



Anthropology 160
Fall 2007

RECONSTRUCTING LOST CIVILIZATIONS

SECTION 7 (57400)

3.0 Units

Meeting Time and Place: W 6:00-8:45 PM
HGH 122

Instructor: John M. Matsunaga
Office Hours: Wednesdays 5-6 or by appointment
Office: Clark Hall 461
Email: jmatsuna@email.sjsu.edu

COURSE DESCRIPTION

On a daily basis, we put our faith in the products of scientific knowledge and make many important personal and political decisions based upon scientific claims. Given the significant impact that science has on our everyday lives and the decisions that we make, it is important that we have a clear understanding of what exactly science is and how scientific knowledge is produced. In this course, we will explore the epistemology, methodology, and boundaries of science. In doing so, we will address the following questions: "What is science?"; "How does scientific knowledge differ from other forms of knowledge?"; "How is scientific evidence and knowledge produced and evaluated?"; "What are the limitations of science?"; "What are the differences between scientific and pseudoscientific/non-scientific explanations?" In addressing these questions, the goals of this course are: 1) to provide students with a proper understanding of science so that they can distinguish between scientific and pseudoscientific interpretations and explanations, and 2) to develop students' analytical skills so that they can critically evaluate both scientific and non-scientific claims and forms of knowledge.

This course uses the discipline of archaeology as a point of entry for exploring the nature of scientific inquiry. Archaeology is one of four sub-fields within the discipline of anthropology that focuses on the study of past human societies through the analysis of the material culture produced and used by people. Throughout this course, we will learn about how archaeologists utilize various scientific concepts, theories, and methods to reconstruct past human societies and civilizations. By doing so, we will address how we know what we know about the human past from a scientific perspective, and how archaeological evidence, interpretations, and explanations are produced and evaluated. As a discipline that employs concepts, theories, and methods from a variety of scientific disciplines, the field of archaeology provides us with a well suited example for understanding the nature and boundaries of scientific reasoning, thought, and practice.



Prerequisites:

This course fulfills the Upper Division GE, Area "R," Earth and Environment requirement. In order to enroll you must have completed the Core GE requirements (including English 1B), be of upper division standing, and passed the Writing Skills Test.

COURSE GOALS AND LEARNING OBJECTIVES

Course Goals:

- One of the primary goals of this course is to introduce students to the scientific method, scientific reasoning, and make students aware of the virtues and shortcomings of scientific practice, interpretations, and explanations.

In addition, this course seeks to:

- develop an understanding of science within students so that they can distinguish between scientific and pseudoscientific/non-scientific interpretations and explanations
- provide students with a basic understanding of how scientific knowledge is produced, and more specifically, how archaeologists use a scientific approach to reconstruct the human past
- introduce students to some of the key concepts, methods, and debates within contemporary archaeology
- promote and develop students' analytical and critical thinking skills by discussing and actively engaging with some of the main concepts, debates, and methodologies within modern science and archaeology. Throughout this course, students will be encouraged to question, evaluate, and critically assess the methods, concepts, interpretations, and practices of science and archaeology. It is hoped that students will learn to apply these analytical and critical skills to other areas outside of the classroom.
- develop students' research, writing, and argumentation skills

Student Learning Objectives:

After completing this course, students should be able to:

- define science and explain the scientific method
- distinguish between scientific and pseudoscientific/non-scientific claims and interpretations



- develop a well defined and solid scientific argument/interpretation by appropriately selecting and evaluating relevant evidence and concepts, using scientific logic, and avoiding fallacious reasoning
- explain and evaluate the key concepts, methodologies, and major debates within archaeology
- explain how archaeologists and scientists evaluate evidence, and produce interpretations and explanations
- discuss the main stages in the scientific research cycle and the criteria that must be considered in designing a research project
- appreciate and acknowledge the significance and limitations of archaeological/scientific practice and knowledge
- explain and discuss the relationship between archaeology, science, and contemporary society, especially in regards to the political uses of archaeological/scientific interpretations
- critically evaluate and assess information, knowledge, and claims generated from both within and outside of archaeology/science

COURSE REQUIREMENTS AND EVALUATION

Exams (60% of total grade):

A midterm and a final exam will be given during this course to test your understanding of the readings, lectures, discussions, and films. The midterm will be worth 30% of your total grade. The date for the midterm is **October 10** and it will cover the material from the first five sections of the course. The final exam will be worth 30% of your total grade. The date for the final exam is **December 12, 5:15-7:30**. This exam will only include material covered since the midterm. For the midterm and final exams, you will be provided with a study guide that will outline the material that you are expected to know. The format for both the midterm and final exams will be a combination of short answer (anywhere from one word to a few sentences), fill in the blank, and multiple choice.

Research Proposal and Research Paper (40% of total grade):

A major component of this course involves learning how to construct a scientific argument/interpretation by evaluating and presenting concepts, evidence, and interpretations within the context of a research paper. As such, you will be required to



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complete a research proposal and one research paper that are geared towards helping you develop these skills. A one page research paper proposal is due on **October 3** (worth 10% of your total grade). The 8-10 page research paper worth 30% of your total grade will be due on **December 5**. The research paper is a mandatory requirement for passing this course. Failure to hand in a research paper will result in an "F" grade for the course.

The specific formats and requirements for the paper proposal and research paper will be described and outlined in separate handouts.

Extra Credit:

Both the mid-term and final exams will each include 5 points worth of extra credit questions (10 points maximum for the course [5% of the total grade]). The extra credit questions may be based on any aspect of the readings, lectures, or films and they may be derived from material that is not mentioned on the exam study guides.

Calculating the Final Course Grade:

The total points possible for this course are 200. Below is the point breakdown for each of the graded portions of the course:

- *Exams:* 120 points possible (1 midterm exam @ 60 points maximum and 1 final exam @ 60 points maximum)
- *Research Proposal and Research Paper:* 80 points possible (1 paper proposal @ 20 points maximum and 1 research paper @ 60 points maximum)

The grading scale is as follows:

200-195=A+	179-178=B+	159-158=C+	139-138=D+	119-Below=F
194-182=A	177-162=B	157-142=C	137-122=D	
181-180=A-	161-160=B-	141-140=C-	121-120=D-	

COURSE POLICIES

Attendance:

Attendance is a mandatory part of this course. One of the main goals of this class is to get you to critically engage with and think about the ideas presented in the course materials. In order for you to get the most out of this course, it will be necessary for you to attend all class meetings and participate actively in class activities, assignments, and discussions. Our daily lectures, discussions, and activities will be based upon that day's reading assignment. Thus, it is essential that you also carefully read the assigned articles or chapters before class.



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I will not, however, take attendance during this course. If you miss class for any reason, you are responsible for obtaining the lecture notes and any other pertinent class information (announcements made during class, etc.) from a classmate. I will not distribute my lecture notes to students or rehash my lectures during office hours. If you would like for me to clarify specific points from the lecture notes that you have obtained from a classmate, I will be happy to do so during my office hours.

See below for my policy on late work and missed exams due to absence from class.

Late Assignments and Missed Exams:

Paper proposals will be penalized 5 points for each day late and final research papers will be penalized 10 points for each day late.

Missed exams can only be made up if you have a legitimate reason (along with documentation that verifies the reason for your absence). If you miss an exam due to an unexcused absence, **you cannot make it up**. Missed exams that are the result of excused absences can be made up with no penalties imposed. In such cases, it is your responsibility to make arrangements with me for making up missed exams and to do so in a timely manner.

Grade Changes:

Errors can be made in grading exams and assignments. I encourage each of you to look over any exams or assignments returned to you to make sure that they were graded accurately. If a mistake has been made, you may request a grade change. You must make this request in writing (e-mail is acceptable), stating precisely the nature of the grade change. You will have up to **1 week** after the exam or assignment is returned to you to make the request. I will not consider any requests after this 1 week time period.

Student Conduct Code:

At all times during this course you are expected to act in compliance with the San Jose State University Student Conduct Code (http://www.studentaffairs.sjsu.edu/download/judicial_affairs/Student_Code_of_Conduct.pdf). It is your responsibility to familiarize yourself with this code and abide by the rules and policies contained within it. Any inappropriate or disruptive behavior in the classroom will not be tolerated. This includes, but is not limited to: sexual harassment, offensive language, derogatory or threatening remarks (especially those made towards other students in the class or myself), or any kind of behavior that disrupts or inhibits classroom activities or lectures. You are expected to treat each other with respect and be tolerant of other people's perspectives.



In addition, any form of academic dishonesty such as plagiarism or cheating, will not be tolerated and will result in a grade of "F" for the course. Below is the official "Academic Integrity" policy of San Jose State University:

"Academic Integrity"

Academic integrity is essential to the mission of San Jose State University. As such, students are expected to perform their own work (except when collaboration is

expressly permitted by the course instructor) without the use of any outside resources. Students are not permitted to use old tests, quizzes when preparing for exams, nor may they consult with students who have already taken the exam. When practiced, academic integrity ensures that all students are fairly graded. Violations to the Academic Integrity Policy undermine the educational process and will not be tolerated. It also demonstrates a lack of respect for one's self, fellow students and the course instructor, and can ruin the university's reputation and the value of the degrees it offers. We all share the obligation to maintain an environment which practices academic integrity. Violators of the Academic Integrity Policy will be subject to failing this course and being reported to the Office of Judicial Affairs for disciplinary action which could result in suspension or expulsion from San Jose State University.

Cheating

At SJSU, cheating is the act of obtaining or attempting to obtain credit for academic work through the use of any dishonest, deceptive, or fraudulent means. Cheating at SJSU includes but is not limited to:

- *Copying, in part or in whole, from another's test or other evaluation instrument.*
- *Submitting work previously graded in another course unless this has been approved by the course instructor or by departmental policy.*
- *Altering or interfering with grading or grading instructions.*
- *Sitting for an examination by a surrogate, or as a surrogate*
- *Any other act committed by a student in the course of his or her academic work which defrauds or misrepresents, including aiding or abetting in any of the actions defined above.*

Plagiarism

At SJSU, plagiarism is the act of represent the work of another as one's own (without giving appropriate credit) regardless of how that work was obtained, and submitting it to fulfill academic requirements. Plagiarism at SJSU includes but is not limited to:

The act of incorporating the ideas, words, sentences, paragraphs, or parts thereof, or the specific substances of another's work, without giving appropriate credit, and representing the product as one's own work.



Representing another's artistic/scholarly works such as musical compositions, computer programs, photographs, painting, drawing, sculptures, or similar works as one's own."

Students with Special Needs:

The Disability Resource Center (DRC) is a comprehensive center providing services and accommodations for SJSU students with documented disabilities, in compliance with section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. The accommodations provided by the DRC include, but are not limited to the following:

- enlarged or audio taped course materials, handouts, syllabi and exams
- audio taping of a lecture
- sign language interpreters for a lecture
- student notetakers for a lecture
- extended time for tests
- relocation of a class to a more accessible site
- adaptive computer equipment for tests
- modified testing formats or alternative means of evaluation
- assistive listening devices in class
- readers or scribes
- lab assistants

In order to take advantage of these services and accommodations, you must have the appropriate documentation on file with the DRC and have met with a DRC Coordinator. If you have a documented disability, it is your responsibility to coordinate with the DRC and notify me so that the appropriate accommodations and services can be arranged.

The Disability Resource Center is located in the Administration Building, Room 110. The telephone number is (408) 924-6000 (Main Office), (408) 924-6542 (Deaf and HoH). More detailed information on the DRC and its services can be found on-line at: <http://www.drc.sjsu.edu/>.

Office Hours Policy:

Most questions that you may have about various aspects of this course can be addressed either in class, after class, or through email. However, if you would like to see me during my office hours or schedule an appointment to meet with me, you should feel free to do so. While all students are welcome to drop by my office hours unannounced, my preference is that you email me ahead of time and schedule an appointment. This will allow for the most efficient use and scheduling of my office hours. Priority will be given to students who have signed up for office hours. Normally, students may sign up for one 10 minute block, but more time is permitted if available. Appointment times for meeting with me outside of normal office hours are restricted to Wednesdays and should be scheduled as close as possible to our class meeting time.



Additional Course Policies:

Given the nature and duration of our class meetings, food and drink are permitted in class as long as it does not interfere with or interrupt class lectures, discussions, and activities. Please be sure to dispose of your garbage and clean up after yourselves.

As a courtesy to your fellow students and myself, please put away and turn off cell phones and iPods (or any other MP3 players) during class.

Instructions for Dropping this Course:

Go to <http://my.sjsu.edu>

- Enter your SJSU ID and Password - you may now use your nine-digit SJSU ID to login to MySJSU. If you are a continuing student and have previously been given a User ID beginning with an uppercase W, you can continue to use this ID to log in.
- If you drop a class, you must do so prior to the time you submit payment to ensure that your registration fees are properly assessed.

Navigate to "Self Service" > Student center > Drop a class"

- Click on "Drop Classes"
- Click the checkbox next to each class you wish to drop and click "Drop Selected Classes."
- Review your selection and click "Finish Dropping."

Instructor Drops – CAUTION!

Instructors are permitted to drop students who fail to attend the first scheduled class meeting and who fail to inform the instructor prior to the second class meeting of the reason for any absence and their intention to continue in the class. Some instructors will drop students who do not meet the stated course prerequisites. However, they are not required to do so. **It is the student's responsibility to make sure classes are dropped.**

For important information on schedule adjustment deadlines ("add" and "drop" deadlines) please go to:

<http://info.sjsu.edu/web-dbgen/narr/soc-fall/rec-2.html>



COURSE MATERIALS

There is 1 required text for this course which can be purchased at the Student Bookstore. Additional readings will be given to you by the instructor on CD. Paper copies of the additional readings will also be made available for you to photocopy, if for some reason you cannot use the CD.

Required:

Ashmore, Wendy and Sharer, Robert. 2005. *Discovering Our Past: A Brief Introduction to Archaeology*. 4th edition. New York: McGraw Hill.

Anthropology 160 Course CD (Provided by the instructor)

This disc contains electronic versions (pdf format) of articles and book chapters that comprise additional required and recommended readings for this course. **DO NOT LOSE THIS CD.** I will not provide replacement copies. If you need an additional copy, please obtain it from a fellow student. This CD should be compatible with both PC and Mac platforms. If you have any problems accessing the materials on this disc, please notify me immediately. You will need Adobe Acrobat Reader in order to view these documents.

This program can be downloaded for free from:

<http://www.adobe.com/products/acrobat/readstep2.html> (for PC users); or

<http://www.adobe.com/support/downloads/product.jsp?product=10&platform=Macintosh>
(for Macintosh users).



CLASS MEETING AND READING SCHEDULE

NOTE: All readings should be completed before the class for which they are assigned. These readings will help you prepare for in-class activities, assignments, discussions, and lecture for that day. Please come to class prepared to discuss that day's readings.

I. What is Archaeology? Defining the Discipline

Wed 8/29 1. Course Introduction/Defining Anthropological Archaeology/Aims and Goals of Archaeology

II. Archaeology as Science: The Nature of Scientific Inquiry

Wed 9/5 2. What is Science?/Theories, Research Design, and the Scientific Method

Reading Assignment: Ashmore and Sharer Ch 4 "How Archaeology Works" pp. 76-86; Feder (2006) "Epistemology: How You Know What You Know" (CD)

III. Collecting Archaeological Data: Field and Laboratory Methods

Wed 9/12 3. Introduction to Archaeological Data/Survey and Excavation Techniques

Reading Assignment: Ashmore and Sharer Ch 4 "How Archaeology Works" pp. 61-76; Ashmore and Sharer Ch 5 "Fieldwork"; Dickson, Oeggel, and Handley (2003) "The Iceman Reconsidered" (CD)

Wed 9/19 4. Analyzing Artifacts and Ecofacts/Dating Techniques

Reading Assignment: Ashmore and Sharer Ch 6 "Analyzing the Past"; Ashmore and Sharer Ch 7 "Dating the Past"

IV. Interpretation and Explanation in Archaeology

Wed 9/26 5. Interpreting and Explaining Archaeological Data/Analogy, Explanation, Experimental Archaeology, and Ethnoarchaeology/Archaeological Epistemology



Reading Assignment: Ashmore and Sharer Ch 8 "Reconstructing the Past" pp. 179-188; Kosso (2006) "Introduction: The Epistemology of Archaeology" (CD)

Film: "Nova: Secrets of Lost Empires - This Old Pyramid" (1992)

V. Scientific vs. Pseudoscientific Interpretations: Dispelling Myths through Archaeology

Wed 10/3 6. Archaeology vs. Pseudoarchaeology I: What is Pseudoarchaeology?/ Atlantis, Ancient Astronauts, Creationism, and Ancient Egyptian Civilization

Reading Assignment: Fagan (2006) "Diagnosing Pseudoarchaeology" (CD); O'Hehir (2005) Archaeology from the Dark Side" (CD); Feder (2006) "Mysterious Egypt" (CD)

Film: "Mystery of the Sphinx" (1993)

**Mid-Term Review
Research Paper Proposals Due**

Wed 10/10 7. Mid-Term Exam

VI. Debating the Major Questions: Clashing Viewpoints and Interpretations in Modern Archaeology

Prehistoric Beliefs, Rituals, and Practices

Wed 10/17 8. Prehistoric Art: Why was it made? What did it mean? How was it used?

Reading Assignment: Begley and Shipman (2006) "Does Cave Art Depict Shamanism" (CD); Hamilton et al. (1996) "Can We Interpret Figurines?" (CD)

Film: "How Art Made the World – The Day Pictures Were Born" (2006)

Wed 10/24 9. Prehistoric Cannibalism in the American Southwest: Did prehistoric Native Americans practice cannibalism?

Reading Assignment: Billman et al. and Dongoske et al. (2005) "Did Prehistoric Native Americans Practice



Cannibalism in the American Southwest? (CD);
Gibbons, Boaz, Ciochon (2006) *“Is Cannibalism
a Prominent Feature of Prehistoric Societies?”*
(CD)

Film: *Secrets of the Dead: Cannibalism in the Canyon* (2000)

Wed 10/31 **NO CLASS – Happy Halloween!**

Firsts and Origins

Wed 11/7 10. The First Peopling of the New World: When and how did people first arrive in the New World?

Reading Assignment: Fiedel and Dillehay (2005) *“Did People First Arrive in the New World After the Last Ice Age?”* (CD); Roosevelt (2000) *“Who’s on First?”* (CD); Bradley and Stanford (2004) *“The North Atlantic Ice-edge Corridor”* (CD)

Film: *Nova: America’s Stone Age Explorers* (2004)

Wed 11/14 11. The Rise of Complex Societies – Why did Cahokia develop into a major prehistoric center?

Reading Assignment: Pauketat (1998) *Refiguring the Archaeology of Greater Cahokia* (CD)

Film: *Ancient Voices – Cahokia: America’s Lost City* (1999)

Wed 11/21 **NO CLASS – Happy Thanksgiving!**

Decline and Collapse

Wed 11/28 12. The Collapse of Complex Societies – Why did Ancient Maya Civilization disappear?

Reading Assignment: Adams and Cowgill (2003) *“Were Environmental Factors Responsible for the Mayan Collapse?”* (CD); Diamond (2005) *“The Maya Collapses”* (CD)

Film: *Lost Kingdoms of the Maya* (1993)



**VII. Impacts on Interpretation: Archaeological Ethics, Contemporary Society,
and the Politics of the Past**

- Wed 12/5 13. The Politics of the Past: Ethics, Society, and Social Identities
Reading Assignment: Ashmore and Sharer Ch 10 "Archaeology Today"; Arnold (1992) "The Past as Propaganda" (CD); Riding In and Meighan (2005) "Should the Remains of Prehistoric Native Americans Be Reburied Rather than Studied?" (CD)

Film: "Shellmound" (2004)

**Final Exam Review
Final Papers Due**

Wed 12/12 14. Final Exam 5:15-7:30
