

Universidade de Brasília – Departamento de Sociologia

Programa de Pós-Graduação em Sociologia

Tópicos Especiais em Ciência e Tecnologia

1º Semestre de 2016

Professores: Luis Reyes-Galindo (Professor Visitante da Cardiff University) e Tiago Ribeiro Duarte

Programa de curso

Objetivos

O objetivo deste curso é apresentar e debater temas contemporâneos dos Estudos Sociais da Ciência e Tecnologia (ESCT) focando particularmente nas seguintes temáticas:

- . A interface entre ciência e políticas públicas
- . Expertise e conhecimento leigo na formulação de políticas públicas
- . Entendimento público da ciência e tecnologia
- . Participação pública na formulação de políticas de ciência e tecnologia
- . Ciência aberta, ciência cidadã e conhecimentos indígenas
- . Estudos pós-coloniais sobre ciência e tecnologia
- . Ciência, tecnologia e políticas públicas no Sul Global

A partir destas temáticas, será feito um esforço para pensar a relação entre ciência, políticas públicas e o público a partir de teorias e estudos de caso advindos do Norte Global assim como de problematizar a produção acadêmica originária de países do Norte utilizando teorias pós-coloniais e casos empíricos ocorridos no Sul Global.

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Avaliação

O curso será avaliado por meio de um artigo no qual os alunos e alunas deverão trabalhar de forma crítica algum dos temas debatidos ao longo do curso. O artigo poderá ter um caráter teórico ou analisar algum caso empírico. Os alunos e alunas deverão utilizar ao menos três textos estudados na disciplina, além de procurar bibliografia complementar em periódicos nacionais e internacionais e em livros especializados no tema do curso. Alguns periódicos que devem ser consultados:

Social Studies of Science
Science, Technology and Human Values
Public Understanding of Science
Science Communication
Science and Public Policy
Science, Technology and Society
Postcolonial Studies

Conteúdo

Aula 1

Apresentação do curso

Aula 2

A co-produção entre ciência e ordem social

Jasanoff, S. (2004) *States of Knowledge: The co-production of science and social order*. London and New York: Routledge. Caps. 1, 2, 3, 9 e 14

Leituras complementares:

Bijker, W. (2003). The need for public intellectuals: A space for STS. *Science, Technology, & Human Values*, 28 (4): 443-450..

Brown, M. N. (2015). Politicizing science: Conceptions of politics in science and technology studies. *Social Studies of Science*, 45(1): 3–30.

Campbell, N. D. (2005). Suspect technologies: scrutinizing the intersection of science, technology, and policy. *Science, Technology & Human Values*, 30(3): 374-402.

Macnaghten, P., Kearnes, M. Wynne, B. (2005). Nanotechnology, governance, and public deliberation: What role for the social sciences? *Science Communication*, 27 (2): 1-24.

Sismondo S (2008) Science and technology studies and an engaged program. In: Hackett EJ, Amsterdamska O, Lynch M and Wajcman J (eds) *The Handbook of Science and Technology Studies*, third edition. Cambridge, MA: MIT Press: 13-31.

Aula 3

A construção social da expertise

Hilgartner, S. (2000) *Science on Stage: Expert Advice as Public Drama*. Stanford: Stanford University Press. Caps. 1 e 2.

Jasanoff, S. (1995) *Science at the Bar: law, science, and technology in America*. Cambridge, Massachusetts, and London, England: Harvard University Press. Caps. 1, 2 e 3.

Aula 4

O entendimento público da ciência e tecnologia

Hilgartner, S. (1990) “The Dominant View of Popularization: Conceptual Problems, Political Uses”. In: *Social Studies of Science*, 20: 519-539.

Wynne, B. (1992) “Misunderstood misunderstanding: social identities and public uptake of science”. In: *Public understanding of Science*, 1(3): 281-304.

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

Leituras complementares:

Fonseca, P. F., & Pereira, T. S. (2014). The governance of nanotechnology in the Brazilian context: Entangling approaches. *Technology in Society*, 37: 16-27.

Durant, D. (2008). Accounting for expertise: Wynne and the autonomy of the lay public actor. *Public Understanding of Science*, 17(1): 5-20.

Wynne, B. (2014) “Elefantes nas salas” onde os públicos encontram a “ciência”? Uma resposta a Darrin Durant, “Refletindo sobre a expertise: Wynne e a autonomia do público leigo”. In: *Antropolítica*, 36(1): 83-110.

Aula 5

Collins e Evans e a Terceira onda de estudos de ciência

Collins, H. E Evans, R. (2002) “The Third Wave of Science Studies: Studies of Expertise and Experience”. In: *Social Studies of Science*, 32(2): 235-96.

Collins, H. E Evans, R. (2003) “King Canute Meets the Beach Boys”. *Social Studies of Science* 33(3): 435-452.

Jasanoff, S. (2003). Breaking the Waves in Science Studies: Comment on H.M. Collins and Robert Evans, ‘The Third Wave of Science Studies’. *Social Studies of Science* 33(3): 389-400.

Rip, A. (2003). Constructing Expertise: In a Third Wave of Science Studies? *Social Studies of Science* 33(3): 419-434.

Wynne, B. (2003). Seasick on the Third Wave? Subverting the Hegemony of Propositionalism: Response to Collins & Evans (2002). *Social Studies of Science* 33(3): 401-417.

Aula 6

Exercícios de participação pública em ciência e tecnologia

Callon, M., Lascoumes, P. e Barthe, Y. (2001) *Acting in an Uncertain World: An Essay on Technical Democracy*. Cambridge, Massachusetts, and London, England: The MIT Press.

Vessuri, H. (2003). Science, politics, and democratic participation in policy-making: a Latin American view. *Technology in Society*, 25(2), 263-273.

Leituras Complementares

Andersen, I. Jæger, B. (1999) “Scenario workshops and consensus conferences: towards more democratic decision-making”. In: *Science and Public Policy*, 26(5): 331–340.

Brandt, M. (2014). Zapatista corn: A case study in biocultural innovation. *Social Studies of Science*, 44(6): 874-900.

Bribois, B.W. (2014). Epidemiology and ‘developing countries’: Writing pesticides, poverty and political engagement in Latin America. *Social Studies of Science*, 44(4): 600–624.

Ericson, J. A. (2006). A participatory approach to conservation in the Calakmul Biosphere Reserve, Campeche, Mexico. *Landscape and Urban Planning*, 74(3): 242-266.

Irwin, A. *Ciência Cidadã: Um estudo das pessoas, especialização e desenvolvimento sustentável*.

Rowe, G., Marsh, R. e Frewer, L. (2004) "Evaluation of a Deliberative Conference". In: *Science, Technology, & Human Values*, 29(1): 88-121.

Aula 8

Latour, as política da natureza e o parlamento das coisas

Latour, B. (2004) *Políticas da natureza: como fazer ciência na democracia*. Bauru: Edusc.

Leituras complementares

Callon, M. "Some Elements of a Sociology of Translation". In: J. Law, *Power, action and belief: a new sociology of knowledge?*

Latour, B. (2000). *Jamais Fomos Modernos: ensaio de antropologia simétrica*. Rio de Janeiro: Ed. 34.

Latour, B. (2001) *A esperança de pandora*. Bauru: EDUSC.

Latour, B. (2012) *Reagregando o Social*. Salvador: Editora UFBA; Bauru, Sao Paulo: Edusc.

Aula 9

O giro ontológico nos estudos de ciência e tecnologia

Artigos do dossiê "A Turn to Ontology in Science and Technology Studies?" publicado no volume 43, número 3, do periódico *Social Studies of Science* organizado por Steve Woolgar e Javier Lezaun.

Aula 10

Ciência Aberta e Acesso Aberto

Delfanti, A. (2013) *Biohackers: The politics of open Science*. London: Pluto Press.

Suber, P. (202). *Open Access*. The MIT Press.

https://mitpress.mit.edu/sites/default/files/9780262517638_Open_Access_PDF_Version.pdf

Poynder, R. (2012) "The Finch Report and its implications for the developing world".

<http://poynder.blogspot.co.uk/2012/07/the-finch-report-and-its-implications.html>

The Guardian: Open Acces 2015.

<http://www.theguardian.com/higher-education-network/open-access>

Business, Innovation and Skills Committee - Fifth Report on Open Access. House of Commons. 2013.

<http://www.publications.parliament.uk/pa/cm201314/cmselect/cmbis/99/9902.htm>

Sociology of Science and Open Access blog.

<http://blogs.cardiff.ac.uk/luisreyes/>

Aula 11

Ciência cidadã e conhecimentos indígenas

Agrawal, A. (1995) “Dismantling the Divide Between Indigenous and Scientific Knowledge”. *Development and Change*, 26(3): 413-439.

Harding, S. (1994). ‘Is Science Multicultural? Challenges, Resources, Opportunities, Uncertainties’, *Configurations*, 2: 301-330.

Leach, M. e Fairhead, J. (2002) “Manners of contestation: “citizen science” and “indigenous knowledge” in West Africa and the Caribbean”. *International Social Science Journal*, 54(173): 299–311,

Lin, W. Y., & Law, J. (2014). A correlative STS: Lessons from a Chinese medical practice. *Social Studies of Science*, 44(6): 801-824.

Riesch, H. e Potter, C. (2013) “Citizen science as seen by scientists: Methodological, epistemological and ethical dimensions”. *Public Understanding of Science*, 23(1): 107–120.

Aula 12

Estudos pós-coloniais em ciência, tecnologia e sociedade

Anderson, W. (2002) “Introduction: Postcolonial Technoscience”. *Social Studies of Science*, December 2002; 32 (5-6): 643-658.

Anderson W (2009) From subjugated knowledge to conjugated subjects: Science and globalisation, or postcolonial studies of science? *Postcolonial Studies*, 12(4): 389–400.

Adams, V. (2002) “Randomized Controlled Crime: Postcolonial Sciences in Alternative Medicine Research”. *Social Studies of Science*, December 2002; 32 (5-6): 659-690.

Dedijer, S (1963). Underdeveloped Science in Underdeveloped Countries. *Minerva*, 2(1): 61–81.

Drori, G. S. (1993). The relationship between science, technology and the economy in lesser developed countries. *Social Studies of Science*, 23(1): pp. 201-215.

Hetch, G. (2002) “Rupture-Talk in the Nuclear Age: Conjugating Colonial Power in Africa”. *Social Studies of Science*, December 2002; 32 (5-6): 691-727.

Veran, H. (2002) “A Postcolonial Moment in Science Studies: Alternative Firing Regimes of Environmental Scientists and Aboriginal Landowners”. *Social Studies of Science*, December 2002; 32 (5-6): 729-762.

Aula 13

Estudos Pós-coloniais em ciência, tecnologia e sociedade (Parte 2)

Artigos do dossiê “Voices from within and Outside the South—Defying STS Epistemologies, Boundaries, and Theories” publicado no volume 39, número 6, do periódico *Science, Technology & Human Values*, organizado por Raoni Rajão, Ricardo B. Duque and Rahul De’.

Aula 14

Ciência, políticas públicas e o público no Sul Global

Bonneuil, C., Foyer, J., Wynne, B. (2014). Genetic fallout in biocultural landscapes: Molecular imperialism and the cultural politics of (not) seeing transgenes in Mexico. *Social Studies of Science*, 44(6): 901–929.

Lahsen, M. (2004). “Transnational locals: Brazilian Experiences of the Climate Regime”. In: Jasanoff, S. & Martello, M. (orgs.), *Earthly politics, worldly knowledge: Local and global in environmental politics*. MIT Press: Cambridge, pp.151–72.

Luna, M. E. Morales & Collazo Reyes, F. (2002). El síndrome ‘Big Science’ y su influencia en el proceso de la maduración de la física Mexicana de partículas elementales. *Rev. Esp. Doc. Cient.*, 25(4): 409-420.

Mathews, A. S. (2014). Scandals, audits, and fictions: Linking climate change to Mexican forests. *Social Studies of Science*, 44(1): 82-108.

Morris, S. D., & Klesner, J. L. (2010). Corruption and trust: Theoretical considerations and evidence from Mexico. *Comparative Political Studies*, 43(10): 1258-1285.

Reyes-Galindo, L. (2012) “Expertise side-lined: science, fraud and bogus molecular detectors in the Mexican ‘War on Drugs. Paper submitted to the SEESHOP6 (Studies of Expertise and Experience) Workshop Yearbook, organised by the *Centre For The Study Of Knowledge Expertise Science* at Cardiff University, 8-10 June 2012.

Rusike, E. () “Exploring food and farming futures in Zimbabwe: a citizens’ jury and scenario workshop experiment”. In: Leach, M., Scoones, I., & Wynne, B. (orgs). *Science and citizens: Globalization and the challenge of engagement*. London, New York: Zed Books.

Sagasti, F. R. (1973). Underdevelopment, science and technology: the point of view of the underdeveloped countries. *Social Studies of Science*, 3(1), 47-59.

Schoijet, M. & Worthington, R. (1993). Globalization of science and repression of scientists in Mexico. *Science, Technology, & Human Values*, 18(2): 209-230.

Taddei, R. e Gamboggi, A. (2011) “Marcas de uma democratização diluída: Modernidade, desigualdade e participação na Gestão de águas no ceará. In: *Revista de ciências sociais, Fortaleza*, 42(2): 8 – 33.

Aula 15

Genética e Raça na América Latina

Dossiê intitulado “Genomic Research, Publics and Experts in Latin America—Nation, Race and Body” publicado no periódico *Social Studies of Science* em dezembro de 2016 e organizado por Adam Hedgecoe, Peter Wade, Carlos López-Beltrán and Ricardo Ventura Santos.

Aula 16

Apresentação e discussão das propostas de trabalho de final de curso