

Lectures:	two 75-minute lectures per week
Date and Time:	T/R 9:40-10:55 AM. In person if permitted by the University.
Date and Time (2022):	T/R 12:30-1:45 PM.
Location:	Morey 205
Discussion:	1 hr/ week (online via Blackboard, details TBA.)

Instructor

Alison J. Frontier
office: 414 Hutchison Hall
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office hours: Tuesday 3:30-5:30 PM

Description. In this course, we examine how human experience has been influenced by chemical compounds from natural sources, and how our relationship with these substances has evolved. We will explore the ways in which encounters with these substances have guided our myths, legends and stories, in both the religious realm and in popular culture. Through readings and screenings, we will see how storytellers describe the effects on human behavior and mental or physical health, and evaluate whether they perceive the experiences as healing or damaging events.

Course Organization. The course is made up of five modules, listed below.

Survival
Enchantment
Transformation
Sleeping and Waking
Transcendance

Within this framework, we consider some unusual cultural situations (see below). We will consider the different forms of these stories, as well as possible scientific underpinnings.

- *Return from the Dead*
- *Love Potions and Bewitchings*
- *Agents that Alter Personality*
- *Encounters with a Higher Power*

Students will learn about a representative assortment of the following Molecules of Power: Morphine, Hemlock, Deadly Nightshade (Atropine/Scopolamine), Strychnine, Ergot Alkaloids (including LSD), Physostigmine, Digitoxin, Ethanol, Mescaline, Psilocybin, Oxytocin and L-Dopa.

Prerequisites: None.

Clusters: Molecules of Power (CHEM 111) is part of three clusters, one in Humanities, one in Natural Sciences, and one in Social Sciences. All three clusters are entitled "Science and Culture."

Readings will be drawn from a variety of sources, some will be available online, others posted on Blackboard and others selected from the following books:

The Poisoner's Handbook	Deborah Blum
The Serpent and the Rainbow	Wade Davis
Awakenings	Oliver Sacks
The Strange Case of Dr. Jekyll and Mr. Hyde	Robert Lewis Stephenson
Brave New World	Aldous Huxley
Circe	Madeleine Miller
Acid Dreams: The Complete Social History of LSD	Martin A. Lee
Opium, A History	Martin Booth
The Molecule of More: How a Single Chemical in Your Brain Drives Love, Sex, and Creativity— and Will Determine the Fate of the Human Race	Daniel Z. Lieberman/ Michael E. Long

Film and TV clips will also be assigned and discussed.

Evaluation:

The graded assignments in Chemistry 111 are listed below.

1. **Midterm Paper.** Due November 2
2. **Final Project (Wikipedia Article).** Due December 11. 165 points total. 20/165 points for proposal due April 8.
3. **Homework:** Weekly assignments based on assigned readings, due on Wednesdays as journal upload (see below).

Midterm Paper	100	20%
Project	150	30%
Homework	150	30%
Participation in Class Discussion	100	20%
Total:	500	

Homework Assignments: These will be posted on Blackboard every Wednesday, and due the following Wednesday at 9AM. Typically, you are asked to answer a question or respond to a statement or a reading. The format of the assignments vary: some require that you do a little research on a topic, and some are based on a reading assignment, and some ask you to give an opinion on a topic. Outside-the-box thinking is encouraged in these responses, provided strong support for the opinion is provided. Please use the journal function on BlackBoard to submit your assignment. A complete assignment should be no more than 450 words. If you are drawing upon any source in your assignment, it should be cited.

The assignments are graded based on a check-plus/check/check-minus scheme.

Check-plus submissions are thoughtful or insightful, accurate, and include relevant support from outside sources. Alternatively, or additionally, the submission represents a creative or profound opinion (outside-the-box) accompanied by strong, logical arguments.

Check submissions indicate that the reading was completed or Google searches were done, but lack detail or fail to demonstrate independent thinking on the subject. Accurately summarizing a topic that you read about, without any well-articulated original ideas or personal opinions, earns a solid check grade.

Check minus submissions are late or show a deficit in knowledge on the subject that indicates 1) the reading was not done 2) little effort was made to think/ learn about the topic before writing a response.