

ANTH 3334:

FANTASTIC ARCHAEOLOGY AND PSEUDOSCIENCE LOST TRIBES, SUNKEN CONTINENTS, AND ANCIENT ASTRONAUTS

Professor:	Whitney A. Goodwin, Ph.D. Candidate, Department of Anthropology
Contact:	wgoodwin@smu.edu
Course Time:	Monday-Friday, 9:00am-12:00pm, 1:00-4:00pm
Course Location:	Fort Burgwin Archaeology Laboratory
Office Hours:	By appointment

COURSE DESCRIPTION:

Archaeology, like any other science, is no stranger to today's world of half-truths and 'alternative facts'. Fantastic claims have been made about everything in the field, from crystal skulls to entire civilizations. In this course, you will acquire the tools to form critical opinions about archaeological phenomena and become able to take apart shaky arguments based on incomplete, false or nonexistent evidence. At the same time, you will learn that science is never straightforward, neat, and simple. When it comes to many issues, legitimate controversies among scientists about what is known and what is knowable can turn into speculations about the past that go beyond any possibility of documentation. In fact, you will learn that sometimes these frontiers between the legitimate and the lunatic are the most dynamic and interesting of all.

In this course we will also consider, thematically and periodically, the difference between legitimate controversy within scientific archaeology, what is termed a "Paradigm controversy", and controversy 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 very different interpretations of evidence. A controversy between scientists and charlatans (people who capitalize on the gullibility in others) pits people working with such rules against people who ignore them.

Through the close examination of case studies about pseudoscience, cult archaeology and creationism, we will dispel archaeological myths and mysteries which are often depicted as fantastic or cult archaeology. You will learn that a strong adherence to scientific investigation can uncover facts about prehistory that are as interesting as the myths. Perhaps most importantly, the tools and skills you acquire in this course will hopefully help you better examine and navigate the world of information and misinformation that surrounds you.

COURSE LEARNING OUTCOMES AND OBJECTIVES:

1. Students will be able to recognize a pseudoscientific claim, particularly about the human past involving archaeology
2. Students will learn techniques for critical thinking and analyzing seemingly scientific claims
3. Students will learn the proper structure of scientific argumentation and how to avoid common logical fallacies in pseudoscientific thinking
4. Students will examine the role and popularity of pseudoscientific claims in contemporary American culture and the power archaeology has to create national, religious, social, ethnic, and political narratives
5. Students will be exposed to how seemingly “silly” pseudoarchaeological claims have harmful and sometimes violent effects on indigenous groups in the form of social/political/religious/ethnic marginalization, economic exploitation, and “romanticizing” an “exotic other”.

UNIVERSITY CURRICULUM STUDENT LEARNING OUTCOMES:

This course fulfills the Individuals, Institutions, and Cultures (Level 2) and the Philosophical and Religious Inquiry and Ethics (Level 2) ad Pillars; the Humanities and Fine Arts and History, Social and Behavioral Sciences Depth Requirements; and the Human Diversity, Information Literacy, Oral Communication, and Writing Proficiencies for the University Curriculum.

University Curriculum Pillars:

- **Individuals, Institutions, and Cultures (Level 2)**
 - 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.
 - 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.
- **Philosophical and Religious Inquiry and Ethics (Level 2)**
 - Students will be able to demonstrate the ability to critically reflect on or apply the theoretical methods of philosophy or religious studies via a focus on a specific area or set of issues.

University Curriculum Depth Requirements:

- **Humanities and Fine Arts Depth Requirement**
 - Students will analyze and construct clear and well-supported interpretations of creative or innovative works within a particular discipline.
 - Students will demonstrate the ways in which creative works reflect values and modes of thought in individual or cultural contexts.
- **History, Social and Behavioral Sciences Depth Requirement**
 - Using extensive primary and/or secondary sources students will explain, in their own prose, how and why historical changes occur in a particular time and society.
 - Using primary and secondary historical sources, students will situate disciplinary/professional subject matter within its changing historical contexts.

University Curriculum Proficiencies and Experiences:

- **Human Diversity Proficiency**
 - Students will be able to demonstrate an understanding of the historical, cultural, social, or political conditions of identity formation and function in human society, including the ways in which these conditions influence individual or group status, treatment, or accomplishments.
- **Information Literacy Proficiency**
 - Students will be able to select and use the appropriate research methods and search tools for needed information.
 - Students will be able to evaluate sources for quality of information for a given information need.
- **Oral Communication Proficiency**
 - Students will be able to select, organize and use appropriate evidence or information to suit a specific or targeted audience.
 - Students will be able to use appropriate vocal and visual cues to deliver a presentation to a specific or targeted audience.
- **Writing Proficiency**
 - Through multiple opportunities supervised and/or directed by a professor, an editor or other authority, students will demonstrate proper use of language through completion of a substantial amount of purposeful writing appropriate for a specific or targeted audience.

REQUIRED TEXT:

There is one required textbook for this course:

Frauds, Myths, and Mysteries: Science and Pseudoscience in Archaeology, 9th Edition, Kenneth L. Feder, McGraw Hill, NY. It is available at the SMU bookstore or can be purchased online. Additional assigned readings will be available online as PDF documents on Canvas. Students are required to have completed all assigned readings by the date indicated on the course schedule.

CANVAS:

This class uses Canvas. I will send announcement alerts via Canvas to your SMU email account. ***It is your responsibility to check your SMU email account regularly to get these announcements.*** The syllabus, additional readings, and other materials will be placed on Canvas for you. You also will be able to track your grade in the class by clicking on the My Grades link. ***You are responsible for monitoring your grades to catch any errors that may occur.*** Please bring these to my attention right away – do not wait.

COURSE FORMAT AND GRADING:

Grades for the course are based on the following:

	Pts.	%
Class Participation	100	20%
Group Projects	150	30%
Research Report	50	10%
Research Paper	100	20%
Exam	100	20%
Total	500	100%

Class Participation:

Class participation is determined on the frequency, relevance, clarity, and creativity of contributions to in-class discussions. Students are expected to engage the course material, including lectures, readings, and films. Surfing the web, checking e-mails, texting, etc. are disruptive to your own learning and the learning of others and will not be tolerated. Cell phones should be switched to silent at the beginning of each class. Students who do not respect these rules will be asked to leave and marked absent. Participating actively in the discussion also means showing an understanding of the required readings. Readings are due on the day assigned. **It is critical you do the readings before you come to class**, so that you will be prepared to understand the lectures and participate in discussions.

Group Projects:

Group projects will require in-class and field trip group-based research and presentation. There are 10 group projects. Groups will be given prompts related to the material assigned for that day. Group projects are designed to help you reflect upon some aspect of Fantastic Archaeology and apply it to more general principals in anthropology (i.e., cultural relativism, evolution, ideology, hegemony, Post-Colonialism, and Gender theory), philosophy (i.e., logical fallacies, argumentation, parliamentary debate), religion (i.e., understanding basic tenets of specific religious systems of the past and present), and ethics (i.e., beneficence, the concept of “least harm”, autonomy, respect for others) that we learn throughout the course. Participation will be assessed through quantity and quality of individual contribution and involvement. All group projects will require some sort of product in the form of powerpoint presentations, photos, or written work.

Research Report:

One research report (3 pages minimum, double-spaced, 12-point font, 1 inch margins, not including notes or photos) is required for this class and will deal with how archaeologists and anthropologists evaluate and describe the values and beliefs associated with material culture (archaeological artifacts or cultural objects) through contextual analyses. For the report, you will be asked to describe one archaeological artifact and one cultural object and discuss its archaeological or cultural context, chronological context, use-context, and spatial context. These concepts will be covered in class but outside reading specific to the artifacts you select will be required. This report will be based on artifacts and objects on display at the Millicent Rogers Museum and in the SMU-in-Taos archaeological collections. We will take a class field trip to the museum on Wednesday, January 9th.

Research Paper:

You will be required to write one research paper (12 pages minimum, double-spaced, 12-point font, 1 inch margins) that explores in more detail one of the major topics of pseudoscience that we address during the course of the semester. Topics must be approved prior to the first day of class. The research paper assignment will be posted on Canvas about one month before the start of class. It will include a list of appropriate topics and some related sources. You will be required to find additional sources. You are encouraged to have your topic approved and begin research as early as possible.

The paper will include several phases. An outline and annotated bibliography due a week prior to the paper deadline are each worth 5% of the total paper grade. A draft of the paper is due three days before the final paper deadline and is worth 10% of the total grade. A more complete draft will receive more constructive feedback so you are encouraged to submit a well-polished draft. Feedback on each phase will be returned promptly. The final draft is due at the end of the last day of class. See the Research Paper Assignment handout on Canvas for more details.

Research will be a combination of internet and library-based resources. Sources and direct quotes must be acknowledged by citations in the text using typical social sciences citation conventions, as exemplified in your textbook and other readings. A list of references cited must also be supplied. In order to help you understand how to find and evaluate these sources we will do some of the research for these papers in class using internet-based sources and at on-campus libraries. All papers will be submitted through Canvas to check for plagiarism.

Exam:

There is one cumulative exam required for this course. The exam will cover readings, lectures, class discussions/activities, and videos. The exam format will include: i) multiple choice, ii) matching, iii) fill in the blanks, iv) definitions, v) short answer, and vi) essays. A review session will be held the morning before the test. Students must bring questions to the review and have begun studying by that class date. There are no make-up exams.

COURSE POLICIES:

Attendance

Attendance to every class is mandatory. Daily attendance will be taken and students are expected to be present for all classes and prepared to discuss topics, readings, and films. Students more than ten minutes late to class will be marked absent. If you miss a lecture, you are still responsible for the material that was covered.

Excused absences will be given for the observance of religious holidays, participation in University extracurricular activities, documented cases of extreme illness, or documented personal emergencies. In cases of religious holidays and extracurricular activities, I must be provided with notification by **December 21st, 2017**.

***Religious Observance:** 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 Catalog)

Incompletes and Withdrawals:

A grade of 'I' is given only in cases of documented emergency or special circumstances late in the term, provided that you have been making satisfactory progress. Students are responsible for knowing the deadline for withdrawing from the course without grade penalty.

Disability Accommodations

Students needing academic accommodations for a disability must first register with Disability Accommodations & Success Strategies (DASS). Students can call 214-768-1470 or visit <http://www.smu.edu/Provost/ALEC/DASS> to begin the process. Once registered, students should then schedule an appointment with the professor as early in the semester as possible, present a DASS Accommodation Letter, and make appropriate arrangements. Please note that accommodations are not retroactive and require advance notice to implement (See University Policy No. 2.4).

University Honor Code:

In *all* work for the class you are expected to follow the SMU Honor Code. The Honor Code states, "Students and faculty members must mutually share the knowledge that any dishonest practices permitted will make it more difficult for the honest student to be evaluated and graded fairly and will damage the integrity of the whole University." If you have any questions about what that means, see:

<http://www.smu.edu/StudentAffairs/StudentLife/StudentHandbook/HonorCode>.

Acts of academic dishonesty, cheating, and plagiarism will **not** be tolerated under any circumstances. Students who violate the SMU Honor Code will be subject to immediate disciplinary penalties including the submission of a Faculty Disposition form to the Honor Council, failure of the assignment, possible failure of the course, and/or dismissal from the University.

As commonly defined, plagiarism consists of passing off as one's own the ideas, words, writings etc., which belong to another (even if you have the permission of that person). If you have any questions about how to properly use source material, especially from the web, I strongly encourage you to consult *Writing with internet sources*, produced by Harvard's Expository Writing Program or Gordon Harvey's (2008) *Writing with sources: a guide for students*:

http://isites.harvard.edu/fs/docs/icb.topic244006.files/writing_with_internet_sources.pdf

<http://isites.harvard.edu/fs/docs/icb.topic624846.files/WritingSourcesHarvard.pdf>

TENTATIVE COURSE SCHEDULE (SUBJECT TO CHANGE)

Research Paper topics must be approved prior to the start of class

Day 1: Pseudoscience, Science, and Archaeology

- *Morning*
 - Introduction and Orientation
 - Why People Believe Weird Things
 - Feder chapter 1
 - Posted Reading: Shermer 2002 chapter 1
 - Film clips: *John Oliver segment on Alex Jones (HBO, July 30, 2017)*
- *Afternoon*
 - Recognizing Pseudoscience: The “Baloney Detection Kit”
 - Posted Reading: Shermer 2002 chapter 3
 - Posted Reading: Sagan 1996 chapter 12
 - Science and Epistemology: How Do We Know What We Know?
 - Feder chapter 2
 - Film clips: *South Park: A History Channel Thanksgiving (Season 15, episode 13)*
 - **Group Project 1: Confronting Logical Fallacies**
 - ***Research Paper***
 - **Topics must be approved prior to class today**

Day 2: Archaeological thinking and doing

- *Morning*
 - An Introduction to Archaeology
 - Posted Reading: Archaeology 101
 - Field Trip: SMU-in-Taos collections
- *Afternoon*
 - **Group Project 2: An Exercise in Archaeological Thinking**
 - Research paper discussion and orientation
 - Field Trip: Library Research (3:30-4:00pm)

Day 3: Archaeological hoaxes

- *Morning*
 - Archaeological Hoaxes: The Cardiff Giant
 - Feder chapter 3
 - Film: *The Cardiff Giant (A&E)*
- *Afternoon*
 - Archaeological Hoaxes: Piltdown Man
 - Feder chapter 4
 - Film: *The Boldest Hoax (Nova)*
 - **Group Project 3: Contemplating Contemporary Archaeological Hoaxes**

Day 4: The Wild Side of North American Archaeology

- *Morning*
 - ***Research Paper***
 - **DUE at the beginning of class: Outline and Annotated Bibliography**
 - The “Discovery” of North America
 - Feder chapters 5 and 6
 - Film: *Journey to 10,000 BC* (History Channel, 2008)
- *Afternoon*
 - The Mysterious Moundbuilders
 - Feder chapter 7
 - Pseudoarchaeology in Taos – hums, hauntings, and government conspiracies

Day 5: Strangers from Beyond: Atlanteans

- *Morning*
 - The Myth of Atlantis
 - Feder chapter 8
 - **Group Project 4: Lost Continents**
- *Afternoon*
 - ***Research Report Assigned***
 - Field Trip: Millicent Rogers Museum

Day 6: Strangers from Beyond: Aliens and cosmic forces

- *Morning*
 - Ancient Aliens
 - Feder chapter 9
 - Film: *Ancient Aliens* (History Channel)
 - **Group Project 5: Identifying Logical Fallacies in “Alien Theory”**
- *Afternoon*
 - Cosmic forces and otherworldly powers: Psychic Archaeology
 - Feder chapter 11
 - Posted Reading: Hopkins 2014
 - Posted Reading: Sala et al 2012, pp. 133-144
 - Feder chapter 12, pp. 279-282, 284-286

Day 7: “Mysteries” of Mesoamerica

- *Morning*
 - The Maya and 2012
 - Feder chapter 10, pp. 221-224
 - **Group Project 6: “It’s the End of the World as We Know It (and I feel fine)”**
 - The Curse of the Crystal Skulls
 - Feder chapter 12, pp. 282-284
 - Posted Reading: Walsh 2008
- *Afternoon:*
 - Field Trip: Taos Pueblo
- **Research Report DUE via Canvas by 11:59pm**

Day 8: Lost Cities in Archaeology and the Public Imagination

- *Morning*
 - The Lost City of the Monkey God
 - Posted Reading: Preston 2015
- *Afternoon*
 - Aztlán, El Dorado, and Z
 - Film clips: *The Lost City of Z*
 - **Draft of Research Paper DUE via Canvas by 11:59pm**

Day 9: “Mysteries” of Egypt, Psychics and New Age Prehistory

- *Morning*
 - The “Mystery” of the Egyptian Pyramids
 - Posted Reading: Mendelssohn 1971 (SKIM)
 - Feder chapter 10, pp. 209-221, 238-247
 - Film clips: *Engineering an Empire (History Channel)*
 - The Paleo-Diet: Getting Ripped or Getting Ripped Off?
 - Posted Reading: Jabr 2013
- *Afternoon*
 - Field Trip: Downtown Taos (1:00-3:00pm)
 - **Group Project 7: Pseudoscience Clean-up on Aisle 8**

Day 10: Representing and “Re-presenting” Evolutionary Fact and Theory, Biblical Archaeology

- *Morning*
 - Introduction to Evolution and Natural Selection
 - Feder chapter 12, pp. 265-270
 - Posted Reading: Coyne 2010:
<https://www2.palomar.edu/anthro/evolve/default.htm>
 - Evolution, Creationism, and Intelligent Design
 - Posted Reading: Scott 1997
 - Film clips: *Judgment Day: Intelligent Design on Trial (Nova) and The Revisionaries*
 - **Group Project 8: Why Evolution is True**
- *Afternoon*
 - **Group Project 9: “Fact” and Fiction in Creation Science**
 - Noah’s Ark and Other Biblical Archaeology
 - Feder chapter 12, pp. 270-279
 - Power, Ideology, Nationalism, and Nazi Archaeology
 - Posted Reading: Arnold 2006

Day 11-12: Real Archaeological Mysteries

- *Morning*
 - Real Archaeological Mysteries
 - Review for Final Exam
 - ***Research Paper***

- **Discussion of final questions or concerns**
 - **Group Project 10: Research paper topic presentations**
- *Afternoon*
 - **FINAL EXAM**
- **Final Draft of Research Paper DUE via Canvas by 11:59pm**