



ARIZONA STATE UNIVERSITY

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 of Human Evolution and Social Change; Prefix: ASB; Number: 333; Title: Frauds, Myths, and Mysteries; Units: 3

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.

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).

Chair/Director Initials: [Signature] (Required)

Course description:

Requested designation:

Social-Behavioral Sciences-SB

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 2016 Effective Date: October 1, 2015

For Spring 2017 Effective Date: March 10, 2016

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.

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:

- [X] Signed course proposal cover form
[X] Criteria checklist for General Studies designation(s) being requested
[X] Course catalog description
[X] Sample syllabus for the course
[X] 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: Sara Marsteller; E-mail: smarstel@asu.edu; Phone: 480-965-5304

Department Chair/Director approval: (Required)

Chair/Director name (Typed): Kaye Reed; Date: 3/22/17

Chair/Director (Signature): [Signature]

Arizona State University Criteria Checklist for
SOCIAL-BEHAVIORAL SCIENCES [SB]

Rationale and Objectives

Social-behavioral sciences use distinctive scientific methods of inquiry and generate empirical knowledge about human behavior, within society and across cultural groups. Courses in this area address the challenge of understanding the diverse natures of individuals and cultural groups who live together in a complex and evolving world.

In both private and public sectors, people rely on social scientific findings to consider and assess the social consequences of both large-scale and group economic, technological, scientific, political, ecological and cultural change. Social scientists' observations about human interactions with the broader society and their unique perspectives on human events make an important contribution to civic dialogue.

Courses proposed for a General Studies designation in the Social-Behavioral Sciences area must demonstrate emphases on: (1) social scientific theories, perspectives and principles, (2) the use of social-behavioral methods to acquire knowledge about cultural or social events and processes, and (3) the impact of social scientific understanding on the world.

Revised April 2014

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

ASU--[SB] CRITERIA					
A SOCIAL-BEHAVIORAL SCIENCES [SB] course should meet all of the following criteria. If not, a rationale for exclusion should be provided.					
YES	NO		Identify Documentation Submitted		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. Course is designed to advance basic understanding and knowledge about human interaction.	syllabus and textbook		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Course content emphasizes the study of social behavior such as that found in: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%; vertical-align: top;"> <ul style="list-style-type: none"> • ANTHROPOLOGY • ECONOMICS • CULTURAL GEOGRAPHY • HISTORY </td> <td style="width: 60%; vertical-align: top; text-align: center;">anthropology</td> </tr> </table>	<ul style="list-style-type: none"> • ANTHROPOLOGY • ECONOMICS • CULTURAL GEOGRAPHY • HISTORY 	anthropology	syllabus and textbook
<ul style="list-style-type: none"> • ANTHROPOLOGY • ECONOMICS • CULTURAL GEOGRAPHY • HISTORY 	anthropology				
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Course emphasizes: <ul style="list-style-type: none"> a. the distinct knowledge base of the social and behavioral sciences (e.g., sociological anthropological). <li style="text-align: center;">OR b. the distinct methods of inquiry of the social and behavioral sciences (e.g., ethnography, historical analysis). 	syllabus and textbook		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Course illustrates use of social and behavioral science perspectives and data.	syllabus and textbook		
		THE FOLLOWING TYPES OF COURSES ARE EXCLUDED FROM THE [SB] AREA EVEN THOUGH THEY MIGHT GIVE SOME CONSIDERATION TO SOCIAL AND BEHAVIORAL SCIENCE CONCERNS:			
		• Courses with primarily arts, humanities, literary or philosophical content.			
		• Courses with primarily natural or physical science content.			
		• Courses with predominantly applied orientation for professional skills or training purposes.			
		• Courses emphasizing primarily oral, quantitative, or written skills.			

Course Prefix	Number	Title	General Studies Designation
ASB	333	Frauds, Myths, and Mysteries	SB

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 checksheet)	How course meets spirit (contextualize specific examples in next column)	Please provide detailed evidence of how course meets criteria (i.e., where in syllabus)
1:	Course aim is to advance understanding and knowledge about human interaction through emphasis on archaeological scientific investigations of past human relationships and events	Green highlights in syllabus
2:	Course emphasizes the study of social behavior in past societies using archaeological science and also considers the social behavior and outcomes associated with the creation and perpetuation of pseudoarchaeological interpretations	Yellow highlights in syllabus and textbook
3b:	Course emphasizes the distinct methods of inquiry of the social and behavioral sciences by teaching students the techniques used by archaeologists to make informed assessments about people and events in the past	Blue highlights in syllabus
BI4:	Course illustrates the use of social science perspectives and data through discussions and hands-on assignments that demonstrate the need for evidence-based social science data and perspectives to inform contemporary public perceptions and social and political issues.	Grey highlights in syllabus

ASB 333 Frauds, Myths and Mysteries – Course Catalog Description

Depictions of archaeology in popular culture are full of dubious tales of ancient extraterrestrials, giants, and widespread scientific conspiracy. Explore such fantastic claims and learn how archaeologists separate plausible arguments from pseudoscience. Critically examines how and why such pseudoscientific claims develop and take hold of the public imagination.

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.

FRAUDS, MYTHS, AND MYSTERIES

ASB 333

Master Syllabus

Course Description:

This 300-level course takes a Myth Busters approach to pseudoarchaeology. Students will examine the debunking of popular pseudoarchaeological myths and hoaxes, including topics such as Piltdown Man, the lost city of Atlantis, ancient aliens, an early Viking "discovery" of the Americas, ancient Mayan predictions of an apocalypse, and many more. Through hands-on activities and analyses of a variety of pseudoarchaeological interpretations and claims, students will develop an understanding of how archaeologists use science and multiple lines of evidence to make informed assessments about peoples and events in the past.

Course Goals:

Students will debunk popular pseudoarchaeological myths and hoaxes, learning in the process how archaeological science and methods are used to interpret the past, while also critically evaluating the potentially harmful effects of pseudoarchaeology for many living groups of peoples today.

Learning Outcomes:

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

- Describe how pseudoscience differs from scientific inquiry
- Explain the scientific method and its use in the field of archaeology
- Evaluate a variety of pseudoarchaeological claims
- Compare the various methods archaeologists use to investigate the past
- Analyze public concepts concerning pseudoarchaeological myths versus actual archaeological discoveries
- Assess the scientific validity of claims about and portrayals of archaeology in popular media

Pre-requisites/Co-requisites/Anti-requisites:

There are no pre-requisites for this course.

Required Course Texts/ Readings:

Feder, Kenneth. 2014. *Frauds, Myths, and Mysteries: Science and Pseudoscience in Archaeology*, Eighth Edition. New York: McGraw-Hill

**Any additional required readings will be provided as PDFs through the course website.*

Course Format:

This course is organized into a series of weekly learning modules each focused on a specific topic as listed below. Within each module, students will review a series of required lectures, readings, and videos; participate in a group discussion; and complete a quiz on assigned materials. In addition, students will complete bi-weekly assignments that consist of applying the materials studied through hands-on activities.

Module 1: What is Pseudoarchaeology? Pseudoscience vs. Archaeological Inquiry

Module 2: Were There Giants? Hoaxes (and Real Discoveries) in the History of Our Human Origins

Module 3: Who Discovered America? Myths of Early New World Visitors

Module 4: Where is Atlantis? The Search for a Lost Continent

Module 5: Were There Aliens? Stories of Extraterrestrial Influences in Ancient Civilizations

Module 6: Can Psychics Help Archaeologists? Visualizing Hidden Sites

Module 7: Did the Maya Predict an Apocalypse? Seeking Evidence of Ancient Religious Beliefs

Coursework

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.

- 1 **Quizzes (150 points, 25% of final grade):** Each module will have one quiz (7 total). All you have to do to prepare for the quiz is complete the assigned reading and view the assigned videos and lectures for each module. These quizzes are open-book and open-video/lecture, but it will be difficult to find all the right answers if you have not done the reading beforehand because the quizzes are timed.
 - 1 Required Readiness (Syllabus) Quiz (10 points)
 - 7 Module Reading/Video Quizzes (20 points each; 140 total *****2 extra credit points possible per quiz*****)
- 2 **Discussion Posts (150 points, 25% of final grade):** In response to each module's prompt (7 total), students will make one Discussion Post (50-100 words). Each student's post should have an interesting or provocative title so that others will want to read and respond to the post. Posts are graded on a pass/fail basis. To pass and earn full points, posts must (1) be at least 50-100 words, (2) have an interesting or provocative title, and (3) be relevant to the discussion topic. Each student's post should have an interesting or provocative title so that others will want to read and respond to the post. Within 24 hours of the post deadline, students must post a response to two other classmates' initial post that are no more than 100 words and engage in critical or substantive ways with the initial post (e.g., exemplar, critique, question). These responses are graded on a pass/fail basis. To pass and earn full points responses must (1) adhere to the word limit and (2) engage critically or substantively with the initial post it is responding to.
 - 1 Introductory Post (10 points)
 - 7 Discussion Posts (20 points each; 140 total)
- 3 **Assignments (300 points, 50% of final grade):** There will be three hands-on activities that apply the materials we study. These assignments are outlined below.
 - **Assignment 1 – You Be the Researcher (100 points)**

In this assignment, students will pretend to be a researcher on an interdisciplinary team studying public beliefs about pseudoarchaeological myths and misconceptions about archaeological science. As a member of this research team, each student will conduct a pilot survey of 10 persons using a provided list of statements about pseudoarchaeological and/or archaeological topics that we will be discussing throughout the course. Students will analyze the results of their public survey, create hypotheses and predictions for a larger survey of the general public, and brainstorm ideas for how to improve the survey, as well as for how the results of a larger survey might be used to help scientists increase public understanding of archaeological science. Each student will then summarize the results of this analysis and brainstorming activity in a summary report to the research team.
 - **Assignment 2 – You Be the News Editor (100 points)**

In this assignment, students will pretend to be a science editor for a popular news magazine looking for a story on an archaeological discovery to feature. As a science editor at a magazine that prides itself on its reputation for accurate, scientifically supported information, each student will find an interesting report of an archaeological discovery, conduct a guided assessment of its scientific validity, and make a recommendation as to whether or not the magazine should feature the story.
 - **Assignment 3 – You Be the Film Consultant (100 points)**

In this assignment, students will take on a new role as a film consultant advising filmmakers on how to correct archaeological inaccuracies in a popular film. As a film consultant hired to help transform a previously released fictional movie on an archaeological topic into a more accurate, yet still exciting, adventure film, each student will view a film about archaeology, identify potential inaccuracies surrounding the portrayal of archaeological concepts in the film, and report to producers ideas for improving the film's scientific accuracy while maintaining its adventurous spirit.

Summary of Course Assignments and Grade Assessment

1 Required Readiness (Syllabus) Quiz		10 points
7 Module Reading/Video Quizzes	20 points x 7 =	140 points
1 Introductory Post		10 points
7 Discussion Posts	20 points x 7 =	140 points
Assignment 1		100 points
Assignment 2		100 points
Assignment 3		<u>100 points</u>
		600 total points

For your own protection, you should keep a copy of everything you hand in, and you should keep your graded assignments at least until grades are finalized at the end of the semester, and in the event you wish to contest any grades.

Final Grades

Final course grades are assessed as follows:

A-/ A/ A+	89.5-92.4/ 92.5-97.4/ 97.5-100	Excellent
B-/B/ B+	79.5-82.4/ 82.5-87.4/ 87.5-89.4	Good
C/ C+	69.5-77.4/ 77.5-79.4	Average
D	59.5-69.4	Passing
E	<59.5	Failure
XE	Failure due to Academic Dishonesty	

**Please note that this syllabus is subject to change or revision, as needed, to best realize the educational goals of the course. Any revision will be discussed in class with fair prior notice.

Extra Credit

There are 3 points extra credit available for each of the 7 module quizzes for total of 21 extra credit points available in this course. This will be the only extra credit possible.

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>).

Late Assignments

Please follow the appropriate University policies to request an accommodation for religious practices or to accommodate a missed assignment due to University-sanctioned activities.

Unexcused late assignments will be docked 5% of the total points for each day they are late and will not be accepted more than 3 days late (including weekends). Extensions for assignments are only granted when unpreventable and unforeseeable circumstances arise and this must be documented. 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 full credit, with the late assignment you must turn in a copy of the email approval or signed written excuse. If you wish to submit documentation to request an extension on an assignment submission, contact the Instructor/TA as soon as possible.

Please note: If there is a system-wide outage when an assignment is due you will not be punished for not turning it in on time, but will be required to turn it in by the newly stated day and time.

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>.

Course Policies

Is an on-line course right for you?

1. Are you self-motivated? There is a significant amount of reading required for this course, as well as quizzes, online discussions, and short written assignments. Because this course is self-paced and moves quickly, it is necessary that you keep up with the reading and lecture materials on a regular basis.
2. Do you have a reliable internet connection? Please be sure that you have a reliable computer and internet connection. To access the class website you can use your personal computer, one in the library, and/or computer labs at ASU.
3. Do you work well on your own? Interaction with other students and the professor occurs on-line rather than in a traditional classroom setting. However, there is an optional discussion board available for student interaction where you can post comments or interact with the other students in the course.

Getting Answers to your Questions

If you have questions about an assignment, quiz, due date, course schedule, or other general course issues, please post your inquiry on the Hallway Conversations board in the Course Home. If you need personalized help or advice regarding class assignments, please email your instructor or TA with "ASB 301" in the subject of the email. If you are having trouble keeping up with the course or miss assignments due to an illness or family emergency, please contact your instructor right away.

Handing in Assignments

All assignments must be submitted by the deadline on the due date to receive full credit. If you are unable to submit the assignment through Blackboard for any reason, you must email your assignment to the instructor or teaching assistant by the deadline. No exceptions. Please see the course policies below regarding late assignments. ***IMPORTANT:** Assignment file name: Do not put any extra characters (such as # or :) in the file name. Save the file with the following format: LastnameFirstname.doc and **ensure your file is a .doc, .docx, .txt, or .pdf.** Other file types cannot be read in Blackboard and thus will not be graded. All assignments will be scanned for plagiarism.

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>

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.

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 <http://sexualviolenceprevention.asu.edu/faqs/students>.

Copyright Information and Prohibition of Commercial Note Taking Services

All course content is copyrighted and any and all notes from in-person and/or online lectures may not be reproduced nor sold without explicit written permission from the instructor. Students should consult the [ACD 304-06 Commercial Note Taking Services](#) policy before written permission is sought from the official instructor of the class. If permission to reproduce notes is granted, students may not use Blackboard email or discussion boards to advertise services to other students.

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 as they tend to come up quickly (e.g. week 3 for 7 ½ week A/B session courses and week 11 for 15 week C session courses). 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](#).

Email Communications

All email communication for this class will be done through your ASU email account. You should be in the habit of checking your ASU email regularly as you will not only receive important information about your class(es), but other important university updates and information. You are solely responsible for reading and responding if necessary to any information communicated via email. For help with your email contact

the [help desk](#). Your email communications should be [professional](#) and succinct. General guidelines for email include:

- Expect faculty to respond to emails between 9am and 5pm on Monday through Friday with a forty-eight hour lag time.
- For any concerns about grades, meet with your professor or TA face-to-face.
- Before sending questions via email, make sure that your question is not answered on the course syllabus or website.
- Be specific about the subject of the email in the mail subject heading and use proper salutation (e.g. Dear Professor XXXX) and check spelling, grammar, and punctuation.

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: <http://studentsuccess.asu.edu/frontpage>
- 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: <http://shesc.asu.edu/undergraduate/undergraduate-studies>. Our advisors are always willing to discuss career and guidance options with you.

Schedule of Readings and Assignments (Due dates can be found in the Course Schedule)

Module 1: What is Pseudoarchaeology – Pseudoscience vs. Archaeological Inquiry

Learning Objectives

- Describe how pseudoscience differs from scientific inquiry
- Explain the scientific method and its use in the field of archaeology
- Reflect on the reasons for pseudoarchaeological interpretations

Readings

- Feder textbook - Chapter 1, Science and Pseudoscience (18 pages)
- Feder textbook - Chapter 2, Epistemology: How You Know What You Know (28 pages)
- Fagan, GG. 2006. Diagnosing Pseudoarchaeology. In: Archaeological Fantasies, edited by GG Fagan, pp. 23-46. London: Routledge. (23 pages)

Lectures

- What's the Difference Between Science & Pseudoscience?
- How to Identify Pseudoarchaeology
- Why Does Pseudoarchaeology Exist?

Assignments due:

- Required Readiness (Syllabus) Quiz (10 points)
- Introductory Post (10 points)
- Module 1 Quiz (20 points)
- Module 1 Discussion (20 points) : Pseudoarchaeology and Your Future
- Start Assignment 1 (Due following week in Module 2)

Module 2: Were There Giants? Hoaxes (and Real Discoveries) in the History of Our Human Origins

+ Assignment 1

Learning Objectives

- Evaluate claims for the existence of ancient human giants
- Examine the authenticity of the Piltdown Man discovery
- Compare the evidence supporting the historical fossil finds at Piltdown, England, and Taung, South Africa

Readings

- Feder textbook - Chapter 3, Anatomy of an Archaeological Hoax (22 pages)
- Feder textbook - Chapter 4, Dawson's Dawn Man: The Hoax at Piltdown (28 pages)

Lectures

- Were There Giants?
- Who Was Piltdown Man?
- Who Was the Taung Child?

Videos

- The Boldest Hoax (48 min, PBS NOVA)
- **Becoming Human: Episode 1 (51 min, NOVA)**

Assignments due:

- Module 2 Quiz (20 points)
- **Module 2 Discussion (20 points): Fake vs. Authentic Fossils**
- Assignment 1 Due (100 points)

Module 3: Who Discovered America? Myths of Early New World Visitors

Learning Objectives

- Examine the evidence for the earliest, original discovery of the Americas
- Evaluate claims of pre-Columbian visits to the Americas by the Vikings, Chinese, and other Old World groups
- Debunk the myth that the Moundbuilders were not Native American Indians

Readings

- Feder textbook - Chapter 5, Who Discovered America? (22 pages)
- Feder textbook - Chapter 6, Who's Next? After the Indians, Before Columbus (35 pages)
- Feder textbook - Chapter 7, The Myth of the Moundbuilders (32 pages)

Videos

- Myths and the Moundbuilders (58 min, Odyssey)

Lectures

- Who Discovered America?
- Did the Vikings Reach America Before Columbus?
- Who Were the Moundbuilders?

Assignments due:

- Module 3 Quiz (20 points)
- **Module 3 Discussion (20 points): Implications of Pseudoarchaeological Myths for Social and Political Issues Today**
- Start Assignment 2 (Due following week in Module 4)

Module 4: Where is Atlantis? The Search for a Lost Continent + Assignment 2

Learning Objectives

- Explain the origins of the story of Atlantis in ancient Greece
- Evaluate whether or not archaeological evidence supports the idea that all cultures originated from Atlantis
- Assess pseudoarchaeological claims for the discovery of the site of Atlantis
- **Describe how archaeologists investigate underwater sites**

Readings

- Feder textbook - Chapter 8, Lost: One Continent--Reward (31 pages)
- Williams, S. 1991. Catastrophism: Sunken Continents and All That Jazz. In: Fantastic Archaeology:

The Wild Side of North American Prehistory, pp. 130-155. Philadelphia: University of Pennsylvania Press. (26 pages)

Videos

- Atlantis: Reborn Again (49 min, Horizon, BBC Learning)

Lectures

- Who Created Atlantis?
- Did All Cultures Diffuse from One Source?
- Where is Atlantis Now?

Assignments due:

- Module 4 Quiz (20 points)
- Module 4 Discussion (20 points): Potential Harmful Effects in Searching for Atlantis
- Assignment 2 Due (100 points)

Module 5: Were There Aliens? Stories of Extraterrestrial Influences in Ancient Civilizations

Learning Objectives

- Evaluate claims suggesting archaeological evidence of extraterrestrial visits to earth in ancient times
- Debunk myths that technological developments in ancient human history came from extraterrestrials
- Explain how case studies from ancient Egypt and the ancient Andes reflect human innovations and behaviors without help from extraterrestrials

Readings

- Feder textbook - Chapter 9, Prehistoric E.T.: The Fantasy of Ancient Astronauts (27 pages)
- Feder textbook - Chapter 10, Mysterious Egypt (32 pages)
- Jordan, P. 2006. Esoteric Egypt. In: Archaeological Fantasies, edited by GG Fagan, pp. 109-128. London: Routledge. (19 pages)

Videos

- Landscapes: The Sculpture Diaries (8 min, Channel Four Television)

Lectures

- Is There Evidence for Ancient Alien Visits?
- Did Aliens Give Humans Knowledge and Technology?
- Did the Egyptian Pyramids Appear Instantaneously?

Assignments due:

- Module 5 Quiz (20 points)
- Module 5 Discussion (20 points): Debunking *Ancient Aliens*
- Start Assignment 3 (Due following week in Module 6)

Module 6: Can Psychics Help Archaeologists? Visualizing Hidden Sites + Assignment 3

Learning Objectives

- Describe how psychics claim to be able to help archaeologists locate sites and predict what will be found during excavation
- Explain how archaeologists can use satellite imagery and other forms of aerial technology to locate hidden sites
- Compare different methods archaeologists use to visualize what's underground before digging

Readings

- Feder textbook - Chapter 11, Good Vibrations: Psychics and Archaeology (16 pages)
- Williams, S. 1991. Psychic Archaeology: Seeking Visions of the Past. In: Fantastic Archaeology: The Wild Side of North American Prehistory, pp. 286-304. Philadelphia: University of Pennsylvania Press. (19 pages)

Videos

- Archaeologists Discover Lost City in Cambodian Jungle (NPR, 10 min)
- Archaeology from Space (TED, 6 min) (focuses on Egyptian archaeology)

Lectures

- What is Psychic Archaeology?
- How Can Lost Sites Be Found?
- Can Buried Sites Be Visualized Without Digging?

Assignments due:

- Module 6 Quiz (20 points)
- Module 6 Discussion (20 points): Future Technologies and Archaeology
- Assignment 3 Due (100 points)

Module 7: Did the Maya Predict an Apocalypse? Seeking Archaeological Evidence of Religious Beliefs**Learning Objectives**

- Examine the pseudoscience concerning alleged Mayan predictions of an apocalypse
- Explain whether there is archaeological evidence for the Biblical Flood and Noah's Ark
- Describe what science can and cannot tell us about the Shroud of Turin
- Consider the various methods archaeologists employ to examine religious beliefs and rituals in the past

Readings

- Feder textbook - Chapter 12, Old-Time Religion, New Age Visions, and Paranormal Predictions (31 pages)
- Feder textbook - Chapter 13, Real Mysteries of a Veritable Past (31 pages)

Videos

- Maya Underworld: The Real Doomsday (National Geographic, 45 min)

Lectures

- Did the Maya Predict an Apocalypse?
- Is There Archaeological Evidence for Noah's Ark and Flood?
- What Does Science Tell Us About the Shroud of Turin?

Assignments due:

- Module 7 Quiz (20 points)
- Module 7 Discussion (20 points): Creating and Testing Hypotheses

Citations for Assigned Readings

Fagan, GG. 2006. Diagnosing Pseudoarchaeology. In: *Archaeological Fantasies*, edited by GG Fagan, pp. 23-46. London: Routledge.

Feder, Kenneth. 2014. *Frauds, Myths, and Mysteries: Science and Pseudoscience in Archaeology*, Eighth Edition. New York: McGraw-Hill.

Jordan, P. 2006. Esoteric Egypt. In: *Archaeological Fantasies*, edited by GG Fagan, pp. 109-128. London: Routledge.

Williams, S. 1991. Catastrophism: Sunken Continents and All That Jazz. In: *Fantastic Archaeology: The Wild Side of North American Prehistory*, pp. 130-155. Philadelphia: University of Pennsylvania Press.

Williams, S. 1991. Psychic Archaeology: Seeking Visions of the Past. In: *Fantastic Archaeology: The Wild Side of North American Prehistory*, pp. 286-304. Philadelphia: University of Pennsylvania Press.

FRAUDS, MYTHS, AND MYSTERIES

Science and Pseudoscience in Archaeology

EIGHTH EDITION

KENNETH L. FEDER

Central Connecticut State University



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