

PHL2011A

Philosophy of Nature I

Spring Term 2022

Lectures: Mondays 12:35-13:55 (Hatherly Labs B10)

Module code: PHL2011A

Module title: Philosophy of Nature – 1

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

Office Hours: Online drop in (Thursdays 13-14/Fridays 11-12) or by Appointment

Tutorials: Tuesdays (Fortnightly) - Joseph Crickmore J.Crickmore@exeter.ac.uk

Course Description

This module introduces you to the Philosophy of Nature as a fundamental concern of philosophy. It provides an overarching historical reconstruction of the different phases of the Western understanding of the relation of humans to Nature – from early Greek thought to current ecological concern. It thus discusses not only the metaphysical conceptions of Nature, but also the normative, ethical implications for the contemporary understanding of ourselves in relation to Nature. Students with an interest in philosophy of science and metaphysics will enjoy this module as well as those who have interdisciplinary interests in the aesthetic, ethical, and ideological use of appeals to Nature in Western culture.

Learning Outcomes

- Understand the history, basic concepts, and problems in philosophy of nature
- Critically examine views and arguments in philosophy of nature, as well as their relation to ethics
- Identify research problems in philosophy of nature and conduct research on them
- Write essays presenting your own views cogently and convincingly

Pre-requisite

PHL1002 ‘Knowledge and Reality’

Topics of the Course

1. What is Nature? Introduction
2. Aristotle’s Philosophy of Nature
3. Mechanicism and Organicism
4. Darwinism

5. Process Ontology
6. Human Nature
7. Mind and World
8. Ecology and Feminism
9. Nature in Asian Philosophy
10. The Gaia Hypothesis
11. Summary

Assessment

- *Written Exam*: 90-minutes (40% of the final mark).
- *Essay*: 2000 words (60% of the final mark). Deadline: March 10th (Week 8)

The written exam will be marked for clarity, accuracy, depth, and scope of knowledge. Sample questions will be distributed for study purposes before the exam.

Essays will be marked for clarity of presentation and argument, level of detail and material used, and originality of ideas. Guidelines for writing philosophical essays will be available on this module's ELE page.

NOTICE: An essay plan of 500 words for formative assessment and oral feedback is due two weeks in advance (Week 6). *Students are highly encouraged to meet with the instructor during office hours (or by appointment) to discuss the essay plan.*

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](#)).

Schedule and Required Readings

Week 2: Aristotle's Philosophy of Nature

- Aristotle *Physics* Book I: §7; Book 2: §3 and §8. In Barnes, J. (1991) *The Complete Works of Aristotle*. Princeton University Press.
- Aristotle *Metaphysics* Book VII: §1-3 and §6. In Barnes, J. (1991) *The Complete Works of Aristotle*. Princeton University Press.

Week 3: Mechanicism and Organicism

- Descartes (2006) *Discourse on The Method* Part 5 Oxford University Press
- Needham, J. (1928). Organicism in biology. *Philosophy*, 3(9), 29-40.
- Nagel, E. (1951). Mechanistic explanation and organismic biology. *Philosophy and Phenomenological Research*, 11(3), 327-338.

Week 4: Darwinism

- Darwin C (1859). *Origin of Species*. Chapter XIV. Oxford University Press
- Sober, E. (1980). Evolution, population thinking, and essentialism. *Philosophy of Science*, 47(3), 350-383.

Week 5: Process Ontology

- Rescher, N. (1996) Introduction, Historical Background, Basic Ideas, in: *Process Metaphysics: An Introduction to Process Philosophy*.
- Dupré, J. (2020). Life as process. *Epistemology & Philosophy of Science*, 57(2), 96-113.

Week 6: Human Nature

- Lewens Tim (2012). Human Nature: The Very Idea. *Philosophy & Technology*, 25(4): 459–474.
- Kronfeldner, Maria, Neil Roughley, and Georg Toepfer (2014) Recent Work on Human Nature: Beyond Traditional Essences. *Philosophy Compass*. 9(9): 642–652.

Week 7: Mind and World

- Bennett, Karen (2007). Mental Causation. *Philosophy Compass* 2 (2):316-337.
- Gibb, Sophie C. (2014). Mental Causation. *Analysis* 74 (2):327-338.

Week 8: Nature, Ecology and Feminism

- Merchant, C., 1980, Nature as Female in: *The Death of Nature: Women, Ecology and the Scientific Revolution*, San Francisco: Harper and Row
- Warren, K. J. (1990). The power and the promise of ecological feminism. *Environmental ethics*, 12(2), 125-146.

Week 9: Nature in Asian Philosophy

- Zhaungzi (2006) Autumn Floods. In Watson, B. *The Complete Works of Zhuangzi*. Columbia University Press
- Mo-Tzu (2009) Heaven's Intent I, II, III. In Johnston. *The Mozi: Complete Translation*. Chinese University Press.

Week 10: The Gaia Hypothesis

- Lovelock, J. (1989). Geophysiology, a science of Gaia. *Review of Geophysics*
- Godfrey-Smith. (2014). *The Ant and the Steam Engine*. London Review of Books

Suggested Reading

All students must read the texts listed above. It is also highly recommended that you read the following books:

- Coates, P. (1998) *Nature: Western Attitudes since Ancient Times*

- Collingwood, R.G. (1945). *The Idea of Nature*
- Dear, P. (2006) *The Intelligibility of Nature: How Science Makes Sense of the World*
- Koyré, A. (1957) *From the Closed World to the Infinite Universe*
- Merchant, C. (1980) *The Death of Nature: Women, Ecology, and the Scientific Revolution*
- Sterelny, K. and Griffiths, P. E. (1999) *Sex and Death*

The following readings are complementary to the weekly mandatory readings:

Week 1:

Collingwood, R. G. (1934/44) Chapter 1: ‘Introduction’, in *The Idea of Nature*.
 Coates, P. (1998) ‘The Natures of Nature’, in *Nature: Western Attitudes since Ancient Times*
 Dear, P. (2006). Introduction. In *The Intelligibility of Nature: How Science Makes Sense of the World*.

Week 2:

Walsh, D. M. (2008). Teleology. In *The Oxford handbook of philosophy of biology*.
 Austin, C. J. (2017). Aristotelian essentialism: essence in the age of evolution. *Synthese*, 194(7), 2539-2556.

Week 3:

Dear, P. (2006) ‘Chapter 1: The Mechanical Universe from Galileo to Newton’, in: *The Intelligibility of Nature: How Science Makes Sense of the World*.
 Gilbert, S. F., & Sarkar, S. (2000). Embracing complexity: Organicism for the 21st century. *Developmental Dynamics*, 219, 1–9.

Week 4:

Ruse, M. (2000). Teleology: yesterday, today, and tomorrow?. *Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences*, 31(1), 213-232.
 Sober, E. (2011). Evolution without naturalism. *Oxford studies in philosophy of religion*, 3, 187-221.

Week 5:

Rescher, N. (1996) ‘Historical Background’ in: *Process Metaphysics: An Introduction to Process Philosophy*.
 Dupré, J., & Nicholson, D. J. (2018). Towards a processual philosophy of biology. *A manifesto for a processual philosophy of biology*.

Week 6:

Hull, D. L. (1986, January). On human nature. In *PSA: Proceedings of the biennial meeting of the philosophy of science association* (Vol. 1986, No. 2, pp. 3-13). Philosophy of Science Association.

Kitcher, P (1993). Four ways of 'Biologizing' Ethics. In Ruse M (ed). *Philosophy after Darwin*. Princeton University.

Week 7:

Kim, J. (2001/5) 'Mental Causation and Consciousness: Our Two Mind-body Problems', in: *Physicalism, or Something Near Enough*.

Papineau, D. (2009). The causal closure of the physical and naturalism. In *The Oxford handbook of philosophy of mind*.

Week 8:

Gaard, G. and L. Gruen, 2005, "Ecofeminism: Toward Global Justice and Planetary Health", in Zimmerman et al. 2005: 155–157.

Cuomo, C. J. (1992). Unravelling the problems in ecofeminism. *Environmental Ethics*, 14(4), 351-363.

Week 9:

Cooper, D. (2014). Daoism, Nature and Humanity. *Royal Institute of Philosophy Supplement*, 74, 95-108.

Fraser, Chris, "Mohism", *The Stanford Encyclopedia of Philosophy* (Winter 2020 Edition), URL = <<https://plato.stanford.edu/archives/win2020/entries/mohism/>>.

Week 10:

Dawkins, R. (1982). *Extended Phenotype*. Oxford University Press.

Lenton, T. M., & Latour, B. (2018). Gaia 2.0. *Science*, 361(6407), 1066-1068.

Doolittle, F (2020) Is the Earth an Organism? *Aeon Magazine* online (free access)

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)