

HPSC0091 Science, Technology & Identity

Course Syllabus

2019-20 session | Dr Emily Dawson | emily.dawson@ucl.ac.uk

Course Information

Where, how, with whom, how much and why we encounter science (or not) matters. In this module we will explore how science affects our lives and the lives of other people, through the lens of social justice. Science is a prized resource in our societies. As a result, it is important to map where people encounter science in their lives and what happens when they do. This course is your opportunity to explore how science and technology are co-constructed alongside the intersections of gender, 'race'/ethnicity, class, sexuality, mobility, age and other factors that affect our life chances and our identities. We will look at who can access science, how people access and use science (or not) and everything in between. We will think about science and technology in contemporary and historic contexts using key concepts such as identity, inclusion/exclusion, representation and recognition, relational and redistributive social justice, as well as intersectional approaches to class, race/ethnicity, gender, ability/disability, sexuality and other social positions. For instance, what do assistive reproductive technologies (ARTs) mean for how we understand gender and sexuality? How are science museums 'whitewashed'? Does science include a 'hidden curriculum' that reproduces class-based advantages? The module is interdisciplinary, and will draw on wide range of concepts from political philosophy, sociology, education, cultural studies and STS. **BEWARNED: there is a lot of reading and it IS essential!**

Basic course information

Course website:	See moodle
Moodle Web site:	https://moodle-1819.ucl.ac.uk/course/view.php?id=7494&section=0
Assessment:	100% Coursework: 50% Translation Project, 50% Essay
Timetable:	Term 2, Thursdays, 1-3pm
Prerequisites:	None
Required texts:	See syllabus, library reading list & moodle
Course tutor(s):	Dr Emily Dawson
Contact:	Emily.dawson@ucl.ac.uk

Web:	https://www.ucl.ac.uk/sts/people/dr-emily-dawson
Office location:	22 Gordon Square, room 2.2
Office hours	TBC

Schedule

UCL Week	Topic	Date	Preparation Activity
6	Intro & distributive social justice	16.1.20	Essential readings Practical activities to be agreed in class
7	Relational social justice	23.1.20	Essential readings Practical activities to be agreed in class
8	Oppression, social justice & identity	30.1.20	Essential readings Practical activity to be agreed in class
9	Identities & performances	6.2.20	Essential readings Practical activity to be agreed in class
10	Gender	13.2.20	Essential readings Practical activity to be agreed in class
11	READING WEEK	20.2.20	
12	'Race'/Ethnicity	27.2.20	Essential readings Practical activity to be agreed in class
13	Social class	5.3.20	Essential readings Practical activity to be agreed in class
14	Kaleidoscopic intersections	12.3.20	Essential readings Practical activity to be agreed in class
15	OPEN WEEK	19.3.20	Essential readings Practical activity to be agreed in class
16	Conclusions: What are you going to do about it?	26.3.20	Essential readings Practical activity to be agreed in class

Assessments

Summary

	Description	Deadline	Word limit	Deadline for Tutors to provide Feedback
Coursework	Translation Project	Weekly, see above.	2 sides of A4 MAX!	Two weeks later on a rolling basis
Closed Exam	Academic Essay	22.4.20 4.30 pm ☺	2500	5.5.20

Assignments & Specific Criteria for Assessment for this Module:

1. Translation project

The translation projects will be weekly and carried out where possible individually or in pairs (ish), and will give you 50% of your mark. For each week, beginning on the 2nd week and carrying on until the last week, the first hour will involve student-led presentations and discussions, in other words, you will be expected to lead the seminar for the class. Working in small groups you will choose your own specific case-study concerned with science, technology, identity and social justice and produce a presentation, learning resources and lead a discussion for the group. The presentation will also need to include links to the theoretical reading for that week, as well as how the case study chosen challenges, adds to, or disrupts the other case study on the reading list. You will be expected to provide the additional case-study reading/resource on the Monday before (at the latest) to the whole group by email, so that everyone has a chance to look at it before the session on Thursday.

The translation project brief:

- a) A 15 minute presentation & supporting materials for the whole group (these will include the extra case study reading/resource as well as other resources to support your presentation & your colleagues learning, which might be slides, paper hand outs, drawings, additional readings or other resources that resonate with the topic for you, with links that you want to draw out in the presentation and discussion).
- b) Leading the group discussion for approx. 25 minutes, making sure everyone in the

group has access to voice their views, keeping the discussion flowing, making links to previous or future weeks topics.

c) Attendance and participation. You help with translation work not just when you present, but when you ask questions, contribute a new resource to the group and take part in discussions.

d) The week after your presentation you will submit a précis of the points you made on no more than 2 sides of A4 – **including references** - via moodle. The discussion and reflection time should give you more opportunities to develop your ideas.

Time limits & word limits: Please do not overrun your 15 minutes of presentation time, keeping to time is part of the assessment, as is keeping strictly to the 2 sides of A4 précis, so you will lose marks as “incomplete” for not keeping to the brief in this way.

2. Essay

You will need to write a 2500 word essay on your own that will be 50% of your mark, I'll make the essay titles available during the second week of class, based on our discussions in the first week of class about what you're interested in, confused by or want to explore further OR depending on what we agree in the first week of class, you might want to make your own titles. The essay will involve both theoretical reflection and research using primary & secondary sources. The aim of this assignment is for students to critically engage with the theoretical dimensions of an issue.

Word limits: 2475-2525, i.e. you want to aim for that 2500 point!

Aims & objectives

Aims:

Where, how, with whom, how much and why we encounter science (or not) matters. In this module we will explore how science affects our lives and the lives of other people, through the lens of social justice. Science is a prized resource in our societies. As a result, it is important to map where people encounter science in their lives and what happens when they do. This course is your opportunity to explore how science and technology are co-constructed alongside gender, 'race'/ethnicity, class, sexuality, mobility, age and other facets of our identities. We will look at who can access science, how people access and use science (or not) and the differences in between. We will think about science and technology in contemporary and historic contexts using key concepts such as identity, inclusion/exclusion, representation and recognition, relational and redistributive social justice, as well as intersectional approaches to class, race/ethnicity, gender, ability/disability, sexuality and other social positions. For instance, what do assistive reproductive technologies (ARTs) mean for how we understand gender and sexuality? How are science museums 'whitewashed'? Do science & technology include a 'hidden curriculum' that reproduces class-based advantages? The module is interdisciplinary, and will draw on wide range of concepts from philosophy, sociology, education, cultural studies and STS

Objectives

- By the end of this module students should be able to:
- Be active & engaged participants in co-constructing their workshops, responsible for their own learning.
- Demonstrate their understanding of key theoretical concepts from social justice and identity theories.
- Demonstrate an understanding of the ways in which identities are co-constructed and contested through engagements with science, technology and culture both explicitly (for example, through medical categorisation systems) and implicitly (through media & cultural consumption embedded in everyday life).
- Demonstrate an understanding the roles of structure and agency in the co-construction of identities on one hand and science & technology on the other.
- Apply key theoretical concepts from this course to critically analyse a range of issues (contemporary & historic) in science & technology.
- Analyse closely, interpret and show the exercise of critical judgement in the understanding

Your participation matters! This is a participatory, collaborative class where students help to design the curriculum and lead their own discussions and activities. On a weekly basis you will have academic and practical homework to do. Each week you will need to

read the essential readings (& any of the additional readings that you find interesting), carry out any of the more practical tasks agreed on the week before AND keep up with the materials the team doing that week's translation project share. You are expected to attend all classes and to demonstrate active engagement with your learning through taking on teaching & learning activities, participating in discussions, exploring readings and other learning materials, sharing notes & materials as appropriate and sharing your ideas with the group. You can miss up to two classes without upsetting me too much (but please email to let me know). If you miss three we'll need to have a chat about what's going on.

Reading list

This module involves lots of reading & thinking, *before* you come to class, to form the basis of an informed discussion. As stated above, this module is collaborative, so there will be opportunities throughout for you to suggest extra weekly readings, podcasts, TV shows, movies, soundtracks or other material relevant to that week's topic as we go through. Although I've put 'reading' as the activity for each week on the schedule below, we'll also be doing other kinds of activities as the weeks go by to explore science, identities & social justice in our own lives, as well as the week-by-week translation projects. With the pretty heavy going class titles below, feel free to add "and science" or "and technology" in your head as you read through.

To reflect the nature of the course, each week I've tried to pair up at least one more theoretical text with a text that describes a case study of some kind or other and in our classes we'll discuss how they go together, building each week on what went before as well as the new readings. I've also suggested additional readings (again these are broadly themed by weekly topic but they also work well across the whole course, so if you feel like reading *Anarchy, State & Utopia* in week 6, you go ahead!). Finally, the online list also includes some 'fun' readings that aren't academic but provide interesting ways to think about the topics we'll cover.

All the readings can be found on the library reading list which is super extensive & includes a lot of "extra reading that I just think is interesting" as well as "readings students sent me in previous years that I like" so knock yourselves out!



<http://readinglists.ucl.ac.uk/lists/AE3C6A9A-D19C-9757-B44C-5499CFD9098A.html>

I've only listed the essential readings below.

Essential lecture readings

Week 1: Introduction & Distributive Social Justice

1. Jasanoff, Sheila (2007). Bhopal's trials of knowledge and ignorance. *Isis*, 98, 344-350.
2. Lorde, Audre (2007/1984). 'Age, Race, Class and Sex: Women Redefining Difference', pp. 114-123, in her book *Sister Outsider*, New York: Crossing Press.
3. Rawls, John (1971). *A Theory of Justice*. Cambridge, MA: Harvard University Press. Chapter 1, pp. 3-53

Week 2: Relational Social Justice

4. Fraser, Nancy. (2003). Social justice in the age of identity politics: Redistribution, recognition, and participation. In N. Fraser & A. Honneth (Eds.), *Redistribution or recognition? A political-philosophical exchange* (pp. 7-109). London and New York: Verso.
5. McKittrick, Katherine (2014). Mathematics Black Life. *The Black Scholar*, 44(2), 16-28.
6. Medin, Doug, L., & Bang, Megan. (2014). *Who's Asking? Native science, western science, and science education*. Cambridge, MA and London: The MIT Press. Chapter 5: Science reflects who does it, pp. 69-83 (this whole book is great!)

Week 3: Oppression, Social Justice & Identity

7. Young, Iris Marion (1990). *Justice and the politics of difference*. Princeton: Princeton University Press. Chapter 2, pp. 39-65.
8. Sharpe, Christina (2016). "The Weather". Pp. 102-134 in *In the Wake: On Blackness and Being*. Duke University Press: Durham and London.
9. Dawson, Emily (2017). Social justice and out-of-school science learning: Exploring equity in science television, science clubs and maker spaces. *Science Education*, 101(4), 539-547. (VERY SHORT!)

Week 4: Identities and performances

10. Hall, Stuart. (1996). Who needs 'Identity'? In S. Hall & P. Du Gay (Eds.), *Questions of cultural identity* (pp. 1-19). London, Thousand Oaks and New Delhi: Sage..

OR

11. Gee, James Paul (2000). Identity as an Analytic Lens for Research in Education. *Review of Research in Education*, 25, 99-125.

AND THEN

12. Dawson, Emily (2019). 'Chapter 4: No "taste" For Science', pp. 68-88 in *Equity, Exclusion & Everyday Science Learning: The Experiences of Minoritised Groups*. London: Routledge. [CHAPTER 5 'FEELING EXCLUDED' WOULD ALSO BE RELEVANT IF YOU ARE INTERESTED!]

Week 5: Gender

13. Schiebinger, Londa (2007). Getting more women into science: Knowledge issues. *Harvard Journal of Law and Gender*, 30, 365-378.
14. Ong, Maria, Wright, Carol, Espinosa, Lorelle L, & Orfield, G. (2011). Inside the double bind: A synthesis of empirical research. *Harvard Educational Review*, 81(2), 172-390.

Week 6: 'Race'/Ethnicity

15. hooks, bell (1992). *Black looks: Race and representation*. Boston: South End Press. Chapter 2: Eating the Other: Desire & Resistance. Pp. 21-39
16. Bhopal, Kalwant (2018). Chapter 8: 'Racial inequalities in the labour market' in her book, *White Privilege: The Myth of a Post-Racial Society*. Bristol & Chicago: Policy Press.
17. Benjamin, Ruha. (2019). "Engineered Inequality: Are Robots Racist?". Pp. 49 – 76 in *Race After Technology: Abolitionist Tools for the New Jim Crow*. Polity Press: Cambridge & Medford, MA. [The whole book is also very relevant!]

Week 7: Social Class

18. Archer, Louise, Dawson, Emily, DeWitt, Jen, Seakins, Amy, & Wong, Billy (2015). "Science capital": A conceptual, methodological, and empirical argument for extending bourdieusian notions of capital beyond the arts. *Journal of Research in Science Teaching*, 52, 922-948.
19. Mullan, K., & Wajcman, Judy (2017). Have mobile devices changed working patterns in the 21st century? A time-diary analysis of work extension in the UK. *Work, Employment and Society, Online First*, 1-18.
20. Eubanks, Virginia (2018). Chapter 1: From Poorhouse to Database. Pp. 14 – 38 in *Automating Inequality: How high-tech tools profile, police and punish the poor*. Picador. New York.

Week 8: Kaleidoscopic intersections

21. Hill Collins, Patricia & Bilge, Sirma. (2016) 'Getting the History of Intersectionality Straight?', pp. 63 – 88, in their book, *Intersectionality*. Cambridge: Polity Press.
22. Nash, Jennifer C. (2008). Re-Thinking Intersectionality. *Feminist Review*, 89(1), 1-15.
23. Moraga, Cherrie (2015/1981). La Güera. Pp. 22 – 29, in Cherrie Moraga & Gloria Anzaldúa (Eds.), *This bridge called my back* (pp. 68-72). Albany: State of New York University Press.

Week 9: OPEN WEEK

24. To be discussed & agreed in class
25. To be discussed & agreed in class

Week 10: Conclusions OR what are you going to do about it?

- 26.** hooks, bell (1994). *Teaching to transgress: Education as the practice of freedom*. London and New York: Routledge. Chapter 2: A Revolution of Values, pp. 23-34.
- 27.** Joseph-Salisbury, Remi (2018). Chapter 5: Confronting my duty as an academic: We should all be activists. Pp. 44-55 in Johnson, Azeezat, Joseph-Salisbury, Remi & Kamunge, Beth (Eds). *The Fire Now. Anti-Racist Scholarship in Times of Explicit Racial Violence*. London: Zed Books.