



## **STS1504: Intro to Science, Technology, and Society**

Winter 2022 - CRN40306

Focus Topic: Ethics & Human Space Exploration

During this Winter Session of **Intro to Science, Technology, and Society** you will examine the case study of **space exploration** to inform your understanding of the social, cultural, and political nuances involved in the development and co-construction of scientific and technological objects. Over three weeks, the course will asynchronously explore topics such as ethics, innovation, and colonialism related to space exploration as a way of analyzing human interactions with science and technology.

**Instructor:**

Savannah Mandel  
PhD candidate, Science and Technology Studies  
Office: Lane Hall 322  
Email: Savannahlann@vt.edu or via Canvas  
Office Hours: By appointment

**Course Location:**

This course will be taught asynchronously from December 26th - January 13th. All assignments and information will be posted on Canvas.

**Inclusion Statement and Accommodations:**

Students with disabilities are responsible for self-identification and are encouraged to contact Services for Students with Disabilities. If you require any special arrangements or considerations for the class, please contact me immediately to arrange an appointment to discuss accommodations. See <https://www.ssd.vt.edu/>.

**Communication Expectations:**

You're welcome to contact me via email or directly through Canvas. I strive to respond to any emails within a 48 hour period.

Just as you hold me accountable for answering emails, I hold you responsible for checking your emails and Canvas announcements regularly and reading them in their entirety. I promise to try to keep the emails to a minimum.

If you have questions regarding assignments or due dates please refer to the syllabus and schedule located on Canvas before reaching out to me. If the syllabus changes I will email you to let you know.

## Required Texts:

There are no required texts for this course. All reading materials will be made available in a virtual format whether via PDF or through the library.

## Grading Policies:

### *Course Requirements*

Mission 1	100 points
Mission 2	100 points
Mission 3	100 points
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	Total: 300 points

### Missions

Your course grade depends on you completing three "missions". To learn more about those missions, find them under "assignments" in Canvas.

### *Late Work*

Though this course has "suggested deadlines" it does not penalize for late work. However, all assignments must be submitted by the last day of class, **January 13th at 11:59pm**.

### *Extra Credit*

This course has one optional extra credit opportunity. See the extra credit assignment instructions via canvas. Extra credit assignments must be submitted by **January 13th at 11:59pm** via Canvas.

*Feedback*

I will provide brief written feedback on every graded assignment. That being said, don't hesitate to reach out to me if you would like to schedule a more extensive feedback session or if you are concerned about your progress in the course.

**Course Schedule:**

	Readings/Materials	Guided Deadlines
<b>Week 1: How do social scientists research outer space?</b>	<p>[Choose 4]</p> <p>Michael Oman-Reagan, "Anthropologists in Outer Space," <i>Wanderers</i>, February 8, 2016.</p> <p>Savannah Mandel, "Three Cheers for Pioneers: A review of Outer Space Anthropology," <i>Anthropology Now</i>, 13, no. 2: 111-122.</p> <p>Janet Vertesi, "Introduction: Seeing Mars, Drawing Mars," in <i>Seeing like a Rover: Images and Interaction on the Mars Exploration Rover Mission</i> (Chicago: Chicago University Press, 2015).</p> <p>Valerie Olson, "Introduction: Space as environment," in <i>American extreme: An ethnography of astronautical visions and ecologies</i>, PhD diss. (Rice University, 2010).</p> <p>(Video) "Secrets Below the Surface, Incredible Archaeological Discoveries with Sarah Parcak," World Economic Forum  <a href="https://www.youtube.com/watch?v=hHOI">https://www.youtube.com/watch?v=hHOI</a></p>	<p><i>Mission 1 Due December 30th</i></p>

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<b>Week 2: Multicultural Conflicts with Human Space exploration</b>	<p>[Choose 5 (they're short)]</p> <p>Jane Young, "Pity the Indians of Outer Space: Native American Views on the Space Program," <i>Western Folklore</i>, 46, No. 4 (Oct., 1987).</p> <p>Alex Knapp, "Understanding The Thirty Meter Telescope Controversy," <i>Forbes</i>, June 12, 2015,  <a href="https://www.forbes.com/sites/alexknapp/2015/06/12/understanding-the-thirty-meter-telescope-controversy/?sh=6a65a3f562af">https://www.forbes.com/sites/alexknapp/2015/06/12/understanding-the-thirty-meter-telescope-controversy/?sh=6a65a3f562af</a></p> <p>Sara Kahanamoku et al. "A Native Hawaiian-led summary of the current impact of constructing the Thirty Meter Telescope on Maunakea," White Paper submitted to the National Academy of Sciences Decadal Survey on Astronomy and Astrophysics (Astro2020) Panel on the State of the Profession and Societal Impacts, January 3, 2020.</p> <p>(Poem) Gil Scott-Heron, "Whitey on the Moon," ninth track on <i>Small Talk at 125th and Lenox</i>, 1970.</p> <p>(Poem) Francis Bécanti, "Going into Space," 1971.</p> <p>Peter Redfield, "The Half-Life of Empire in Outer Space," <i>Social Studies of Science</i>, 32, No. 5 (2021): 791-825.</p> <p>Tim Fernholz and Peter D'Auria, "How a handful of South American protestors took Europe's space program hostage," <i>Quartz</i>, April 17th, 2017.</p>	<i>Mission 2 Due January 6th</i>
<b>Week 3: Ethics and</b>	[Choose 4]	<i>Mission 3 Due</i>

<p><b>Outer Space</b></p>	<p>Rose Eveleth, "It's Time to Rethink Who's Best Suited for Space Travel," <i>Wired</i>, January 27th, 2019.</p> <p>Sheri Wells-Jenson, "The Case for Disabled Astronauts," <i>Scientific American</i>, May 30, 2018.</p> <p>Kelly Smith et al. "The Great Colonization Debate," <i>Futures</i>, 10 (2019): 4-14.</p> <p>Kimberly Mckinson, "Do Black Lives Matter in Outer Space?" <i>Sapiens</i>, September 3rd, 2020.</p> <p>Eric Niiler, "Why Civil Rights Activists Protested the Moon Landing," <i>History</i>, July 11, 2019.</p>	<p><i>January 13th</i></p> <p><i>[Optional] Extra Credit Assignments Due</i></p>
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**Honor Code:**

We follow the Virginia Tech Honor System in this class. Please make yourself familiar with the Honor System practices and the various definitions of plagiarism. All assignments submitted should be considered graded work, unless otherwise noted. For more information on the Honor Code, please see <http://www.honorsystem.vt.edu>.