**Knowledge, Human Values, and Anti-Science**

**Term 2 2023/2024**

**Wednesdays, 10:35-12:25, Location: LT7.2/Queens**

**Lecturer:** Dr Celso Neto (C.Alves-Neto@exeter.ac.uk)

**Office Hours:** Mondays12-14 (online or in person) or by Appointment

**Office:** 1st Floor Byrne House, St. Germain Road

**Office Hours Zoom Info:**

<https://Universityofexeter.zoom.us/j/99856968975?pwd=NGZFdml5Z0J2UWU5eW52WG9ldnVNQT09> Meeting ID: 998 5696 8975 Password: 088289

# Course Description

Can knowledge be politically neutral? Can it state facts that are completely independent from our political and moral views? In this module, you will examine these and related questions about how politics and morality influence what we take to be “true” or “false”. You will also consider the motivations and merits of anti-science movements, such as anti-vaxxers and climate change denialists. Are these movements politically biased? Are they correctly denouncing science (and thus knowledge) as rigged? To discuss these issues, we draw on different scholarly traditions, such as feminist philosophy and sociology of science. The module requires no background in science, epistemology, ethics, or politics. The module is highly recommended for interdisciplinary pathways.

# Assessments

# Formative

* *Essay Plan*: 500 words (formative, 0% of the final mark). Deadline: 15th March via e-mail.

**Summative**

* Blog Post: 30% of Final Mark. Deadline: Week10 - 22nd March. Details: online submission, 1000 words
* Essay: 70% of Final Mark. Final Deadline: May – 6th May at 2pm. Details: online submission, 2000 words (\*please read below about the extra-point activity)

Blog Post

The Blog Post involves 2 components. First, choose 4 weeks of the term and submit questions about the reading of those weeks via ELE2. Each question should be submitted a day prior to the class when we discuss that reading. Second, develop one of the submitted questions into a short critical commentary. Guidelines on ELE2.

Essays

Essays must follow the structure of the essay plan and cannot be on the same topic as your short critical commentary. Essay will be evaluated based on argumentation, structure, presentation, relevance, and originality. Guidelines on ELE2.

\* Extra-Point Activity: you must bring to class a first draft of the essay (no less than 1500 words). Students will give feedback on your draft, and you will give feedback on other drafts.

# Topics and Readings

# Week 1: Introduction

# *No required readings*

# Week 2: Value Judgments

# Required: Ward, Z. B. (2021). On value-laden science. *Studies in History and Philosophy of Science Part A*, *85*, 54-62.

* Additional: Elliott, K. C. (2022). *Values in science*. Cambridge University Press. Elements Chapter 2

# Week 3: Facts and Values

# Required: Alexandrova, A. (2018). Can the science of well-being be objective?. *the British Journal for the Philosophy of Science*.

* Additional: Dupré, J. (2007). Fact and value. In Kincaid, H., Dupré, J., & Wylie, A. (Eds.). (2007). *Value-free science: ideals and illusions?*. Oxford University Press.

# Week 4: Objectivity

# Required: Koskinen, I. (2020). Defending a risk account of scientific objectivity. *The British Journal for the Philosophy of Science*.

# Additional: Longino, H. E. (1988). Science, objectivity, and feminist values.

# Week 5: Science and Democracy

# Required: Hilligardt, H. (2023). Partisan science and the democratic legitimacy ideal. *Synthese*, *202*(5), 135.

# Additional: Lusk, G. (2021). Does democracy require value-neutral science? Analyzing the legitimacy of scientific information in the political sphere. *Studies in History and Philosophy of Science Part A*, *90*, 102-110.

# Week 6: Gender, Sex, and Feminist Science (Guest Lecturer: Dr. Rose Trappes)

# Required: Richardson, Sarah S. 2013. *Save the Males! in Sex Itself: The Search for Male and Female in the Human Genome.* Chicago: University of Chicago Press, 149-176. https://doi.org/10.7208/chicago/9780226084718.001.0001.

# Additional: Gowaty, Patricia Adair. 2003. *‘Sexual Natures: How Feminism Changed Evolutionary Biology’.* Signs: Journal of Women in Culture and Society 28 (3): 901–21. https://doi.org/10.1086/345324.

# Week 7: Trust in Science

# Required: Contessa, G. (2023). It takes a village to trust science: towards a (thoroughly) social approach to public trust in science. *Erkenntnis*, *88*(7), 2941-2966.

# Additional: Oreskes, N. (2015). Should We Trust Science? Perspectives from the History and Philosophy of Science. *Public Distinguished Lecture Series*.

# Week 8: Climate Change I

# Required: Intemann, K. (2017). Who needs consensus anyway? Addressing manufactured doubt and increasing public trust in climate science. *Public Affairs Quarterly*, *31*(3), 189-208.

# Additional: Odenbaugh, J. (2012). Climate, consensus, and contrarians. *The environment: Philosophy, science, and ethics*, 137-150.

# Week 9: Climate Change II

# Required: Kovaka, K. (2021). Climate change denial and beliefs about science. *Synthese*, *198*(3), 2355-2374.

# Additional: Kemp, J., Milne, R., & Reay, D. S. (2010). Sceptics and deniers of climate change not to be confused. *Nature*, *464*(7289), 673-673.

# Week 10: Social Responsibility

* Required: Intemann, K., & de Melo-Martín, I. (2014). Are there limits to scientists’ obligations to seek and engage dissenters?. *Synthese*, *191*, 2751-2765.
* Additional: Oreskes, N. (2020). What is the social responsibility of climate scientists?. *Daedalus*, *149*(4), 33-45.

# Week 11: Feedback Session

* *No required Readings. Please bring your essay to class. Instructions available on ELE 2.*

# Suggested Reading

All students must read the texts listed above. The following introductory books and edited volume are highly recommended:

* Elliott, K. C. (2022). *Values in science*. Cambridge University Press.
* Oreskes, N., & Conway, E. M. (2011). *Merchants of doubt: How a handful of scientists obscured the truth on issues from tobacco smoke to global warming*. Bloomsbury Publishing USA.
* de Melo-Martín, I., & Intemann, K. (2018). *The fight against doubt: How to bridge the gap between scientists and the public*. Oxford University Press.
* Kincaid, H., Dupré, J., & Wylie, A. (Eds.). (2007). *Value-free science: ideals and illusions?*. Oxford University Press.

# Online Resources

* **SEP - Stanford Encyclopedia of Philosophy** (available through electronic library).
* **The Philosopher's Index**, searchable bibliography (available through electronic library**)**.
* **JSTOR**, searchable repository of scholarly articles (available through electronic library**)**
* **PHILPAPERS,** searchable repository of philosophical articles (online)

# Plagiarism and Misconducts

Cheating or plagiarism on any assignment or examination is regarded as an extremely serious academic offense. These and other acts of misconduct will not be tolerated by the instructor. Suspicious cases of misconduct will lead to an investigation and adequate penalty according to the Teaching Quality Assurance Manual ([12 - Academic conduct and practice - Teaching Quality Assurance Manual - University of Exeter](https://as.exeter.ac.uk/academic-policy-standards/tqa-manual/aph/managingacademicmisconduct/)).