

STS 2500/ANTH 2590: The Anthropology of Outer Space
Professor Lisa Messeri
Fall 2015

Office: Thornton Hall, A216
Office Hours: Tuesday 2:30-4:30 or by appointment
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Course Description

What do you see when you look up at the night sky? Some see the future of humankind; others see an empty void. There are those who see the homes of gods while others are certain of extraterrestrials. In this class, we will explore how outer space, at different times and for different people, acts as a mirror that reflects back aspirations and anxieties of those studying and pondering the universe. By studying outer space we will in fact be studying ourselves.

We will spend the semester discussing, writing, and thinking about outer space like anthropologists. We will learn how to produce sophisticated cultural readings of the cosmos and find the value of thinking in multiple ways (scientifically, socially, philosophically, etc.) about outer space, appreciating how no single way of understanding is the one "right" way.

To tackle this adventuresome endeavor (boldly going where few have gone before), we will use ideas in anthropology and science, technology, and society (STS) to examine the extraterrestrial. Our challenge is to read social science texts alongside scientific, popular, and fictional accounts of space science and exploration. This journey will open our eyes to how cultural ideas infuse science and technology, adding richness to the study of both social and scientific phenomena.

Learning Objectives

This class will challenge you to think in new ways about something that you have spent your whole life gazing up at. By semester end, you will be able to

- Describe the human understanding of the universe as a physical-and-imagined space that changes through time and from person to person.
- Explain the basic categories anthropologists use to think about the world.
- Connect anthropological thinking to the study of scientific and technical concepts.
- Critically analyze scientific writing, news stories, fiction, and other media in order to tease out how social concepts shape understandings of outer space.
- Respect diverse ways, both scientific and non-scientific, of knowing the cosmos.
- Recognize that science reflects and saturates our social worlds.



Assessments

The projects in this class build upon each other and help develop and deepen your anthropological way of discussing outer space. More details on these assignments will be provided in separate write-ups.

Mythologies of the Moon (10%)

Humans have long told each other stories about the meaning of the moon and continue to do so today. For this project, you will select from a provided list two lunar mythologies. The first will be from a culture we think of as “non-western,” the second will be a “modern” source (we’ll discuss why I’m using quotations in class!). Your essay will be about the similarities and differences of these two sources.

~750 words

Due 9-11

Decoding Popular Science (15%)

This assignment asks you to employ a similar mindfulness as the previous, but focuses more specifically on *our* (adults living in America) encounters with outer space. This happens most often through popular science accounts. Select a piece of popular, non-fiction reporting (I use this term loosely) of outer space from the past few years. Analyze this article using two of the categories of anthropological inquiry we have covered so far in class.

~1,000 words

Due 10-14

Observing at the Observatory (15%)

Not only is anthropology about closely observing texts, it is also about observing people in real, physical places. Select an event from those I provide and head over to the observatory to observe the observers. While at the observatory, take notes on what you see and hear, focusing especially on the other visitors and the people working there. Talk to at least one stranger (anthropology is hard!) and ask them why they came to this event and solicit their views of outer space (ask any questions you think might get at a meaningful response). Write up your observations in a reflective piece.

750-1,000 words

Due 48 hours after your event. Events are on Sept. 18, Oct. 2, Oct. 16, Nov. 6. If you go to the September 18 event, you might want to take a look at readings from 9-23 and 9-28 before completing your write up

Podcast (10%)

This is an opportunity to collectively respond to the topics covered in class. Working in groups of four, you will produce a podcast that is a round table discussion on the topics and readings of the week. This is not a scripted podcast, but a conversation about the week that seeks to synthesize and make connections that will help both you and your classmates (who will be your attentive audience) make sense of larger themes that stretch throughout this class.

~15 minutes

Post by Saturday at midnight on the week you sign up for

Final Exploration (35% total)

This is where it all comes together. The critical analysis cultivated during the first two assignments, the close attention you brought to the observatory, and the thematic, higher-level connections you made in the podcasts. You will apply all of these skills to investigate a topic of your own choosing. Write a researched argument that relates at least one of the anthropological categories we discussed in class to a topic of outer space that interests you. Use the anthropological concept to guide your analysis and unpack the social and cultural aspects of your outer space topic.

2,500-3,000 words

Components: Prospectus, 5%, due 11-2
Draft, 10%, due 11-19
Presentation, 5%, due 11-30 or 12-2
Final Paper, 15%, due exam week

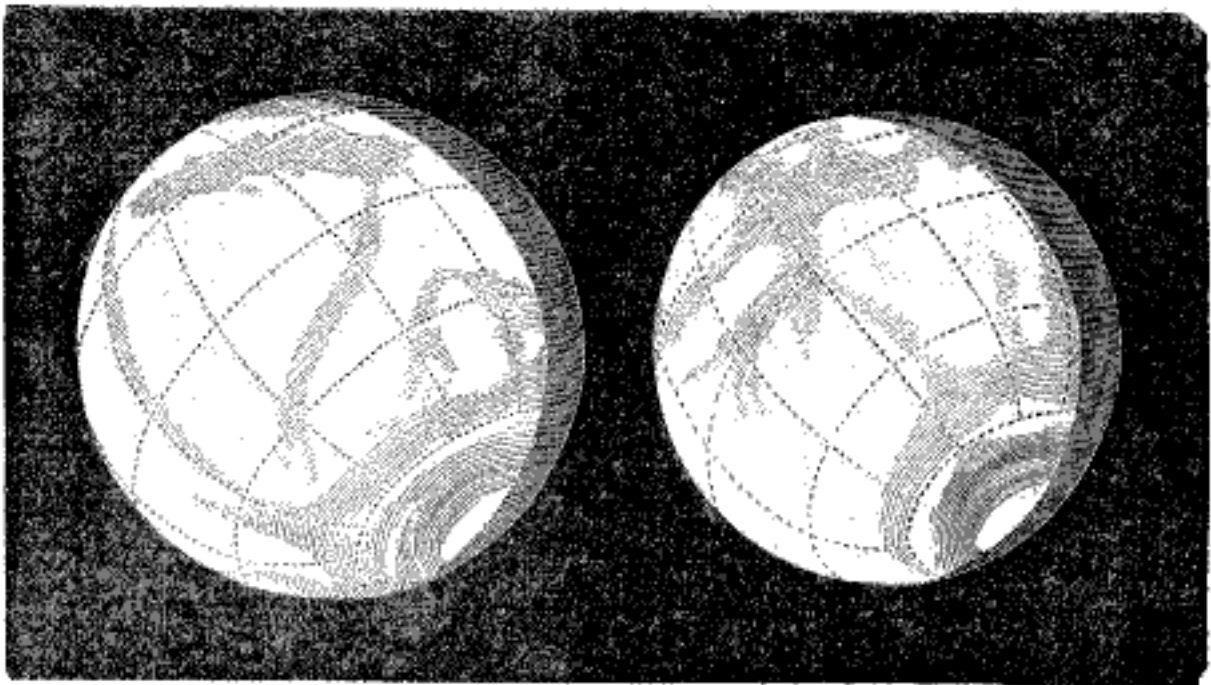
Participation (15%)

Participation is vital to the success and fun of this class. Offering your thoughts and attentive listening to and responding to your classmates are key to productive conversations. I expect you to attend every session. If you know you will be absent please let me know ahead of time. Likewise, if you are sick please just send me a short email, no need to go into detail.

Participation can take many forms: attendance, participating in discussion, attending office hours, going to optional talks I might recommend are all ways to be an active member of this class.

I prefer the classroom to be a laptop-free zone. However, sometimes, laptops or tablets are the best way to access readings and notes. Unless otherwise specified, if you choose to bring a laptop to class you must turn off wireless. I would also invite you to take notes by hand. This has been proven to be a more effective way of retaining information. The many studies of laptop use in classrooms, all showing negative effects, was summarized in this New Yorker article written by a CS professor at Dartmouth (<http://www.newyorker.com/tech/elements/the-case-for-banning-laptops-in-the-classroom>).

I want you to be present in class. Think about what you need to do to achieve that goal.



Course Schedule

What does anthropology have to do with outer space?

8-26	Welcome!	
8-31	Culture and Cosmos	Monaghan and Just "Bee Larvae and Onion Soup: Culture" pg. 34-52 Sagan "Aberrations of Life" pg. 8-19
9-2	Strange Rituals and Familiar Planets	Miner "Body Ritual Among the Nacirema" 503-507 Sagan "You Are Here" pg. 1-7

What is our place in outer space? How does the exploration of other worlds change how we see our own world?

9-7	Myth and Non-Western Cosmologies	Monaghan and Just "A Drought in Bima: People and their Gods" pg. 120-125 Young "Pity the Indians of Outer Space" pg. 269-279
9-9	The Moon, Globalization, and a New Way of Seeing the World	Monaghan and Just "La Bose Becomes a Baker" pg. 89-93,101-106 Maher "Shooting the Moon" pg. 526-531
9-14	Identity, Race, and Afrofuturism *Class will meet without Prof. Messeri (due to Rosh Hashanah). You will watch <i>Last Angel of History</i> together during class time.	Monaghan and Just "La Bose Becomes a Baker" pg. 93-101 Womak selections from <i>Afrofuturism</i> pg. 9-11, 53-65
9-16	Exploration and Empire	McCurdy "Prelude: The Exploration Ideal" p. 9-28 Dittmer "Colonialism and Place Creation in Mars Pathfinder Media Coverage" pg. 112-130

How are astronomy and space exploration informed by cultural practices?

9-21	Society, Structure, and Working on Mars	Monaghan and Just "A Brief Encounter: Society" pg. 53-70 Vertesi "Visualization, Embodiment, and Social Order" pg. 163-186
9-23	No Class due to Yom Kippur.	Messeri "Inhabiting Other Earths"
9-28	Exploring Outer Space on Earth	Hoeppe "Astronomers at the Observatory" pg. 1141-1160
9-30	Space, Science, and Gender	Rand "The Case for Female Astronauts" <i>The Appendix</i> Seager "So Many Exoplanets... So Few Women Scientists"

10-5	READING DAY	
10-7	Astronomy as social and scientific	Messeri "The Problem With Pluto" pg. 187-214

What does space tell us about what it means to be human?

10-12	Aspiration and Utopia	Geraghty "'A Reason to Live'"
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		Watch <i>Star Trek</i> “The Way to Eden” Season 3 Ep. 20
10-14	NewSpace, Politics, and Humanism	Zubrin “Significance of the Martian Frontier” Valentine “Exit Strategy” pg. 1045-1068
10-19	Connections, Groundings, Home	Prelinger “The Landscape of Space” pg. 148-187
10-21	Loneliness and the Search for Other Worlds	Billings “A Fractured Empire” pg. 47-70 “Scientific and Philosophical Implications of Detecting Other Earths” pg. 3-5
10-26	Wonder and Fear	<i>Radiolab</i> , Space, Season 2 Episode 5 Markley, “Wells’s <i>War of the Worlds</i> : Apocalyptic Disintegration” p. 122-127, 203-208 Wells, <i>War of the Worlds</i> , excerpts
10-28	Library Day	

What is the meaning of life beyond Earth?

11-2	The Concept of the Other	Backe “Aliens Among Us” Collins “Close Encounters of the Anthropological Kind” pg. 63-74
11-4	Revisiting Identity, Encountering Aliens	Rieder “Race and revenge fantasies in <i>Avatar</i> , <i>District 9</i> , and <i>Inglorious Basterds</i> ” pg. 41-56 Watch <i>Avatar</i>
11-9	Revisiting Empire and Power	Lepselter “The resonance of captivity” pg. 84-104
11-11	The Scientific Search for ET Life	Dick “The Role of Anthropology in SETI” pg. 49-63 Harrison “Human Response to ET Life” 656-668

How do we ask these questions on our own, beyond this class?

11-16	Writing Workshop	
11-18	Prof. Messeri away – In class peer review	
11-23	TBD	
11-25	THANKSGIVING	
11-30	Presentations	
12-2	Presentations	
12-7	Outer Space Today	<i>The Martian</i>

Grading

Each assignment will be graded out of 100 points:

97-100	A+
93-96	A
90-92	A-
87-89	B+
83-86	B
80-82	B-

etc...

A weighted average will be taken to determine your final grade.

Honor Code and Plagiarism

Unless otherwise specified, the work you submit for this class will be undertaken as an individual. Though we will have plenty of group discussions and I encourage you to talk amongst your classmates about the readings and your prospectus ideas outside of class, all written assignments will be a product of your own thinking. I expect you to adhere to the honor code and pledge your work when appropriate. Additionally, please consult the Honor Guidelines for STS Papers:

<http://guides.lib.virginia.edu/content.php?pid=607723&sid=5088610#tips>.