SCIENCE, TECHNOLOGY, AND CULTURE

ANT 4081
Section 0M01

Fall 2020
Tuesday: 12:00pm – 1:15pm & Online
Video Streaming
3 Credit Hours

Instructor: Dr. Shana Harris
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Office Hours: Tuesday, 1:30pm – 3:30pm

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Office Hours: Thursday, 2:00pm – 3:00pm

Course Description

Author and astronomer Carl Sagan once stated, "We live in a society exquisitely dependent on science and technology, in which hardly anyone knowns anything about science and technology." With this quote, Sagan confirms the urgent need for us as a society to learn more about science, technology, and their effects on the world. This course addresses this need by engaging with science and technology from an anthropological perspective. Drawing on work from cultural and medical anthropology as well as science and technology studies, we will explore how technological innovation and scientific practices influence our lives in both the past and present. Course materials will cover a range of topics that affect and intersect with science and technology, including race, identity, and social justice, in multiple contexts, such Argentina, Germany, and the United States. By engaging with key areas of anthropological inquiry on these topics, this course will force us to critically examine how culture shapes science and technology, and vice versa.

Public Course Description

This course critically examines how culture shapes science and technology and vice versa.

Prerequisites

Sophomore standing or Consent of Instructor

Student Learning Objectives

This course has three objectives: 1) to familiarize you with ways science and technology are produced, experienced, and deployed in various cultural contexts; 2) to expose you to key areas of concern in the anthropology of science and technology; and 3) to instigate critical thinking about science and technology and their effects locally and globally.

Class Structure

This mixed mode course will use Webcourses for the online component as well as Zoom for synchronous ("real time") class meetings. Please take the time to familiarize yourself with Zoom by visiting the UCF Zoom Guides at https://cdl.ucf.edu/support/webcourses/zoom. In order to use Zoom, you must sign into the Zoom session using your NID and password. Please note that these sessions will recorded. If you have any technical issues accessing Zoom, please contact Webcourses@UCF Support: https://cdl.ucf.edu/support/webcourses.

Course Requirements

Reading and Participation

Reading course materials and active participation in the course are both required. Students are expected to attend class having read the required readings for that day. The lectures will cover the readings, but will be supplemented with additional material. Doing well in the course will depend on keeping up with readings and coming to class prepared to discuss them.

Attendance

Attendance will not be monitored this semester. However, it will be to your utmost advantage to attend every class in order to get the most out of the course material. Please let Dr. Harris know in advance of any extenuating circumstance (serious illness, personal/family tragedy, etc.) that may cause you to miss class.

Midterm Exam (40 points)

There will be one midterm exam. The exam will consist of multiple choice, true/false, and/or short answer questions and will cover concepts from all texts, videos, and lectures in the first half of the semester. There will be **no make-up** exam except for serious illness, personal/family tragedy, etc. You must let Dr. Harris know in advance of any extenuating circumstance that would prevent you from taking the midterm exam as scheduled.

Final Exam (40 points)

The final exam will consist of multiple choice, true/false, and/or short answer questions and is

cumulative. It is based on concepts from all texts, videos, and lectures, with an emphasis on the last half of the course. There will be **no make-up** exam except for serious illness, personal/family tragedy, etc. You must let Dr. Harris know in advance of any extenuating circumstance that would prevent you from taking the final exam as scheduled.

Quizzes (6 points each, 60 points total)

There will be 12 quizzes over the course of the semester. Quizzes are based on assigned readings for that day, and will consist of 1-2 questions aimed at assessing whether or not you read and understood the assigned material. The questions will be multiple choice, true/false, fill-in-the-blank, or narrative. Quizzes will take place during the first 5 minutes of class. If you arrive after the first 5 minutes, you will not be allowed to take the quiz that day. Unless you miss class because you are sick with COVID-19 or if you are the caretaker for someone who is sick with COVID-19, there will be **no make-up** for missed quizzes because your two lowest scores will be dropped at the end of the semester.

Online Component – Research Paper (60 points)

The online component of this course is a research paper. This is an opportunity for you to learn more about a topic that interests you. The paper should be 1600-2000 words in length, plus bibliography. It will be based primarily on a **close reading** of three anthropology articles, one anthropology book, or three chapters from an edited anthropology book. Online assignments are designed as a step-by-step process to develop and write a great research paper. The paper topic is your choice! You can choose any topic relevant to science, technology, and culture. For example, you can examine how cultural ideas manifest themselves in a technology or scientific practice or you can select a specific technology as a lens through which to analyze cultural uses of that technology in a specific context. A list of topic ideas will be provided to help you think about possibilities. To have fun with this project, it is most important to choose a topic based on your own interest and on information available.

Grading Structure

Midterm Exam	40 points
Final Exam	40 points
Quizzes (10 out of 12)	60 points
Research Paper	60 points
Total:	200 points

Class participation will be used to help students whose final course grade is on the borderline.

Grading Scale

Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
Total Points	200-187	186-179	178-173	172-167	166-159	158-153	152-147	146-139	138-133	132-127	126-119	118-0

Course Policies

Respectful Behavior

You are expected to conduct yourself in a respectful manner in all class discussions and interactions with Dr. Harris, the GTA, and your classmates. You should also be respectful of the class start time. Arriving late is distracting to both Dr. Harris and your classmates. Make every effort to be punctual.

Zoom Meeting Expectations

Even though we will be using Zoom for this course, you are still expected to follow proper classroom etiquette. Think of the weekly Zoom meetings as face-to-face meetings, and conduct yourself as you would if the whole class was in the same room. Improper behavior will not be tolerated during Zoom meetings and may result in a referral to the Office of Student Conduct.

In addition, here are some useful tips for ensuring that the meetings go smoothly for everyone:

- *Join early*. Signing on 5 minutes before class time will ensure that you do not miss any activities or information shared at the beginning of class.
- *Enable video*. Have your video on unless you truly are experiencing connection issues.
- *You're on camera!* Be aware that you are on camera, and try to avoid doing other tasks during class, such as checking emails, scrolling through Instagram, looking at your phone, etc.
- *Camera level*. Adjust your camera to be around your eye level, if possible. In particular, take note of the angle of your laptop screen if you are using a built-in camera.
- *Microphone*. Mute your microphone when not talking.
- *Be in a quiet space*. Find a space without interruptions or background noise.
- *Lighting*. Avoid backlight from bright windows and have good lighting on your face so that you can be seen clearly.
- *Raising your hand*. If you have a question or comment, use Zoom's "Raise Hand" function so that Dr. Harris can call on you. This will prevent you from speaking over/speaking at the same time as other participants.

Knights Email and Webcourses Communication

Given that there will be important email and Webcourses communications between Dr. Harris, the GTA, and the class, you are responsible for checking your Knights email and Webcourses on a regular basis (i.e. at least once a day).

Late Policy

Late assignments will receive a lower grade. For research paper assignments, your grade will be lowered by one point if submitted after the deadline. For example, if the assignment is worth three points but it is submitted late, your grade will be two points. For the final research paper, your grade will be lowered by one point per hour after the deadline. For example, if you received 48 points on the paper but it was submitted three hours after the deadline, your grade will be 45 points. Extensions will be given only in the case of extenuating circumstances.

Grade Disputes

If you would like to dispute a grade on a particular assignment, please come to Dr. Harris's office hours **and** submit your graded work via email along with a written explanation of why you would like her to read and review your work a second time. Please be aware, though, that her willingness to re-read your work is not a guarantee that your grade for the assignment will be changed.

Academic Integrity

You are expected to do your own work in this course. You should familiarize yourself with UCF's Rules of Conduct (http://osc.sdes.ucf.edu/process/roc). According to Section 1, "Academic Misconduct," you are prohibited from engaging in the following:

- *Unauthorized assistance*: Using or attempting to use unauthorized materials, information, or study aids in any academic exercise unless specifically authorized by Dr. Harris. The unauthorized possession of examination or course-related material also constitutes cheating.
- *Communication to another through written, visual, electronic, or oral means*: The presentation of material which has not been studied or learned, but rather was obtained through someone else's efforts and used as part of an examination, course assignment, or project.
- *Commercial use of academic material*: Selling of course material to another person, student, and/or uploading course material to a third-party vendor without authorization or without the express written permission of the university and Dr. Harris. Course materials include but are not limited to class notes, Dr. Harris's PowerPoints, course syllabi, tests, quizzes, labs, instruction sheets, homework, study guides, handouts, etc.
- *Falsifying or misrepresenting* your own academic work.
- *Plagiarism*: Using or appropriating another's work without any indication of the source, thereby attempting to convey the impression that such work is your own.
- *Multiple submissions*: Submitting the same academic work for credit more than once without the express written permission of Dr. Harris.
- *Helping another student cheat* or violate academic behavior standards

Responses to Academic Misconduct

Engaging in academic misconduct it <u>will not be tolerated</u> in this course and will carry <u>serious consequences</u>. You should familiarize yourself with the procedures for academic misconduct in UCF's Student Handbook, *The Golden Rule* (http://goldenrule.sdes.ucf.edu).

UCF faculty members have a responsibility for students' education and the value of a UCF degree. We seek to prevent unethical behavior and, when necessary, respond to academic misconduct. Penalties can include a zero grade for an assignment or in the course and/or suspension or expulsion from the university. Another penalty is receiving a "Z Designation" on your official transcription, indicating academic dishonesty, resulting in the final course grade being preceded by the letter Z. For more information about the Z Designation: http://goldenrule.sdes.ucf.edu/zgrade

Student Accessibility

UCF is committed to providing access and inclusion for all persons with disabilities. Students with disabilities who need access to course content due to course design limitations should contact Dr.

Harris as soon as possible. Students should also connect with Student Accessibility Services (SAS) at http://sas.sdes.ucf.edu, 407-823-2371, or Ferrell Commons 185. For students connected to SAS, a Course Accessibility Letter may be created and sent to Dr. Harris, which informs her of potential course access and accommodations that might be necessary and reasonable. Determining reasonable access and accommodations requires consideration of the course design, course learning objectives, and the individual academic and course barriers experienced by the student. Further conversation with SAS, Dr. Harris, and the student may be warranted to ensure an accessible course experience.

Course Accessibility and Disability COVID-19 Supplemental Statement

Accommodations may need to be added or adjusted should this course shift from an on-campus to a remote format. Students with disabilities should speak with Dr. Harris and should contact sas@ucf.edu to discuss specific accommodations for this course.

Campus Safety

Emergencies on campus are rare, but if one should arise during class, everyone needs to work together. You should be aware of your surroundings and familiar with the following basic safety concepts:

- In case of emergency, dial 911 for assistance.
- Every classroom contains an emergency procedure guide posted on a wall near the door. You should make a note of the guide's physical location and review the online version: http://emergency.ucf.edu/emergency_guide.html
- You should know the evacuation routes from the classroom and have a plan for finding safety in case of an emergency.
- If there is a medical emergency during class, you may need to access a first-aid kit or Automated External Defibrillator. To learn where those are located, see this website: https://ehs.ucf.edu/automated-external-defibrillator-aed-locations.
- To stay informed about emergency situations, you can sign up to receive UCF text alerts by going to logging into my.ucf.edu. Click on "Student Self Service" located on the left side of the screen in the tool bar, scroll down to the blue "Personal Information" heading on the Student Center Screen, click on "UCF Alert," fill out the information (including email address, cell phone number, and cell phone provider), click "Apply" to save the changes, and then click "OK."
- Students with special needs related to emergency situations should speak with Dr. Harris.
- To learn how to manage an active shooter situation on campus or elsewhere, consider viewing this video: https://www.youtube.com/watch?v=NIKYajEx4pk

Deployed Active Duty Military Students

If you are deployed active duty military and/or National Guard personnel and require accommodation should contact Dr. Harris <u>as soon as possible</u> after the semester begins and/or after you receive notification of deployment to make related arrangements.

Make-Up Assignments for Authorized University Activities

If you represent UCF in an authorized activity (ex. student-athletes) and are unable to meet a course

deadline due to a conflict with that event, then you must provide Dr. Harris with documentation in advance to arrange a make-up. No penalty will be applied. For more information: http://policies.ucf.edu/documents/4-401.2MakeUpAssignmentsorAuthUnivEventsorCocurricular Activities.pdf

Religious Observance

You must notify Dr. Harris in advance if you intend to miss class for a religious observance. For more information: http://regulations.ucf.edu/chapter5/documents/5.020ReligiousObservances FINALJan19.pdf

Obtaining Notes for Missed Lectures

Dr. Harris will provide a recording of a lecture only if you miss class because you are sick with COVID-19 or if you are the caretaker for someone who is sick with COVID-19. If you miss a lecture for any another reason, it is your responsibility to obtain notes from a classmate for that lecture.

University-Wide Face Covering Policy for Common Spaces and Face-to-Face Classes

To protect members of our community, everyone is required to wear a facial covering inside all common spaces and classrooms (https://policies.ucf.edu/documents/PolicyEmergencyCOVID ReturnPolicy.pdf). Dr. Harris will ask all students who choose not to wear facial coverings to leave the classroom. If they refuse to leave the classroom or put on a facial covering, they may be considered disruptive (please see the Golden Rule for student behavior expectations: https://goldenrule.sdes.ucf.edu). Dr. Harris has the right to cancel class if the safety and well-being of class members are in jeopardy. Students will be responsible for the material that would have been covered in class as provided by Dr. Harris.

Notifications in Case of Changes to Course Modality

Depending on the course of the pandemic during the semester, the university may make changes to the way classes are offered. If that happens, please look for announcements or messages in Webcourses or Knights email about changes specific to this course.

COVID-19 and Illness Notification

If you believe that you may have a COVID-19 diagnosis, you should contact UCF Student Health Services (407-823-2509) so that proper contact tracing procedures can take place.
You should not come to campus if you are ill, are experiencing any symptoms of COVID-19, have tested positive for COVID, or if anyone living in your residence has tested positive or is sick with COVID-19 symptoms. CDC guidance for COVID-19 symptoms is located here: www.cdc.gov/ coronavirus/2019-ncov/symptoms-testing/symptoms.html.

You should contact Dr. Harris as soon as possible if you miss class for any illness reason to discuss reasonable adjustments that might need to be made. When possible, you should contact Dr. Harris before missing class.

In Case of Faculty Illness

If Dr. Harris falls ill during the semester, there may be changes to this course, including having a backup instructor take over the course. Please look for announcements or mail in Webcourses or Knights email for any alterations to this course.

Academic Activity Record

You must document your academic activity at the beginning of the semester by completing an Academic Activity quiz on Webcourses by **Friday, August 28**. This quiz includes a few questions about this syllabus. This quiz is **not** part of your course grade; it only documents your presence in the class. Failure to complete the quiz may result in a delay in the disbursement of your financial aid.

Required Texts

The required books for this course are:

- Saini, Angela. 2020. *Superior: The Return of Race Science*. Boston: Beacon Press.

- TallBear, Kim. 2013. *Native American DNA: Tribal Belonging and the False Promise of Genetic Science*. Minneapolis: University of Minnesota Press.

The required books are available for purchase at the student bookstore. Several additional readings are also required and are available electronically on Webcourses website for this course under the **Modules** tab. All assigned readings are listed in the class schedule below, which specifies the date by which you are expected to read them. To access Webcourses: login on webcourses.ucf.edu website, go to Courses, and select our class ANT4081-20Fall 0M01. For technical support with Webcourses, call 407-823-0407.

Course Schedule

Week 1

Tuesday, August 25

- TOPIC: Syllabus and course overview

Online

- Assignment #1: Become familiar with the Webcourses site and make sure you can access readings (instructions on Webcourses).

Week 2

Tuesday, September 1

- TOPIC: Scientific Knowledge and "Facts"

- READINGS: Latour, Bruno and Steve Woolgar. 1986. "The 'Anthropology' of Science." In *Laboratory Life: The Construction of Scientific Facts*, 27-33. Princeton: Princeton University Press.

  Latour, Bruno. 1987. "Opening Pandora's Black Box." In *Science in Action: How to Follow Scientists and Engineers Through Society*, 1-17. Cambridge: Harvard University Press.

  Viner, Katharine. 2016. "How Technology Disrupted the Truth." *The Guardian*, 12 July, http://www.theguardian.com/media/2016/jul/12/how-technology-disrupted-the-truth

Online

- Assignment #2: Submit preliminary paper topic ideas, keywords, and preferred geographic areas. Examples of topics listed on assignment (instructions on Webcourses).

Week 3

Tuesday, September 8

QUIZ #1

- TOPIC: Expert Knowledge

- READINGS: Domus, Susan. 2012. "What Happened to the Girls in Le Roy." *New York Times*, 7 March, http://www.nytimes.com/2012/03/11/magazine/teenage-girls-twitching-le-roy.html

  Goldstein, Donna, and Kira Hall. 2015. "Mass Hysteria in Le Roy, New York: How Brain Experts Materialized Truth and Outscienced Environmental Inquiry." *American Ethnologist* 42:640-657.

Online

- Assignment #3: Begin searching for articles/book/book chapters (instructions on Webcourses).

Week 4

Tuesday, September 15

QUIZ #2

- TOPIC: Lay Expertise and Activism

- READINGS: Epstein, Steven. 1995. "The Construction of Lay Expertise: AIDS Activism and the Forging of Credibility in the Reform of Clinical Trials." *Science, Technology, & Human Values* 20(4):408-437.

  Kramer, Larry. 1983. "1,112 and Counting." *New York Native*, March 17-24.

Online

- Assignment #4: Submit list of proposed articles/books/book chapters. Wait for approval and feedback (instructions on Webcourses).

Week 5

Tuesday, September 22

QUIZ #3

- TOPIC: Race Science – Part 1

- READING: Saini, Ch. 2 - Ch. 4 (pg. 25-70)

Online

- Assignment #5: Submit revised list of articles/books/book chapters and wait for approval or start reading and annotating (instructions on Webcourses).

Week 6

Tuesday, September 29

QUIZ #4

- TOPIC: Race Science – Part 2

- READING: Saini, Ch. 5 - Ch. 7 (pg. 71-125)

Online

- Assignment #6: Read and annotate (instructions on Webcourses).

Week 7

Tuesday, October 6

QUIZ #5

- TOPIC: Race Science – Part 3
- READING: Saini, Ch. 10 - Ch. 11 (pg. 166-202)

Online

- Assignment #7: Submit annotated bibliography (instructions on Webcourses).
- VIDEO: Dorothy Roberts – "The Problem with Race-Based Medicine"

Week 8

Tuesday, October 13

QUIZ #6

- TOPIC: Race and Technology
- READINGS: Benjamin, Ruha. 2019. *Race After Technology: Abolitionist Tools for the New Jim Code*. Cambridge: Polity Press. (Ch. 1, pg. 49-76)

  Noble, Safiya Umoja. 2013. "Google Search: Hyper-visibility as Means of Rendering Black Women and Girls Invisible." *InVisible Culture* 19.

Online

- Assignment #8: Submit outline for research paper (~1 page) (instructions on Webcourses).
- VIDEO: Joy Buolamwini – "How I'm Fighting Bias in Algorithms"

Week 9

Tuesday, October 20

MIDTERM EXAM

Online

- Assignment #9: Begin writing research paper (instructions on Webcourses).

Week 10

Tuesday, October 27

QUIZ #7

- TOPIC: Genetics and Identity – Part 1
- READING: TallBear, Ch. 1 (pg. 31-66)

Online

- Assignment #10: Proceed with writing research paper (instructions on Webcourses).

Week 11

Tuesday, November 3

QUIZ #8

- TOPIC: Genetics and Identity – Part 2
- READING: TallBear, Ch. 2 (pg. 67-103)

Online

- Assignment #11: Proceed with writing research paper (instructions on Webcourses).

Week 12

Tuesday, November 10

QUIZ #9

- TOPIC: Genetics and Identity – Part 3
- READING: TallBear, Ch. 3 (pg. 105-141)

Online

- Assignment #12: Proceed with writing research paper (instructions on Webcourses).

Week 13

Tuesday, November 17

QUIZ #10

- TOPIC: Science, Technology, and the Public

- READING: Brunson, Emily K., and Elisa J. Sobo. 2017. "Framing Childhood Vaccination in the United States: Getting Past Polarization in the Public Discourse." *Human Organization* 76:38-47.

Online

- Assignment #13: Proceed with writing research paper (instructions on Webcourses).
- VIDEO: "Vaccines: Calling the Shots"

Week 14

Tuesday, November 24

QUIZ #11

- TOPIC: Technology and Tragedy
- READING: Black, Edwin. 2001. *IBM and the Holocaust: The Strategic Alliance Between Nazi Germany and America's Most Powerful Corporation*. Washington, D.C.: Dialog Press. (Ch. 1- Ch. 3, pg. 19-74)

Online

- Assignment #14: Proceed with writing research paper (instructions on Webcourses).

Week 15

Tuesday, December 1

QUIZ #12

- TOPIC: Science and Social Justice
- READING: Gandsman, Ari. 2009. "'Do You Know Who You Are?': Radical Existential Doubt and Scientific Certainty in the Search for the Kidnapped Children of the Disappeared in Argentina." *Ethos* 37:441-465.

Online

- Assignment #15: Proceed with writing and final editing (instructions on Webcourses).
- VIDEO: "Dramatic Stories of Argentina's Stolen Children"

Finals Week

Sunday, December 6

Research Paper due by 11:59pm

Date and Time <u>To Be Determined</u>

FINAL EXAM