ANTH 373: Psychoactive Substances in Ancient Societies

Instructor: Dr. Scott M. Fitzpatrick  
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Class Time: T/H (2:00 – 3:20 PM)  
Classroom: 208 DEA  
Office: Rm. 272, Condon Hall  
Office Hours: T/H (12:00 – 1:00 PM)  

GTF: Matt Napolitano  
Office: 366 B  
Office Hours: H (11:30-1:00 PM)

Take me, I am the drug; take me, I am hallucinogenic. (Salvador Dali)

COURSE DESCRIPTION

Mind altering substances have been used by humans for thousands of years. But what are the causes behind why ancient societies have used, and even encouraged, the consumption of psychoactive substances? This course is an introduction to the archaeological study of how various stimulants, narcotics, and depressants have been used by human groups in antiquity. Using case studies from around the world, we will examine how archaeologists study the material evidence for psychoactive substance use, the role that psychotropics have played in social organization, religious ideologies, and inter-personal relationships, the identification of alkaloids and residues found on artifacts, and the impact that these substances have had on modern society. Archaeological, paleoenvironmental, paleoanthropological, and ethnohistorical research provides a framework for understanding why humans appear to have had a social and psychological need for mind-altering substances and the technologies they developed for harvesting, producing, and consuming drugs.

STUDENT LEARNING OUTCOMES

In this course students will:

- evaluate how archaeologists study psychoactive substances chemically, culturally, and theoretically;
- calculate how remains of psychoactive substances and associated artifacts help to understand past cultural behaviors (e.g., using residue analysis from ceramics to infer alcohol production);
- identify the techniques used to analyze the alkaloids and other active agents in psychoactive substances;
- explain how humans interact with, cultivate, and manipulate plants to harness psychoactive properties;
- outline the consequences of purifying and extracting psychoactive agents and the impacts of substance abuse on modern societies.

COURSE REQUIREMENTS

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<tr>
<th>Requirement</th>
<th>Points</th>
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<tbody>
<tr>
<td>Class Discussion/Participation</td>
<td>50</td>
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<tr>
<td>Section Attendance/Participation</td>
<td>50</td>
</tr>
<tr>
<td>Midterm</td>
<td>100</td>
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<tr>
<td>Final</td>
<td>100</td>
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<tr>
<td>Research Paper (draft 1) - abstract, etc.</td>
<td>10</td>
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<tr>
<td>Research Paper (draft 2) - background</td>
<td>10</td>
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<tr>
<td>Research Paper</td>
<td>80</td>
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<td>400</td>
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REQUIRED COURSE READINGS


- Journal Articles (see list under each weekly topic – note, only three (3) articles (in bold) apart from any assigned book chapters, are required. All others are optional and may prove useful as references for your research paper.

COURSE REQUIREMENTS

Participation
It is essential that we provide a learning environment where we can discuss and comment on topics brought up in the course. Your participation in class/sections and in-class events and exercises will be determined by examining the frequency and quality of your participation and performance in the classroom.

Attendance
While attendance is not mandatory in lecture, I will occasionally pass out roster sheets, which will be used in part to factor in participation points (i.e., the more you attend, the more likely it is you will receive an exceptional grade for participation). This will comprise 50 points (12.5%) of your grade. Note that attendance is required during weekly sections with your GE and will comprise another 50 points (12.5%) of your grade.

Salutations
Like many instructors here at UO, I am a professor. You can call me “Professor Fitzpatrick”, “Dr. Fitzpatrick”, ‘Professor Fitz”, or “Dr. Fitz”. Any of those work just fine.

Classroom Exercises
We will occasionally have group exercises in class. At the end of these exercises, I will select students randomly to answer questions related to the exercise. By answering correctly, you’ll have the opportunity to get extra credit (or perhaps a prize!).

Field Trips
During the course of the term, I will try to schedule at least one field trip to a local vendor (e.g., winery, brewery) to learn how the process of fermentation or distillation works. Most of these will be scheduled during the regular class period when at all possible, and organized to allow transit time to and from the university. While these are not mandatory, attendance will be taken and used as a basis for extra credit at the end of class.

Exams – Two (2) exams – a Midterm and Final – will test your knowledge of the topics discussed in lecture, course readings, and any films (100 points each). The final will be comprehensive, but include primarily material covered during the second half of the term.

Research Paper – An 8-10 page research paper will be due during the last week of class. The paper must consist of a pre-selected topic chosen at random (see last page of syllabus for more detailed instructions) and should include both internal and external readings. During the term, you will be required to turn in different sections of the paper to ensure that you have enough time to put together a well written and scholarly piece. The two drafts will be graded by the GTF, while the final research paper will be graded by your instructor.

Course Percentages as they relate to letter grades

<table>
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<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A+</td>
<td>98-100</td>
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<td>B+</td>
<td>88-89.9</td>
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<td>C+</td>
<td>78-79.9</td>
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<tr>
<td>D+</td>
<td>68-69.9</td>
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<tr>
<td>F</td>
<td>59.9 and below</td>
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<tr>
<td>A</td>
<td>93-97.9</td>
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<td>B</td>
<td>83-87.9</td>
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<td>C</td>
<td>73-77.9</td>
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<td>D</td>
<td>63-67.9</td>
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<td>A-</td>
<td>90-92.9</td>
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<td>B-</td>
<td>80-82.9</td>
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<tr>
<td>C-</td>
<td>70-72.9</td>
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<tr>
<td>D-</td>
<td>60-62.9</td>
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If the class is taken P/NP, a C- or higher is required to pass the course

Expected levels of performance:
A: students demonstrate a detailed knowledge of the course material, including major historical achievements in the field, survey and excavation methodologies, analytical procedures, and theoretical concepts; a demonstrated ability to integrate this material within an analytical framework.

B: students demonstrate substantive knowledge of the course material, including major historical achievements in the field, survey and excavation methodologies, analytical procedures, and theoretical concepts; an ability to integrate this material within an analytical framework.

C: students demonstrate reasonable knowledge of the course material, including major historical achievements in the field, survey and excavation methodologies, analytical procedures, and theoretical concepts; an adequate ability to integrate this material within an analytical framework.

D: students demonstrate basic knowledge of the course material, including a subset of major historical achievements in the field, survey and excavation methodologies, analytical procedures, and theoretical concepts; a basic ability to integrate this material within an analytical framework.

F: students demonstrate minimal knowledge of the course material; make little or no effort to integrate this material within an analytical framework; poor written communication skills; an inadequate ability to integrate this material within an analytical framework.

**POLICY ISSUES**

For every day an assignment or exercise is late, 10% will be deducted from your final score. This includes weekend days. **You must submit your assignments via Canvas unless stated otherwise by your instructor or GE.**

**Incompletes**
In this course, an incomplete grade will be used in accordance with the official university grading policy, which can be found at [http://registrar.uoregon.edu/incomplete_policy](http://registrar.uoregon.edu/incomplete_policy)

**Open Learning Environment**
The intention and structure of university level courses are to provide open, thoughtful forums for a wide variety of topics. While discussing these topics, students shall not discriminate on the basis of “The University of Oregon affirms and actively promotes the right of all individuals to equal opportunity in education and employment at this institution without regard to race, color, sex, national origin, age, religion, marital status, disability, veteran status, sexual orientation, gender identity, gender expression, or any other consideration not directly and substantively related to effective performance. This policy implements all applicable federal, state, and local laws, regulations, and executive orders” as outlined in the handbook on the Office of Affirmative Action and Equal Opportunity. [http://aaeo.uoregon.edu/AAEO%20Booklet%20Color.pdf](http://aaeo.uoregon.edu/AAEO%20Booklet%20Color.pdf)

**Accessible Education**
The University of Oregon is dedicated to the principles of equal opportunity in education and accepts diversity as an affirmation of individual identity within a welcoming community. Disability is recognized as an aspect of diversity integral to the university and to society. Please see the following link for more information: [http://aec.uoregon.edu/](http://aec.uoregon.edu/)

**University Career Center**
The Career Center exists to provide career and job search services and resources to UO students and alumni. Our mission is to help you develop long-term career goals and strategies, facilitate self-exploration and discovery, connect with potential employers, and empower and challenge you to fulfill your potential. We look forward to serving as your advocate as you pursue an inspired and fulfilling future. The UO Career Center is a part of the Division of Student Affairs and has offices in Hendricks Hall on the UO campus and in the White Stag Block at the University of Oregon in Portland. Please see the following link for more information: [http://career.uoregon.edu/](http://career.uoregon.edu/)

**Computer and Other Electronic Devices Policy**
The use of laptops and other portable computer devices (e.g., phones, etc.) is generally disruptive and prevent a favorable learning environment. Please be prepared to put these away and turn them off when class begins. If you require special accommodations relating to the use of laptops, please see me first.
TOPICS and READINGS

Unit 1  
(4/2 – 4/4) Psychoactive Substances with Ancient Traditions: Evolutionary and Sociocultural Perspectives

Why do humans use psychoactive substances? What role do they play in social or religious activities? Why is the study of these types of substances important biologically, evolutionarily, anthropologically, and archaeologically?

**Introduction in Ancient Psychoactive Substances:** “Drugs from a Deep Time Perspective”


Unit 2  
(4/9 – 4/11) Evolutionary and Sociocultural Perspectives (cont.)


Unit 3  
(4/16 – 4/18) Alcohol (ethanol) and Caffeine

For how long have humans produced alcoholic and caffeinated beverages? What are the different plants (e.g., grains, potatoes, fruits) used for fermentation or caffeine production? What roles did alcohol and caffeine play in the development of social organization?

**Chapter 7: Seinfeld** – “Intoxication Rituals and Gender among the Ancient Maya”

**Chapter 8: Loughmiller-Cardinal** – “Mayan Ritual Beverage Production: Considering the Ceramics”

**Chapter 5: Thompson and Pluckhahn** – “Pipes, Cups, Platform Mounds, and Mortuary Ritual in the Lake Okeechobee Basin of South Florida”

**Chapter 11: Jennings and Valdez** – “Ingredients Matter: Maize versus Molle Brewing in Ancient Andean Feasting”


Unit 4  

Where did tobacco and betel nut originate and how have they been used ritually and socially? Where are these found and what effects do they have on the user that might be beneficial? Does environment play a role in the selection or potency of these substances?

Unit 5

(4/30 – 5/2) **Coca** (*Erythroxylum Coca*) and **Khat** (*Celastrus edulis*)

Coca and khat have a long history of use in their respective regions, though the antiquity of each is only now being truly appreciated with advances in various analytical techniques which are able to identify the active compounds. How were they processed and are there any advantages to their use in particular environments?


Unit 6

(5/7 – 5/9) **Opium and Iboga**

These plants are sparse in the archaeological record, yet their entheogenic properties and modern uses suggest they were also known in the past much deeper in time than was once thought.


**Midterm Exam** (includes all previous lecture and reading material)
Unit 7  (5/14 – 5/16) **Datura, Ephedra, and Ergot**
What plants are included in the Solanaceae family? Are they all psychoactive? What are the effects of Ephedra and Ergot, and why are they important to understanding the role of psychoactives in ancient societies? What role does archaeology and ethnomedicine play in developing theories of how societies became more complex?

**Chapter 3: Merlin** – “Ancient use of Ephedra in Eurasia and the Western Hemisphere”


Unit 8  (5/21 – 5/23) **Marijuana (Cannabis sp.)**
Cannabis is one of the most commonly used substances in modern society. Where does it come from and what importance does it have in medicine and ritual in ancient times? What issues have arisen in recent years regarding the use of this substance both medically and socially? What are the effects of kava and how does this compare to other psychoactive agents? What does the passage of recent laws mean for the future of marijuana use?

**Chapter 1: Merlin and Clark** “Cannabis in Ancient Central Eurasian Burials”


**In Section: Turn in to GE your revised Research Paper which includes Intro and Background sections**

Unit 9  (5/28 – 5/30) **Ayahuasca and Cohoba/Yopo (Anadenanthera spp.); Betel Nut (Areca catechu)**
*Anadenanthera* spp. were some of the most commonly used psychoactive substances in ancient South America. How were they used in conjunction with other plants? Betel nut is one of the most widely used psychoactives worldwide and still enjoys great popularity in Asia and the Pacific? What are the effects and possible medicinal uses?

Chapter 10: Sayre – “A Synonym for Sacred: Vilca Use in the Preconquest Andes”

Chapter 9: Torres – “The Origins of the Ayahuasca/Yaje Concept: An Inquiry into the Synergy between Dimethyltryptamine and Beta-Carbolines”


Unit 10 (6/4 – 6/6) Hallucinogens: Mushrooms and Cacti

What are the active principles in the major hallucinogens? What roles have they played in shamanistic and other ritualistic types of activities? How are these diverse plants globally distributed?

Chapter 4: Rafferty – “Prehistoric Intoxicants of North America”


**Research Paper due** (In section during last week of class)

**Final Exam:** Thursday, June 13th @ 12:30 PM
RESEARCH PAPER

A major requirement for this class is to write a research paper on a topic of your choosing. This could be a review of a particular substance, a comparison of several substances, a region which includes multiple substances, a specific civilization, or anything else related to psychoactive substances in prehistory. The requirements for this paper are as follows:

I. Write an 8-10 page paper on a specified topic. The paper should be typed, double-spaced, with 1” margins on all sides, in Times New Roman font (length does not include references or figures)

II. Organize your paper into the following sections:
   a. Introduction - What is your topic? Why is it interesting? What is the relevance of your topic to understanding the cultural use of psychoactive agents in the past and present?
   b. Background - Where is the agent(s)/substance(s) found? Who uses it and in what contexts?
   c. Body of Paper - Explain the significance of the research. Discuss the evidence.
   d. Discussion - Why is this research important? What are the implications for research within and outside of anthropology/archaeology?
   e. Conclusions - Reiterate why this topic is interesting and relevant. Summarize your findings.
   f. References Cited - list all of your references – be consistent!

III. You must include at least 10 references for your paper. Four (4) of these can be from readings in class. References must be from reputable sources – No Internet sources or public/mass media sources are acceptable (e.g., National Geographic, newspaper, web pages, and especially not Wikipedia!). There is no set reference format, just be consistent.

IV. You must include at least three figures. One of these should be a map that shows the location(s) of your research and distribution of your particular substance(s). Other figures might include an illustration or photograph of the substance(s) and an example of it being used or produced. Make sure to reference all of your figures.

V. The descriptions and the quality of work for your project will be evaluated based on the following considerations:

   Exceptional – The work goes well beyond the task assigned. The final project is truly impressive, complete, and well-thought out. The scientific analysis is well motivated and is clearly supported by the data presented. Extensions or provocative new ideas are included. Reference material, where used, is extensive and appropriate.

   Strong – The work in the final report fully engages the major scientific principles embodied in the topic. The material is complete and presented clearly. Data are sound and are well chosen or presented to convey information. The scientific analysis makes good use of the data presented. The report demonstrates a clear understanding of the fundamental issues of the topic(s) being explored. Reference material is appropriate for the topic being discussed.

   Additional Categories: Average, Weak, Poor

Your research will be graded on accuracy (30 points), detail (30 points), and clarity of presentation (20 points), with 20 points already given for title/abstract/references submissions. Points will be deducted for deviating from the assigned format, grammatical or typographical errors, and poor writing in general.

You must upload the final document to Canvas, which will be run through VeriCite.