

FANTASTIC ARCHAEOLOGY AND PSEUDOSCIENCE

ANTH 3334

May Term 2017

Time: 9:00am-1:00pm

Professor: Dr. Mark D. McCoy

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Course Perspective

This course will critically examine pseudoscience, cult archaeology and creationism from a scientific perspective. Through the close examination of case studies we will dispel archaeological myths and mysteries which are often depicted as fantastic or cult archaeology. This course will demonstrate that a strong adherence to scientific investigation can uncover facts about prehistory that are as interesting as the myths.

The category of 'Fantastic Archaeology' includes reconstructions of the human past which do not follow the accepted rules of evidence and argument, but which assert that they have scientific support, use science terminology, or claim scientific validity. These can be called pseudoscientific reconstructions. They can be also called cult archaeology when they provide the core beliefs of a group or community. When they attach to religious beliefs questioning human evolution or they use pseudoscientific evidence to promote a religious belief in a supernatural creation event in the past, then they pertain to Creationism. We will look at all of these matters in the class. But the issues surrounding Fantastic Archaeology are by no means always clear cut. In several archaeological arenas, legitimate controversies among scientists about what is known and knowable grade into speculations about the past that go beyond any possibility of documentation. Sometimes these frontiers between the legitimate and the lunatic are the most dynamic and interesting of all.

Finally, we consider, thematically and periodically throughout the course, the difference between controversies within legitimate scientific archaeology and controversies pitting scientists against pseudoscientists and charlatans. As Ken Feder describes in the first two chapters of his book, *Frauds, Myths and Mysteries*, a controversy between legitimate scientists operates by clear and consistent rules of evidence, even if those scientists have different interpretations of evidence. A controversy between scientists and charlatans pits people working with such rules against people who ignore them.

Instructor biography:

Mark D. McCoy is an Associate Professor in Anthropology and an archaeologist whose research centers on the development of ancient political economies and human ecodynamics in the islands of the Pacific. His methodological expertise in 'spatial technology' that includes powerful tools

to detect and analyze spatial patterns in all types of archaeological datasets and tell us about how people interacted with each other, and their environment, in the past. His National Geographic funded research at the site of Nan Madol – a monumental archaeological site that has been subject of outrageous pseudoscientific conspiracy theories – was recently featured in the SMU Research Blog:

<https://blog.smu.edu/research/2016/10/18/evidence-of-first-chief-indicates-pacific-islanders-invented-a-new-society-on-city-they-built-of-coral-and-basalt/>

Benefits to taking the class:

- Students learn critical thinking skills in evaluating pseudoscience and misinformation. We will primarily discuss these as they relate to archaeology, but will also touch upon other fields (e.g., diet/nutrition, medicine, zoology, human behavior).
- Students will consider why pseudoscience is popular within American culture, and what individuals and groups stand to gain and lose by its proliferation.
- Students will learn about world cultures of the past and participate in interactive exercises aimed at enhancing understanding of some of their greatest accomplishments.
- In dissecting academic debates alongside fantastic claims, students will gain appreciation for the scientific process, and the difference between intriguing mysteries of the past and falsehoods and charlatanism spread to advance agendas.
- Students will consider popular representations of archaeology for entertainment value and learn how this can jeopardize cultural resources, relationships with descendant communities of archaeological cultures, and enhanced scientific study of the past.

Learning Outcomes

1. Students should be able to recognize a pseudoscientific claim, particularly about the human past involving archaeology
2. Students will learn techniques for critical thinking and analyzing claims
3. Students will examine the role and popularity of pseudoscientific claims in contemporary American culture

Course Texts

Frauds, Myths, and Mysteries: Science and Pseudoscience in Archaeology, 8th Edition, Kenneth L. Feder, McGraw Hill, NY

Course Requirements

Attendance:

Attendance is mandatory. However, no portion of your grade for this course is based on your attendance.

'Myth Busting' Presentations:

Each student will give a 20-minute formal talk in class. In the first half you will describe a popular myth or misconception about the past and in second half present a critical deconstruction of that myth.

Exams:

There will be three essay exams. *The exams are not cumulative.* However, subsequent exams may include some themes/concepts/terms referring to material covered earlier in the course. I will inform you in advance about the material you need to review in preparation for each exam.

Assignments and exams will be based on 400 total points:

1st exam:	100 points
2nd exam:	100 points
3rd exam:	100 points
Presentation:	100 points

Grade Distribution:

A	94-100%	A-	90-93.9%		
B+	87-89.9%	B	84-86.9%	B-	80-83.9%
C+	77-79.9%	C	74-76.9%	C-	70-73.9%
D+	67-69.9%	D	64-66.9%	D-	60-63.9%
F	≤ 59.9%				

UNIVERSITY CURRICULUM STUDENT LEARNING OUTCOMES (UC 2012):

This course does fulfill the **Individuals, Institutions, and Cultures Pillar (Level 2)** and **Philosophical and Religious Inquiry and Ethics (Level 2)** for the University Curriculum as well as the **Oral Communications Proficiency** and the **Information Literacy Proficiency**.

For Philosophical and Religious Inquiry and Ethics Pillar: The purpose of this pillar is to explore the human condition, engage in probing inquiry of philosophical, religious, or ethical issues and questions. This inquiry also serves as the basis for thoughtful choice and action.

Student Learning Outcome:

2b. Students will be able to identify ethical issues within a particular domain, and to explain and evaluate responses to those issues in terms of both their factual and ethical presuppositions.

For Individuals, Institutions, and Cultures Pillar: Students will be able to understand complex social systems. They also will explore contemporary efforts to document and analyze the interaction of individuals, cultures, and institutions that shape economic, political, and social experiences.

Student Learning Outcomes:

1. Students will be able to analyze different theoretical or interpretive perspectives in the study of individuals, institutions, and cultures that shape economic, political and social experiences.
2. Students will be able to evaluate critically the research outcomes, theory, and/or theoretical applications in the study of individuals, institutions, and cultures that shape economic, political and social experiences.

For Oral Communication proficiency you are required to make at least one formal, public oral presentation. This requirement cannot be met through class participation.

Student Learning Outcomes:

1. Students will be able to select, organize and use appropriate evidence or information to suit a specific or targeted audience.
2. Students will be able to use appropriate vocal and visual cues to deliver a presentation to a specific or targeted audience.

For Information Literacy proficiency requires you to engage in independent research, data analysis, identifying, evaluating, and using material data beyond what is provided by the professor or covered in class. Courses with annotated bibliographies, literature reviews, and multiple-staged research papers, reports or projects will typically satisfy this requirement. Note that this proficiency can be satisfied through courses that focus on tools for accessing/collecting and drawing appropriate conclusions from data.

Student Learning Outcomes:

1. Students will be able to select and use the appropriate research methods and search tools for needed information.
2. Students will be able to evaluate sources for quality of information for a given information need.

UC 2016 UNIVERSITY CURRICULUM:

This course is approved for **Depth in Humanities & Fine Arts** and **Depth in History, Social, & Behavioral Sciences**.

Disability Accommodations

Disability Accommodations: Students needing academic accommodations for a disability must first be registered with Disability Accommodations & Success Strategies (DASS) to verify the disability and to establish eligibility for accommodations. Students may call 214-768-1470 or visit <http://www.smu.edu/alec/dass.asp> to begin the process. Once registered, students should then schedule an appointment with the professor to make appropriate arrangements.

Religiously Observant Students

Religiously observant students wishing to be absent on holidays that require missing class should notify their professors in writing at the beginning of the semester, and should discuss with them, in advance, acceptable ways of making up any work missed because of the absence. (See University Policy No. 1.9.).

Excused Absences for University Extracurricular Activities

Students participating in an officially sanctioned, scheduled University extracurricular activity should be given the opportunity to make up class assignments or other graded assignments missed as a result of their participation. It is the responsibility of the student to make arrangements with the instructor prior to any missed scheduled examination or other missed assignment for making up the work. (University Undergraduate Catalogue)

The SMU Honor Code

The SMU honor is in effect for all aspects of this course.

Course Schedule

Date	Topics	Assignments & Readings
Thursday, May 18	Introduction to Archaeology How We Know What We Know Famous Archaeological Hoaxes	
Friday, May 19	Who 'Discovered' America? Myth of the Moundbuilders	Chapters 1 & 2
Monday, May 22	Lost Continents	Chapters 3 & 4
Tuesday, May 23	EXAM 1 Myth Busting Presentations	Chapters 5 & 6
Wednesday, May 24	Ancient Astronauts	Chapters 7 & 8
Thursday, May 25	Vampires, Mummies, and Zombies Mysterious Civilizations	Chapter 9 & 10
Friday, May 26	Cannibals Psychic Archaeology	Chapter 10 & 11
Tuesday, May 30	Myth Busting Presentations EXAM 2	Chapter 12 & 13
Wednesday, May 31	The Bible and Archaeology The Maya and the End of the World	
Thursday, June 1	Spectacular Sites Fantastic Tales of Historical Figures The Enigmatic Site of Nan Madol	
Friday, June 2	Myth Busting Presentations EXAM 3	