DEPARTMENT OF ANTHROPOLOGY AND ARCHAEOLOGY

Anthropology of Science
ANTH 395
GFC HOURS (3-0)
Monday, Wednesday, and Friday 1 pm – 1:50 pm on Zoom

Instructor: Kelly Monteleone (kelly.monteleone@ucalgary.ca)
Office hours: M & F 12 – 12:50 pm (or by appointment)
(same zoom link as for class)

TA: Cecilia Porter (mary.porter@ucalgary.ca)
Office hours: by appointment

Contact Information
Please email the instructor or attend Zoom office hours (same zoom link as for class).
The instructor will normally respond within 48 hours.

Prerequisites
Prerequisite: Anthropology 203

Official Course Description
An introduction to the culture and the politics of science. Examines conceptual and daily practices in the laboratory, the scientific method, the training of scientists, the work of scientific collaboration and the intersection between scientists and wider political, racial, gendered and religious issues. Special consideration will be given to the anthropology of scientific controversy.

Course Description
An introduction to the culture and the politics of science that draws on both early and contemporary ethnographers of scientific practice. Examines conceptual and daily practices in the laboratory, the scientific method, the training of scientists, the work of scientific collaboration and the intersection between scientists and wider political, racial, gendered and religious issues. Special consideration will be given to the anthropology of scientific controversy. Western science and its hegemonic ideals command enormous influence in our societies. It has shown the potential for good and for ill, and always, for controversy. This course offers an introduction to both the culture and the politics of science, by drawing on the anthropology, history and philosophy of science, and with an emphasis on hegemonic western science. We will examine the rise of 'the scientific method,' the training of scientists, the rise of classification in sciences and its implications for difference and inequality, and lastly, the production of relationships between scientists and the wider political, racial, gendered and religious world. Students

will develop the critical vocabularies and analytic skills to address contemporary scientific controversies and be active participants in the making of our technoscientific worlds.

Required Textbooks

Marks, Jonathan
2009. Why I am not a Scientist: Anthropology and Modern Knowledge. University of California Press. ISBN: 9780520259607
Library link: https://ucalgary-primo.hosted.exlibrisgroup.com/permalink/f/1p0s7n7/TN_cdi_askewsholts_vlebooks_9780520943308

Course Format

This course will follow an interactive lecture and discussion style format, accompanied by the occasional film or documentary. Readings are crucial and students are expected to come to class having: read the readings, prepared to discuss them, and ask questions. The discussion will be a very important component of this class and will be conducted via zoom and discussion boards on D2L. All course materials, assignment guidelines and any other relevant information or announcements will be posted on the class D2L website.

The class Twitter hashtag is #ANTH395w21. The instructor and the TA will monitor the Twitter feed for questions. Interesting and relevant anthropology and science news articles will also be shared.

Course Assignments and Assessment

This course is reading intensive. With this in mind, the course writing will be used as a supplement to aid students in cementing their reading techniques, their textual comprehension and their ability to translate apply ideas from class to public debates surrounding science and/or scientific breakthroughs and/or scientific controversies. Close weekly readings, detailed in-class discussions of those class readings and student participation will form the backbone of this course.

Students are expected to maintain a "Science in Media" portfolio on our class discussion site, engage in the online discussion and portfolio, write a book review, submit discussion questions each week, and a final paper due at the end of the semester.

Students will be evaluated on the basis of a 100-point system, whereby:

Science in Media portfolio (6 entries)	30% (each worth 5%)
4 portfolio responses	20% (each is worth 4%)
Discussion questions from readings	10%
Book Review	10%
Final paper	30%

For additional detailed course information posted by the instructor, visit the course Desire2Learn page online at https://d2l.ucalgary.ca/d2l/home.

Grading Scheme

95–100	A+	75–79.9	B	59–62.9	C-
90–94.9	A	71–74.9	B-	55–58.9	D+
85–89.9	A-	67–70.9	C+	50–54.9	D
80–84.9	B+	63–66.9	C	<50	F

Late Policy
10% will be removed for each weekday an assignment is late.
In the event that a student misses any course work due to illness, supporting documentation, such as a medical note or a statutory declaration will be required see: https://www.ucalgary.ca/pubs/calendar/current/m-1.html.
Please refer to https://www.ucalgary.ca/registrar/registration/appeals/student-faq for frequently asked questions concerning the provision of a medical note/statutory declaration.

Discussion Questions

A question designed to generate discussion among your classmates as due each week. For example, you can survey your fellow students on key issues, or ask them to compare two different perspectives, or evaluate whether an author's argument is convincing and why or why not. Be prepared to answer the questions yourself. Avoid requests for more factual information (i.e., "What is Easter Island like today? Is there a Covid-19 vaccine?"), unless you are willing to look the answer up yourself and share the information with the class.
Due by 12 pm (noon), on the day the reading is due/scheduled. Please submit these on d2l.

Science in Media Portfolio & Portfolio Responses: Description and Assessment

As part of trying to understand how science and technology shape our daily lives and educational knowledge, each class participant will be required to maintain an electronic portfolio on « Science in Media » through D2L's online discussion board. These portfolios will serve as a space for personal reflection, an electronic space where we can all share ideas and lastly, a collection of science news through which we can try to understand our class reading. How do our readings influence the way science can shape our everyday thinking? You will need to update your portfolio regularly and keep up with it all semester – as you can see the portfolio-related assignments (portfolio and responses) are worth 50% of your grade in this class.

Portfolio Entries

Every week starting in Week 2 of the semester, students are expected to upload one article/video/story from a mainstream media source about a current scientific breakthrough, controversy or other science news item, to our class discussion thread. Students must upload this article by Sunday night at midnight, and this article may be a topic of discussion in the week that follows. On the discussion thread, you must put a link to your article or video, then write 3-4 sentences about 1.) why you chose to upload this article, 2.) why it is interesting to you, and 3) how it relates to the content of this class. Though you have an opportunity to upload an entry every week, you only have to upload six entries over the course of the semester. This is to account for some weeks being busier than others in your schedule so that you don't have to upload an entry weekly.

Portfolio Entries Assessment
Each portfolio entry is assessed out of 5 points: you get 1 point just for doing it, 3 points for answering each of the 3 questions listed above, and 1 point for language (correct grammar, spelling, punctuation, etc).

Good sources to turn to would be the Science or Science and Technology sites of mainstream media outlets. For example:

> http://www.nature.com/news/
> https://www.sigmaxi.org/ - smart brief at bottom of the page
> http://www.nytimes.com/section/science
> http://www.cbc.ca/news/technology
> http://www.bbc.co.uk/science?1
> http://www.bbc.com/news/science_and_environment
> https://www.sciencenews.org
> http://www.wired.com
> http://www.theguardian.com/science

Portfolio Responses
The last component of the electronic portfolio is the response assignment. In addition to posting 6 entries over the course of the semester, students will be required to respond to another student's entry 4 times throughout the semester. If students are particularly interested or inspired by an article someone else has posted, they can respond to the article. They must write at least 3 sentences indicating 1.) why they chose to respond to this article, and 2.) what they think of (agree/disagree with) the original poster's comments.

<u>Book Review</u>
Each student will submit a review of a book or monograph on the Anthropology of Science. A list of suggested volumes will be provided. Reviews can be no longer than two pages (excluding bibliography) single-spaced, 12-point Times New Roman type,

and one-inch margins. Longer reports will be returned for revision. Further directions are provided on d2l and will be discussed in class.
Due March 12, 2021, by midnight on D2L.

<u>Final Paper</u>
This will be a short (1000 – 1500 word) paper evaluating a controversy in science from an anthropological/ethnographic perspective. You will select a topic and post it to a discussion form in d2l (no later than **March 1** – you may adjust or change your topic after this date as long as it is still available). You <u>cannot do the same specific topic as someone else</u>; however, you can do a different approach to a similar topic (ex. How western media portrays anthropogenic climate change vs Scientific publications of anthropogenic climate change). You are meant to demonstrate your understanding of class readings, lectures, and discussion, as well as the materials and discussions from the 'Science in Media' portfolios. **Due Tuesday, April 21 by midnight on D2L.**

<u>Learning Technologies and Requirements</u>
In order to successfully engage in their learning experiences at the University of Calgary, students taking online, remote and blended courses are required to have reliable access to the following technology.
- A computer with a supported operating system, as well as the latest security and malware updates
- A current and updated web browser
- Webcam (built-in or external) *
- Microphone and speaker (built-in or external) * or headset with microphone*
- Broadband internet connection

 * Please email the instructor if you do not have these available to ensure you can participate in class discussions.

<u>Supplemental Information</u>

Principles of Conduct
The University Calendar includes a statement on the principles of conduct expected of all members of the university community (including students, faculty, administrators, any category of staff, practicum supervisors, and volunteers), whether on or off university property. This statement applies in all situations where members of the university community are acting in their university capacities. All members of the university community have a responsibility to familiarize themselves with the principles of conduct statement, which is available at www.ucalgary.ca/pubs/calendar/current/k.html.

Plagiarism, Cheating, and Student Misconduct
The University of Calgary is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect.

Academic dishonesty is not an acceptable activity at the University of Calgary, and students are **strongly advised** to read the Student Misconduct section in the University Calendar at www.ucalgary.ca/pubs/calendar/current/k-3.html. Often, students are unaware of what constitutes academic dishonesty or plagiarism. The most common are (1) presenting another student's work as your own, (2) presenting an author's work or ideas as your own without adequate citation, and (3) using work completed for another course. Such activities will not be tolerated in this course, and students suspected of academic misconduct will be dealt with according to the procedures outlined in the calendar at:
https://ucalgary.ca/policies/files/policies/student-academic-misconduct-procedure.pdf

For students wishing to know more about what constitutes plagiarism and how to properly cite the work of others, the Department of Anthropology and Archaeology recommends that they attend Academic Integrity workshops offered through the Student Success Centre: https://www.ucalgary.ca/student-services/student-success/learning/academic-integrity

Instructor Intellectual Property
Information on Instructor Intellectual Property can be found at
https://www.ucalgary.ca/policies/files/policies/Intellectual%20Property%20Policy.pdf

Freedom of Information and Protection of Privacy
Freedom of Information and Protection of Privacy (FOIP) legislation in Alberta disallows the practice of having students retrieve assignments from a public place, such as outside an instructor's office, the department office, etc. Term assignments will be returned to students individually, during class or the instructor's office hours; if students are unable to pick up their assignments from the instructor, they must provide the instructor with a stamped, self-addressed envelope to be used for the return of the assignment.

Guidelines for Zoom Sessions
Zoom is a video conferencing program that will allow us to meet at specific times for a "live" video conference so that we can have the opportunity to meet each other virtually and discuss relevant course topics as a learning community.

To help ensure Zoom sessions are private, do not share Zoom link or password with others, or on any social media platforms. Zoom links and passwords are only intended for students registered in the course. Zoom recordings and materials presented in Zoom, including any teaching materials, must not be shared, distributed or published with the instructor's permission.

The use of video conferencing programs relies on participants to act ethically, honestly and with integrity; and in accordance with the principles of fairness, good faith and respect

(as per the Code of Conduct). When entering Zoom or other video conferencing sessions (such as MS Teams), you play a role in helping create an effective, safe and respectful learning environment. Please be mindful of how your behavior in these sessions may affect others. Participants are required to us names officially associated with their UCID (legal or preferred names listed in the Student Centre) when engaging in these activities. Instructors/moderators can remove those whose names do not appear on class rosters. Non-compliance may be investigated under relevant University of Calgary conduct policies (e.g. Student Non Academic Misconduct Policy). If participants have difficulties complying with this requirement, they should email the instructor of the class explaining why, so the instructor may consider whether to grant an exception, and on what terms. For more information on how to get the most out of your Zoom sessions visit: https://elearn.ucalgary.ca/guidelines-for-zoom/.

If you are unable to attend a Zoom session, please contact your instructor to arrange an alternative activity for the missed session (e.g., to review a recorded session). Please be prepared, as best as you are able, to join class in a quiet space that will allow you to be fully present and engaged in Zoom sessions. Students will be advised by their instructor when they are expected to turn on their webcam (for group work, presentations, etc.).

The instructor may record online Zoom class sessions for the purposes of supporting student learning in this class – such as making the recording available for review of the session or for students who miss a session. Students will be advised before the instructor initiates a recording of a Zoom session. These recordings will be used to support student learning only and will not be shared or used for any other purpose.

Accessibility
Posting of Grades and Picking-up of Assignments
Graded assignments will be made available electronically through the course D2L webpage. Grades and assignments will not be available at the Department of Anthropology and Archaeology's main office.

Academic Accommodations
It is the student's responsibility to request academic accommodations, according to the university policies and procedures listed in the University Calendar.

The student accommodation policy can be found at:
https://www.ucalgary.ca/policies/files/policies/student-accommodation-policy_0.pdf
Students needing an accommodation because of a disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities:
www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf.

Students needing an accommodation based on a protected ground other than disability should communicate this need, preferably in writing to their instructor or the Department Head (email: pcdawson@ucalgary.ca).

Copyright Legislation
All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright https://www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright-policy.pdf
and requirements of the copyright act (https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html) to ensure they are aware of the consequences of unauthorised sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplines under the Non-Academic Misconduct Act.

Wellness and Mental Health Resources
The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness, and academic success and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the mental health resources available throughout the university community, such as counselling, self-help resources, peer support, or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre, https://www.ucalgary.ca/wellnesscentre/services/mental-health-services) and the Campus Mental Health Strategy website (http://www.ucalgary.ca/mentalhealth/).
Students requiring assistance are encouraged to email the Student at Risk line if they or others appear to need wellness assistance: sar@ucalgary.ca. For more immediate response, please call: 403-210-9355 and select option #2.

Contact Information for Student and Faculty Representation
- Student Union VP Academic 403-220-3911, suvpaca@ucalgary.ca
- Students Union Representatives for the Faculty of Arts – 403-220-3913, arts1@su.ucalgary.ca, arts2@su.ucalgary.ca, arts3@su.ucalgary.ca, arts4@su.ucalgary.ca
- Student Ombuds Office information can be found at: www.ucalgary.ca/ombuds/

Campus Safewalk
Campus Security, in partnership with the Students' Union, provides the Safewalk service, 24 hours a day, to any location on Campus, including the LRT station, parking lots, bus zones, and university residences. Contact Campus Security at 220-5333 or use a help phone, and Safewalkers or a Campus Security officer will accompany you to your campus destination.

Preliminary Schedule of Topics

Week	Topic	Date	What is due?
1	Anthropology of Science	Jan 11, 2021	
		Jan 13, 2021	
		Jan 15, 2021	
2	Science as Culture	Jan 18, 2021	
		Jan 20, 2021	
		Jan 22, 2021	
3	Scientific Revolution	Jan 25, 2021	
		Jan 27, 2021	
		Jan 29, 2021	
4	Normative Science	Feb 1, 2021	
		Feb 3, 2021	
		Feb 5, 2021	
5	Science as Practice	Feb 8, 2021	
		Feb 10, 2021	
		Feb 12, 2021	
	Spring Break	Feb 15, 2021	
		Feb 17, 2021	
		Feb 19, 2021	
6	The problem of Creationism	Feb 22, 2021	
		Feb 24, 2021	
		Feb 26, 2021	
7	Bogus Science I	Mar 1, 2021	Final paper topic
		Mar 3, 2021	
		Mar 5, 2021	
8	Scientific Misconduct	Mar 8, 2021	
		Mar 10, 2021	
		Mar 12, 2021	Book Review
9	Scientific Misinformation	Mar 15, 2021	
		Mar 17, 2021	
		Mar 19, 2021	
10	Indigenization of Science	Mar 22, 2021	

		Mar 24, 2021	
		Mar 26, 2021	
11	Racial and Gendered Science	Mar 29, 2021	
		Mar 31, 2021	
		Apr 2, 2021	
12	Nature/Culture	Apr 5, 2021	
		Apr 7, 2021	
		Apr 9, 2021	
13	Scientific Misinformation II	Apr 12, 2021	
		Apr 14, 2021	Science in Media portfolio and responses
		April 21, 2021	Final Essay