal. For more information, see <http://provost.asu.edu/academicintegrity>.

If you fail to meet the standards of academic integrity in any of the criteria listed on the university policy website, sanctions will be imposed by the instructor, school, and/or dean. Academic dishonesty includes borrowing ideas without proper citation, copying others' work (including information posted on the internet), and failing to turn in your own work for group projects. Please be aware that if you follow an argument closely, even if it is not directly quoted, you must provide a citation to the publication, including the author, date and page number. If you directly quote a source, you must use quotation marks and provide the same sort of citation for each quoted sentence or phrase. You may work with other students on assignments, however, all writing that you turn in must be done independently. If you have any doubt about whether the form of cooperation you contemplate is acceptable, ask the TA or the instructor in advance of turning in an assignment. Please be aware that the work of all students submitted electronically can be scanned using SafeAssignment, which compares them against everything posted on the internet, online article/paper databases, newspapers and magazines, and papers submitted by other students (including yourself if submitted for a previous class).

Note: Turning in an assignment (all or in part) that you completed for a previous class is considered self-plagiarism and falls under these guidelines. Any infractions of self-plagiarism are subject to the same penalties as copying someone else's work without proper citations. Students who have taken this class previously and would like to use the work from previous assignments should contact the instructor for permission to do so.

PROHIBITION OF COMMERCIAL NOTE TAKING SERVICES

In accordance with [ACD 304-06 Commercial Note Taking Services](#), written permission must be secured from the official instructor of the class in order to sell the instructor's oral communication in the form of notes. Notes must have the notetaker's name as well as the instructor's name, the course number, and the date.

COURSE EVALUATION

Students are expected to complete the course evaluation. The feedback provides valuable information to the instructor and the college and is used to improve student learning. Students are notified when the online evaluation form is available.

SYLLABUS DISCLAIMER

The syllabus is a statement of intent and serves as an implicit agreement between the instructor and the student. Every effort will be made to avoid changing the course schedule but the possibility exists that unforeseen events will make syllabus changes necessary. Please remember to check your ASU email and the course site often.

STUDENT SUPPORT AND DISABILITY ACCOMMODATIONS

In compliance with the Rehabilitation Act of 1973, Section 504, and the Americans with Disabilities Act of 1990, professional disability specialists and support staff at the Disability Resource Center (DRC) facilitate a comprehensive range of academic support services and accommodations for qualified students with disabilities.

[Qualified students with disabilities may be eligible to receive academic support services and accommodations](#). Eligibility is based on qualifying disability documentation and assessment of individual need. Students who believe they have a current and essential need for disability accommodations are [responsible for requesting accommodations and providing qualifying documentation](#) to the DRC. Every effort is made to provide reasonable accommodations for qualified students with disabilities. Qualified students who wish to request an accommodation for a disability should contact their campus DRC at: <http://www.asu.edu/studentaffairs/ed/drc/>

If you are a student in need of special arrangements for we will do all we can to help, based on the recommendations of these services. For the sake of equity for all students, we cannot make any accommodations without formal guidance from these services.

DROP AND ADD DATES/WITHDRAWALS

Please refer to the [academic calendar](#) on the deadlines to drop/withdraw from this course. Consult with your advisor and notify your instructor if you are going to drop/withdraw this course. If you are considering a withdrawal, review the following ASU policies: [Withdrawal from Classes](#), [Medical/Compassionate Withdrawal](#) and [Drop/Add and Withdraw](#).

COMPUTER REQUIREMENTS

This course requires a computer with Internet access and the following: Web browsers (Firefox, Explorer), [Adobe Acrobat Reader](#) (free,)[Adobe Flash Player](#) (free), Microphone (optional), and speaker.

TECHNICAL SUPPORT

This course uses Blackboard to deliver content. It can be accessed through MyASU at <http://my.asu.edu> or the Blackboard home page at <https://myasucourses.asu.edu>. To monitor the status of campus networks and services, visit the System Health Portal at <http://syshealth.asu.edu/>. To contact the help desk call toll-free at 1-855-278-5080.

STUDENT SUCCESS

This is an online course. To be successful: check the course daily, read announcements, read and respond to course email messages as needed, complete assignments by the due dates specified, communicate regularly with your instructor and peers, and create a study and/or assignment schedule to stay on track

CAMPUS RESOURCES

As an ASU student you have access to many resources on campus. This includes tutoring, academic success coaching, counseling services, financial aid, disability resources, career and internship help and many opportunities to get involved in student clubs and organizations.

- Tutoring: <https://studentsuccess.asu.edu/student-services/tutoring>
- Counseling Services: <http://students.asu.edu/counseling>
- Financial Aid: <http://students.asu.edu/financialaid>
- Disability Resource Center: <http://www.asu.edu/studentaffairs/ed/drc/>
- Major/Career Exploration: <http://uc.asu.edu/majorexploration/assessment>
- Career Services: <http://students.asu.edu/career>
- Student Organizations: <http://www.asu.edu/studentaffairs/mu/clubs/>

For more information about the School of Human Evolution and Social Change, including our degree programs, research opportunities and advising information, please go to: <https://shesc.asu.edu/student-life/undergraduate-advising>. Our advisors are always willing to discuss career and guidance options with you.

NOTES ON LETTERS OF RECOMMENDATION

Please be aware that I receive many requests from students to write letters of recommendation and therefore have set down these guidelines. Students should only request a letter of recommendation if s/he meets the following minimum criteria.

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- Has taken *more than* one in-person (upper-division) class with me if it is lecture, or have taken *one intensive* smaller class such as a seminar, lab, or practicum class with me (note: I do not write letters for students who take online classes with me)
- Received A or A+ in a 300 or 400 level course(s) taken with me
- Has spoken with me directly outside of class about career/academic goals

Note that if you meet these minimums it doesn't mean that I will agree to write you a letter. When asking for a letter of recommendation you **MUST** allow *more than two weeks* notice and provide me with the following. Everything listed here must be in *one* email.

- Unofficial Transcript
- Resume or CV
- Any application materials that are pertinent (e.g. personal statement/statement of purpose; answers to application questions; scholarship/job description; a paragraph stating why you are applying for X if you don't have a personal statement/answers to application questions; etc.).
- The information of to whom and where the letter is to be sent (e.g. email address or if it needs to be sent via the US Postal Service you must provide me with a stamped and addressed envelope).
- Clearly stated deadline of when the letter is due.

If I agree to write a letter of recommendation I will only be able to summarize your academic performance in my class(es) and will not be able to speak to any factors that have not been accessed in class. Lastly, if I agree to write you a letter, *you agree* to the following.

- You will let me know the outcome. This is important to me as I will want to know what is happening with you and to keep track of any positive outcomes. Also, this means a lot to me (and anyone else you request letters from).
- You agree to check with me before putting my name down on any subsequent applications (don't just assume you can keep putting my name down if I have only agreed to write one letter for you).

SCHEDULE OF READINGS AND ASSIGNMENTS

UNIT 1: Establishing the Research Context

Module Topic	Readings
1 Introduction to course	Larsen 2006a

This module discusses anthropology as a field of social science inquiry and defines the importance of cross-cultural and comparative perspectives for understanding human cultural variation. Bioarchaeology is broadly defined as distinct from other areas of anthropology.

2 History of bioarchaeological inquiry	Knusel 2010; Stojanowski and Duncan, 2015
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This module discusses the historical development of bioarchaeology during the 1970s in US and UK contexts. The key point is the relationship of bioarchaeology to archaeology, biological anthropology, and forensic anthropology. Emphasis is placed on early female pioneers of the discipline and an outline of major research foci and how these have changed over time. In particular, the field has become more strongly aligned with the social sciences over the last two decades.

3 Ethics, NAGPRA, and Human Remains	Mays 2010 chapter 13; Riding In 2004 Walker 2008
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This course discusses the scientific value of research involving human remains. However, there are serious ethical issues surrounding bioarchaeology. In this module, we discuss the ethical debates about human remains research, including legal issues with regard to Native American archaeological materials. The history of ideas about the ethnical engagements of the field are outlined.

4 Field and lab methods	Mays 2010 chapter 2
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This module discusses archaeological field recovery techniques and introduces the basics of scientific practices within the lab. Emphasis is placed on proper recovery for preserving context and best practices for lab methods of human skeletal analysis. The module emphasizes the importance of context for asking basic questions about social science questions in the past.

5 Basic bone biology	Mays 2010 chapter 1
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Bone biology is the core of the observations we use this class. This module discusses the basics of bone as a living tissue within the body, including its microscopic and macroscopic structure and function.

6 Human osteology and anatomy	Byers 2011 chapter 2
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Human osteology is the study of the skeletal system, anatomical characteristics of specific bones, and aspects of anatomy that relate to muscle tissue attachment. The key goal of this module is to develop the basic terminology of the course, including the names of bones, sutures and joints, as well as anatomical directional terminology.

7 Age estimation 1	Nikita 2017 chapter 4 (135-149)
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The biological profile entails estimation of age and sex for all burials. In this module the topic of subadult age assessment is discussed including skeletal and dental indicators.

8 Age estimation 2	Nikita 2017 chapter 4 (149-162)
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This module discusses techniques for adult age estimation and the challenges related to chronological vs calendrical vs biological age. This introduces topics we return to later, namely that age is in some ways a socially constructed phenomenon.

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Sex is the second key component of the basic biological profile. Sexual dimorphism is introduced as a general concept and specific techniques are discussed for the human skeleton. Sex is differentiated from gender, which prefaces later discussions about gender identity in the past.

Labs 1-4 and UNIT 1 Exam DUE 10 pm Wednesday, January 17th

UNIT 2: The Methodological Toolkit of Bioarchaeology

Module Topic	Readings
10 Bone remodeling and Paleopathology	Waldron 2009 (12-23)
<p>This module introduces the basic issues of paleopathological analysis, including preservation bias and the processes of skeletal response to disease processes. The concept of "health" is defined and linked to modern social science questions related to global health perspectives.</p>	
11 Paleopathology –non-specific infection and stress	Mays 2010 chapter 7 (197-216)
<p>Stress and insults to the body are often non-specific, that is no single disease can be linked to the bony response. This module discusses the types of indicators that reflect the body's response to non-specific stress events. Both skeletal and dental indicators are defined. Research on stress and diet, lifestyle variation, and patterns of group interactions are discussed.</p>	
12 Paleopathology –differential diagnosis	Mays 2010 chapter 7
<p>The concept of differential diagnosis is defined and case studies are presented for the major diseases that impact the skeleton. This module discusses diagnosis in a clinical sense, but uses the specific diseases that impact the skeleton to discuss the concept of stigma as a social science construct. An extended case study is presented on the history of leprosy, stigma and exclusion, the institution of the hospital, and its relationships to religious identity.</p>	
13 Skeletal trauma	Mays 2010 chapter 9
<p>Trauma is any external force impacting the body. This module discusses the kinds of trauma one finds on the skeleton in past populations and emphasizes the importance of understanding the healing process for differentiating when the traumatic event occurred. Initial discussions of warfare and inter-personal violence are presented. Domestic violence is developed in an historical context and the social mechanisms that underlie this form of violence are defined. Finally, this module discusses structural violence, an important and current concern in the social sciences.</p>	
14 Dental disease and oral health (1)	Nikita 2017 chapter 8 (328-334)
<p>Dental disease is among the most common types of disease found in archaeological populations. In this module caries, tooth loss, periodontal disease, abscesses, and hypoplastic defects are defined with respect to their etiology. Patterns of variation in oral health are linked to variation in social interaction and mobility patterns, status, and dietary focus in past communities.</p>	
15 Dental disease and oral health (2), wear	Mays 2010 chapter 8 (228-235)
<p>A common feature of ancient populations is the high rate of tooth wear. Macrowear is the gross loss of tooth mass due to diet. Microwear is the microscopic pitting and scratching of tooth surfaces as a result of diet and food preparation techniques. Patterns of variation in dental wear are linked to variation in social interaction and mobility patterns, status, and dietary focus in past communities.</p>	
16 Isotopic methods	Mays 2010 chapter 10
<p>Stable isotopes are used to infer diet and mobility patterns in the past. This module discusses the basis of isotopic research and the major kinds of isotopes used to study diet and mobility. Patterns of variation are linked to variation in social interaction and mobility patterns, status, and dietary focus in past communities.</p>	

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17 **Mobility and behavior - biomechanics**

Mays 2010 chapter 5 (137-152)

Long bone measurements provide information on activity patterns in past populations. This module discusses methods of measuring the postcranial skeleton and the I beam model of Wolff's Law as it relates to functional biomechanics. Interaction and mobility are discussed with respect to social organization and status differences in the past. Gender and age-specific patterns of activity are also defined, including division of labor and labor taxation.

18 **Biological distance**

Hefner et al. 2016

Evolutionary inferences are often based on DNA. However, skeletal and dental data have a genetic basis and are used to infer population and inter-individual relationships at different scales. This module focused on the techniques used to study evolution in past populations, including post-marital residence and social ties related to multi-scalar notions of kinship, community, and ethnic identity.

Mid-term exam due November 2, 5pm

Practical exam due November 2, 5pm

UNIT 3: Topics in Bioarchaeology

Module	Topic	Readings
19	Paleodiet (isotopes+dental path+ macro/microwear, calculus)	Eshed et al. 2006 Killgrove & Tykot 2013

Diet is one of the key aspects of a population's adaptation to their environment. This module synthesizes the methods used to infer diet and discusses the major questions posed in a global and cross-cultural sense about dietary quality and the emergence of major dietary transitions in the past. This module assumes a historical perspective and surveys changes in human diets across the major social transitions (forager to farmer) in Africa, the Near East, Europe, India, East Asia, and the New World.

20	Paleomobility (isotopes+long bone)	Eerkens et al. 2014 Killgrove & Montgomery 2016 Valentine et al. 2015
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Mobility is a key aspect of a population's relationship with its environment. This module synthesizes the techniques used in bioarchaeology to address the changes in human mobility practices with the onset of the Holocene. This module has a specific global emphasis in tracing the transition to settled life in different parts of the world including research in North America, South America, Africa, and Europe.

21	Health and disease experience (path, dental path, care)	Tilley 2015
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Populations with different diets and environments experienced drastically different health patterns. This module presents evidence for how health varies through time and space and focuses on the health effects of major dietary transition such as the emergence of agriculture and pastoralism and the transition from settled villages to large urban centers. Health is considered in its social context and issues related to health disparity, inequality, and resource distribution are explored. As with the previous modules we explore these changes in human health throughout the Old and New Worlds with an historical perspective focusing in major shifts and transitions. Epidemiological transition theory links this module with global health perspectives.

22	Paleodemography (age and sex)	Fernandez-Crespo & de-la-Rua 2015 Agarwal 2012
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Mortality and fertility are key demographic parameters that determine a population's long term historical trajectory. This module synthesizes information on age and sex and relates concepts of fertility and mortality to major transitions in human lifestyles. Paleodemographic trends are viewed historically and related to major social transitions, such as the Neolithic Revolution, industrialization, and the modern era.

23	Cultural modifications	Arcini 2005
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Body modification assumed many forms in different parts of the world. This module surveys the ways individuals have modified the body, with an emphasis on cross-cultural understanding of body modification as a near universal expression of human identity. The historical development of body modification is discussed in a global comparative perspective. We emphasize addressing questions of "why" individual's modified their bodies and adopt perspectives from psychology and other social sciences.

24	Group Identity	Stojanowski 2005
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Group identities such as ethnic group and community are important social structuring agents in the past and present. This module discusses bioarchaeological attempts to reconstruct expressions of ethnic identity in the past. Ethnogenesis emphasizes the fluid nature of ethnicity through time and we consider the historical endurance of ethnic identities as key aspects of social interaction. The module presses the question of what makes a group a group, and addresses the historically fluid nature of identities that are often seen as fixed

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and static in modern political discourse. Bioarchaeological approaches serve an important role of breaking down received wisdom and dogma about the nature of ethnic identities today.

- 25 **Age, sex, gender, childhood and aging** Walker & Cook 1998
Perry 2006

Gender and age identity are often cast in a western, normative light. In this module bioarchaeological data are used to differentiate sex and gender, define different types of age identity, and consider how age identity and gender identities differed in human populations across the planet. This module also emphasizes the historical development of age and gendered identities in a comparative perspective. By casting our net broad and deep we deconstruct notions of age and gender being fixed and immutable properties of the human species.

- 26 **Osteobiography** Boutin 2011

Bioarchaeology is about the human experience writ large and small. Osteobiography uses the techniques of bioarchaeology to tell the story of a specific person in the past. This work focuses on the individual as a microhistory of the time and place in which he or she lived. This module focuses on microscale inferences but works to place the individual within his or her society.

- 27 **Cannibalism, sacrifice, trophies** Billman et al. 2000
Dongoski et al. 2000
Andrushko et al. 2010
Okumura & Siew 2013

Building on the previous module that focuses on the individual, in this module the concept of postmortem self is introduced. That is, sociological perspectives recognize that the individual does not completely cease to exist once the physical body has died. Cannibalism, human sacrifice, and trophy hunting are all examples where the body is appropriated after death, often serving important political and social functions. The funerary event itself is often a highly symbolized event. We use a global comparative perspective to explore the origins of these practices.

UNIT 4: Answering the BIG Questions in Bioarchaeology

Module Topic	Readings
28 Peopling of the World and Race	Gravlee 2009

This module discusses decades of research on tracking the human dispersal around the planet. The module takes a historical perspective and emphasizes key events in the human past, such as the peopling of Oceania and the New World. Population movements throughout Africa over the last 10,000 years are also discussed. Embedded within this module is a discussion of what happens when different groups interact, and this is historically placed within the study of race – one of the most critical social science concepts debated today.

29 Warfare and Inter-personal violence	Osterholtz 2012 Steadman 2008 Walker 2001
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What is warfare? How ancient is the practice? This module synthesizes the global record of human prehistoric violence to address these questions. Key issues include defining warfare, identifying inter-personal violence, and understanding the social functions of warfare in past societies, with an emphasis on Andean, North American, African and European contexts. In addition, the concept of structural violence is introduced as a form of passive violence against peoples based on specific aspects of social organization, political ideology, and identity.

30 Biocultural Transitions	Humphrey et al. 2014; Lambert 2009 Lambert & Welker 2017; Larsen 2006a
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Twelve thousand years ago all of our ancestors hunted, gathered, and fished in a nomadic lifestyle. During the Holocene food production emerged at varying places and times. This module synthesizes bioarchaeological evidence for changes in diet, mobility, and lifestyle in Asia, Africa, Europe, and throughout the New World. The module adopts an historical approach in tracing the development of food producer economies, and links these developments to changes in social and political complexity. Through deep time perspectives the student will learn how current political systems were established as they appear today.

31 Colonialism and Empire	Kyle et al. 2016; Walker et al. 1989 Stojanowski 2004; Buzon & Richman 2007
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The emergence of states was perhaps the single most significant event in the political history of our species. States are expansive entities and the impacts on other communities are often significant. This module synthesizes bioarchaeological data on colonialism and empire, with an emphasis on four contexts: New World European colonialism, Andean pre-Hispanic state imperialism, ancient Rome, and ancient Egypt. We focus on changes in social institutions in response to the state expansionism and couch the discussion the context of agency theory.

32 Inequality	Robbins Schug et al. 2012 Buzon 2006 Sullivan 2004
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Settled life allowed for the accumulation of resources, which led to social inequality. This module synthesizes evidence for the emergence of inequality during the course of the Holocene. The module discusses evidence for inequality in multiple contexts around the world but focuses on areas that experienced the early emergence of food production, specifically the Nile Valley, the Near East, Europe, and East Asia.

Death is a reality of life, and humans have responded to death in myriad ways throughout time. This module discusses the mortuary practices of different populations and summarizes the history of death and burial (that is, when did intentional burial first occur), the emergence of cemeteries across the world, and the meaning associated with cremation, inhumation, secondary burial, and ancestor veneration. Death is conceived as a biological AND social process and the funerary ritual is presented as highly symbolic act whose meaning is often debated, even in contemporary populations.

The course closes with a summary of the insights that clearly link the past and present. That is, one of the goals of the class is to dispel false notions of “the way things were” and demonstrate that the problems of today were in some ways similar to the problems and challenges that people experienced in the past. The goal is to humanize the past and create a connection that espouses stewardship of archaeological resources.

Final exam due November 30, 5pm.

Final paper due November 30, 5pm.

Citations for Assigned Readings

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THE ARCHAEOLOGY OF HUMAN BONES

SECOND EDITION

Simon Mays

 Routledge
Taylor & Francis Group
LONDON AND NEW YORK

CONTENTS

<i>List of figures</i>	viii
<i>List of tables</i>	xiv
<i>Preface</i>	xv
<i>Acknowledgements</i>	xvi
1 The nature of bones and teeth	1
2 The nature of an archaeological human bone assemblage	15
3 The determination of sex and age	40
4 Metric variation in the skull	91
5 Metric variation in the post-cranial skeleton	126
6 Non-metric variation	153
7 Bone disease	177
8 Dental disease	217
9 Traces of injury on the skeleton	236
10 Stable isotope analysis	265
11 The study of DNA from skeletal remains	290
12 Cremated bone	311
13 Ethics and human remains	331
<i>Bibliography</i>	349
<i>Index</i>	395

CONTENTS

<i>List of figures</i>	viii
<i>List of tables</i>	xiv
<i>Preface</i>	xv
<i>Acknowledgements</i>	xvi
1 The nature of bones and teeth	1
2 The nature of an archaeological human bone assemblage	15
3 The determination of sex and age	40
4 Metric variation in the skull	91
5 Metric variation in the post-cranial skeleton	126
6 Non-metric variation	153
7 Bone disease	177
8 Dental disease	217
9 Traces of injury on the skeleton	236
10 Stable isotope analysis	265
11 The study of DNA from skeletal remains	290
12 Cremated bone	311
13 Ethics and human remains	331
<i>Bibliography</i>	349
<i>Index</i>	395

FIGURES

1.1	The human skeleton	2
1.2	The structure of a long-bone	4
1.3	Cross-sections of the humeri of a professional tennis player	5
1.4	A deposit of woven bone on a femur	6
1.5	The microscopic structure of cortical bone	7
1.6	Microscopic view of a transverse section of a femur	8
1.7	Development of a typical long-bone	9
1.8	The deciduous dentition of the upper jaw	11
1.9	The right maxilla of a medieval child	12
1.10	The permanent dentition of the upper jaw	13
1.11	The structure of a tooth	13
2.1	Factors affecting an excavated collection of skeletons	16
2.2	A medieval skeleton from the Ipswich Blackfriars site	18
2.3	A burial of a foetus from Roman Poundbury	20
2.4	A skeleton recording sheet for use in the field	21
2.5	Two superimposed burials from Sutton Hoo	24
2.6	Scanning electron micrograph of a transverse section of a bone from Wharram Percy	26
2.7	Well-preserved skeletons of a child and an adult from the medieval churchyard at Wharram Percy	27
2.8	Frequency of various skeletal elements in the medieval burials from the Ipswich Blackfriars site	30
2.9	An artist's impression of Fussell's Lodge long barrow as it may have appeared when first constructed	34
2.10	Wayland's Smithy, Barrow I	35
2.11	Composition of assemblages from Fussell's Lodge, Wayland's Smithy and Wharram Percy	37
3.1	Adult male and female pelvic girdles	41
3.2	Sex differences in the adult pubic bone	42
3.3	Left pelvic bones of an adult female and male	44

FIGURES

3.4	Adult skulls, female and male	45
3.5	Lower canine dimensions for burials from Poundbury	48
3.6	Sex difference in the angle of the greater sciatic notch in non-adults	50
3.7	Linear regression of foetal age against humerus length	52
3.8	Actual age plotted against age estimated from dental X-rays	53
3.9	Chronology of the development of the deciduous teeth	54
3.10	Chronology of the development of the permanent teeth	55
3.11	Radiograph of a mandible from a child from a British archaeological site	56
3.12	Immature and mature femurs	57
3.13	Epiphysial fusion	58
3.14	Some methods for estimating age at death in adult skeletons	60
3.15	Casts of left male pubic bones	63
3.16	Deviation of age estimated from real age, Spitalfields adult skeletons	69
3.17	Sections through an unworn and a heavily worn molar	72
3.18	A classification of molar wear	72
3.19	The Miles method for estimating the rate of dental wear	74
3.20	Estimated correspondence between adult age at death and molar wear phases for British material from the Neolithic to the medieval period	75
3.21	Ante-mortem tooth loss in nineteenth-century AD burials as a function of age	77
3.22	Anglo-Saxon grave goods thought to be masculine signifiers	78
3.23	Anglo-Saxon grave goods thought to be feminine signifiers	80
3.24	Distributions of ages of archaeological and modern perinatal infants	83
3.25	The location of the deserted medieval village of Wharram Percy	85
4.1	Anterior view of skull	92
4.2	Superior view of skull	93
4.3	Instruments for measuring skulls	94
4.4	MicroScribe G2 desktop digitiser for capturing three-dimensional geometric morphometric data	95
4.5	Three mandibular measurements in British archaeological material	98
4.6	Summary of cranial changes in ancient Nubia	99
4.7	Nasal index in living populations around the world	100
4.8	Anterior view of skull, showing method of taking nasal index	101
4.9	Location of Yanomama villages studied by Spielman and co-workers	102
4.10	Schematic representation of relationships between six African populations	103
4.11	Cluster analysis of craniometric data from pre-European contact archaeological sites in South America	105
4.12	Japanese Jomon and Yayoi crania	111
4.13	Map of Japan	112
4.14	Temporal changes in upper facial index in Japan	113
4.15	Dendrogram of measurements from Far Eastern and Pacific skulls	114
4.16	Summary tooth size from Japanese and Chinese samples	115
4.17	British Beaker pottery	116
4.18	Distribution of the Beaker phenomenon	117

FIGURES

4.19	Long-headed Neolithic and round-headed Beaker skulls	118
4.20	Discriminant function analysis of British skulls	120
5.1	An osteometric board	127
5.2	A burial showing bone tumble and cranial fragmentation	129
5.3	Estimated stature plotted against dental age for the Wharram Percy children	135
5.4	Results of experimental loading of the rat ulna	142
5.5	Femoral midshaft polar second moment of area for early Native North American populations	143
5.6	A spear-thrusting experiment	145
5.7	Polar second moments of area in the humeral shaft for Wharram Percy and York Fishergate	147
5.8	Asymmetry in humerus polar second moments of area for Wharram Percy and York Fishergate	147
5.9	A man and a woman breaking up clods following the plough. Luttrell Psalter	148
5.10	The Cape region of South Africa	149
5.11	Ratio of femur second moments of area in antero-posterior and medio-lateral planes in skeletal material from South Africa	150
5.12	Asymmetry in humerus second moments of area in skeletal material from South Africa	151
5.13	Rock art from South Africa	151
6.1	Skull showing an ossicle at the lambda and a lambdoid ossicle	154
6.2	Skull showing retention of the metopic suture	155
6.3	Skull showing a parietal foramen	155
6.4	Tibia showing a squatting facet	156
6.5	Atlas vertebra showing posterior atlas bridging	157
6.6	Palatine bones showing development of a bony torus	158
6.7	Patella showing a vastus notch	158
6.8	Adult dentition showing reduced, peg-shaped maxillary lateral incisors	159
6.9	Shovel-shaped maxillary permanent central incisor	159
6.10	Maxillary permanent molar showing a Carabelli cusp	160
6.11	Twin-rooted mandibular permanent canine	160
6.12	Painted cranium from Hallstatt	164
6.13	Location and site plan of the Naqada excavations	167
6.14	Layout of burials in the cemetery at Grossbrenbach, Germany	169
6.15	Part of the cemetery at Alfedena, Italy	170
6.16	A generalised joint	171
6.17	The position of the leg in the squatting posture	172
6.18	Skull showing an auditory torus	173
7.1	A classification of the diseases of bone	178
7.2	An anencephalic infant from Hermopolis, Egypt	179
7.3	Periostitis	180
7.4	Osteomyelitis	181
7.5	Vertebrae showing signs of tuberculosis	182

FIGURES

7.6 A cranium showing several button osteomas	183
7.7 Benign nasal tumour	184
7.8 Metastatic carcinoma	185
7.9 The lower leg bones of an adult bowed as a result of childhood rickets	186
7.10 Osteophytosis associated with degenerative disc disease in a vertebra	187
7.11 The head of a radius showing osteoarthritis	187
7.12 Thoracic spine with DISH	188
7.13 Hand phalanx with gout	189
7.14 Bone destruction caused by a disease process and by post-depositional damage	190
7.15 Clavicles with and without cavitation at the point of attachment of the costo-clavicular ligament	191
7.16 A horizontal virtual slice through the head of an Egyptian mummy shown by CT	193
7.17 Tibia with Paget's disease of bone	195
7.18 Micrograph of a rib showing vitamin D deficiency	197
7.19 Sequence of cranial vault changes in treponemal disease	202
7.20 Tibia with syphilis	203
7.21 Frontal bone of York skull showing treponemal disease	205
7.22 An upper incisor from a recent case of congenital syphilis, and from an archaeological case	206
7.23 Healed compression fractures in osteoporosis	209
7.24 Porotic hyperostosis of the orbital roofs (cribra orbitalia)	210
7.25 Burial grounds in the Moquegua valley used in the study of porotic hyperostosis	211
8.1 A caries cavity in a molar tooth	218
8.2 A periapical void in a maxilla	221
8.3 Dental caries in relation to sugar consumption in Britain	222
8.4 A molar tooth showing caries at the cemento-enamel junction	224
8.5 Occlusal caries in an eighteenth-century British mandible	225
8.6 Periodontal disease in an archaeological specimen	226
8.7 Ante- and post-mortem tooth loss in a mandible	226
8.8 Dental enamel hypoplasias on incisor and canine teeth	228
8.9 Schematic representation of a vertical section of a permanent upper central incisor	229
8.10 Location of the Nova Rača site	233
9.1 Soft tissue injuries: myositis ossificans and dislocation	237
9.2 Common types of fracture	239
9.3 Stages in the healing of a fracture	240
9.4 A midshaft fracture of an ulna which has failed to unite	242
9.5 Tibia of an adult showing a healed fracture in its distal third	243
9.6 Skull from Ipswich showing an unhealed blade injury	244
9.7 The anterior part of the cut surface of the blade injury in the Ipswich skull	245
9.8 Skull from Wharram Percy showing an unhealed blunt injury	246
9.9 The inner surface of the Wharram Percy skull at the site of the injury	247
9.10 The right temple area of the skull of William Leschallas, excavated from the Spitalfields crypt, London	248

FIGURES

9.11	The right pelvic bone from a skeleton recovered from the Little Bighorn battle site	249
9.12	A decapitated burial from fourth century AD Stanwick, England	250
9.13	An axis vertebra from a decapitated skeleton from Towcester, England (fourth century AD)	251
9.14	The skull of another late fourth-century AD decapitated burial from Stanwick	251
9.15	The fracture rate of the Libben long-bones	253
9.16	Colles' fracture	254
9.17	An ulna Parry fracture	255
9.18	One of the mass graves at Wisby under excavation	256
9.19	A skull from Wisby showing several cuts	257
9.20	The distribution of blade injuries according to skeletal element at Wisby	258
9.21	Spondylolysis of the fifth lumbar vertebra	259
9.22	Configuration of a normal lumbo-sacral spine and one predisposed to develop spondylolysis	261
9.23	Interfacet distances in individuals from the Wharram Percy and modern Hamann-Todd collections with and without spondylolysis	262
10.1	Stable isotope values for some major food classes	268
10.2	Human bone collagen stable isotope ratios for archaeological populations consuming pure C3, C4 and marine diets	270
10.3	Carbon stable isotope values for some burials from Missouri and Arkansas, USA	271
10.4	Carbon stable isotope results from human skeletons from Mesolithic and Neolithic Denmark	273
10.5	Human carbon stable isotope data from Köpingsvik and Resmo, Öland, Sweden	274
10.6	Rib bone nitrogen stable isotope data plotted against dental age for infants and children from medieval Wharram Percy, England	276
10.7	Strontium isotope values in Neolithic faunal and human tooth enamel from Vaihingen, Germany	282
10.8	Annual mean oxygen isotope ratios for precipitation in Italy	284
10.9	Oxygen stable isotope ratios in enamel carbonate from human permanent first and third molars from Portus Romae	285
10.10	Carbon and nitrogen stable isotope ratios in dentine from skeletons from the slave burial ground at Newton Sugar Plantation, Barbados	286
10.11	Strontium and carbonate oxygen stable isotope ratios in dental enamel from skeletons from the slave burial ground at Newton Sugar Plantation, Barbados	287
11.1	The structure of DNA	291
11.2	DNA molecules bear genes, separated by intergenic or 'spacer' DNA	292
11.3	Harmony Road cemetery, Durham, Ontario	297
11.4	Location of Mooder <i>et al.</i> 's (2006) archaeological sites in Siberia and Mongolia	300
11.5	Mooder <i>et al.</i> 's (2006) principal components analysis based on haplotype frequencies	301
11.6	PCR amplification of the X and Y amelogenin alleles from some archaeological burials	303

FIGURES

11.7	A lumbar vertebra from a burial from Wharram Percy , showing a superficial destructive lesion	305
11.8	Reconstruction of a peasant longhouse at Wharram Percy	307
12.1	X-ray diffraction patterns on bone heated to different temperatures	313
12.2	A pyre site at the Iron Age cemetery at Westhampnett, England	315
12.3	Bone from a cremation burial after sieving	316
12.4	Commonly occurring fragments in cremation burials	318
12.5	X-ray diffraction pattern from a skull fragment from a Mucking cremation	323
12.6	A section through a skull fragment from one of the Mucking cremations showing a fused mass of glass on its outer surface	324
12.7	The distribution of bone weights from the adult cremation burials from Godmanchester	327
12.8	Pot volume versus the weight of bone recovered from adult Godmanchester cremations	329
13.1	Handover of Australian Aboriginal human remains	334
13.2	St Peter's Church, Barton-upon-Humber	339

TABLES

1.1	Bones of the adult human skeleton	3
2.1	Frequencies of some major skeletal elements at Wayland's Smithy I	36
3.1	Relationship between pubic symphyseal phases and age (Suchey and co-workers)	63
3.2	Relationship between pubic symphyseal phases and age in males (Todd)	64
3.3	Relationship between pubic symphyseal phases and age in males (McKern and Stewart)	65
3.4	Relationship between pubic symphyseal phases and age in females (Gilbert and McKern)	65
3.5	Relationship between age and auricular surface phases	67
3.6	Comparison of real ages and ages estimated from dental wear, Lengua Indians	75
3.7	Sex of Anglo-Saxon burials with weapons	79
3.8	Sex of Anglo-Saxon burials with 'feminine' grave goods	79
3.9	Age distribution of Wharram Percy adults	86
3.10	Age distribution in Russell's demographic study	87
4.1	Values for distance statistics between six African populations	104
4.2	The cranial indices of British Neolithic and Bronze Age skulls	119
5.1	Mathematical equations for estimating stature from long-bone length in adults	132
5.2	Femur length : stature ratios in children	133
5.3	Median values for some humeral cross-sectional properties in European Palaeolithic and later material	144
6.1	Standardised mean measures of divergence for three Naqada cemeteries	168
6.2	Squatting facets at two British sites	173
7.1	Bone mineral density in women from Wharram Percy compared with a modern female reference population	207
7.2	Frequencies of cribra orbitalia in the prehistoric Moquegua valley	212
7.3	Prevalence of periostitis at Wharram Percy and York	214
8.1	Frequency of caries in European Upper Palaeolithic and Mesolithic skeletal material	223
8.2	Dental caries and tooth loss in northern Chile	227
8.3	Dental enamel hypoplasia frequencies at Nova Rača	233
9.1	Prevalence of spondylolysis at Wharram Percy and in recent skeletal remains	260
9.2	Prevalence of spondylolysis in non-adults and adults at Wharram Percy	260
11.1	Probability of shared haplotypes in the Harmony Road cemetery spatial groupings	298
12.1	Ash weight of the human skeleton	326

PREFACE

Archaeology is about people and how they lived in the past. The study of the physical remains of those people is therefore a central component of archaeological enquiry. This involves primarily the analysis of skeletal remains (oste archaeology), as bones and teeth are the only human remains that survive in most circumstances. The aim of this book is to illustrate the sorts of information that can be derived from the study of ancient human remains and how this can be harnessed to address questions of general archaeological interest. We shall generally be concerned with the remains of anatomically modern man (*Homo sapiens sapiens*), rather than with tracing the story of human evolution.

In the 12 years since the publication of the first edition of this book there have been many important developments in oste archaeology. In the second edition, every chapter has been updated to reflect this. Perhaps the most important methodological advances since the first edition have been in the areas of stable isotope and DNA analyses. In this edition, there is a chapter devoted to stable isotopic work, and its application to both dietary and mobility studies is described. The chapter on DNA has been completely rewritten. The text has also been expanded to encompass areas omitted from the first edition so as to make the coverage of the field more comprehensive. There is a new chapter on post-cranial metric variation, with an emphasis on biomechanical analyses. There is also a new chapter on ethics and human remains. Ethical matters, particularly those surrounding the question of whether archaeological human remains should be kept in museums for future study or should be reburied, are some of the most challenging issues faced by oste archaeology.