PH3A9-15 Philosophy of Nature

20/21

Department

Philosophy

Level

Undergraduate Level 3

Module leader

Andrew Cooper

Credit value

15

Module duration

10 weeks

Assessment

20% coursework, 80% exam

Study location

University of Warwick main campus, Coventry

Description

Introductory description

The climate emergency invites us to rethink our understanding of nature. To what extent can we understand and control our environment? What does beauty (and ugliness) tell us about nature's value? In what sense can the regularity of natural events be described as 'lawful'? Does it make sense to hope when our world is warming? This module introduces the concept of nature as a fundamental and ongoing matter of philosophical reflection. From the Presocratic poets to ecofeminism, it provides a critical reconstruction of key attempts in western philosophy to interrogate and alter our understanding of nature. Along the way we will examine the political and normative implications of the philosophy of nature, and critically reflect on our own presuppositions about the natural world.

Module aims

By the end of the module, students will be able to:

- *understand key phases in the western tradition regarding the philosophy of nature,
- *contextualise and analyse historical texts,
- *evaluate the political and normative implications of our thinking about nature,
- *grasp the implications of the philosophy of nature for natural science, philosophy of mind, environmental philosophy and ethics,
- *critically reflect on their own conception of the natural world.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

- 1. The module begins with an overview of the various meanings of 'nature' in the western philosophical tradition. Our first port of call is the shifting meaning of the Greek word 'phusis' in the Presocratic poets, which raises a fundamental question for our module: is our best natural science a comforting veneer over the chaotic powers of nature?
- 2. We then turn to Aristotle's formalisation of the concept of phusis (with some reference to Plato), which denotes a stable ontological ground for scientific investigation. We examine the extent to which Aristotle's doctrine of powers and potentialities is opposed to our mechanistic conception of science, and whether it has explanatory advantages.
- 3. Next we explore Aristotle's immense influence on scholastic philosophy in the work of Aquinas. We consider whether the Christian concept of creation is compatible with Aristotle's theory of generation, and how this creative and yet eclectic fusion establishes the basis of modern science.
- 4. The so-called 'scientific revolution' turns on a fundamental rejection of Aristotelian physics. We examine the work of Descartes and Newton, which aims to replace the Aristotelian doctrine of causal powers with a mechanical conception of natural events. We consider what is gained in the revolution, and what is lost.
- 5. Kant can be seen as combining the Aristotelian tradition with modern physics, imbuing the physical investigation of nature with a dynamic foundation. He sets a challenge for contemporary philosophers of nature: can this combination work?
- 6. Kant's philosophy inspires divergent traditions. This week we follow one of them, Naturphilosophie. The Naturphilosophen discovered in Kant a Romantic vision of nature in which, despite nature's antagonism, the human mind is very much at home.
- 7. This Romantic vision of nature is shattered by Darwin's theory of evolution by natural selection. Or is it? This week we consider the other tradition that follows Kant's work: naturalism, which takes hold in the century following Darwin. We explore the challenges it poses to basic philosophical ideas, including mind, consciousness and value.
- 8. We then examine responses to naturalism in the twentieth century, focusing on Sellars' distinction between the 'manifest' and 'scientific' images we hold of ourselves, and Price's attempt to heal the divide. We consider the extent to which the questions of mind, consciousness and value should be subservient to natural science.
- 9. Finally we examine two movements that challenge the mechanistic conception of nature at the heart of the scientific revolution: ecofeminism, which exposes the masculine narratives of control and domination, and recent calls for an extended conception of the evolutionary process, which grants to language, culture and value a causally significant role.

Learning outcomes

By the end of the module, students should be able to:

- Students will develop a critical understanding of key phases in the western tradition regarding the philosophy of nature.
- Students will acquire the capacity to contextualise and analyse historical texts.

- Students will be able to evaluate the political and normative implications of our thinking about nature.
- Students will acquire the ability to reflect on their own conception of the natural world.

Indicative reading list

Readings by week:

- 1. N/A
- 2. Aristotle Physics I-III
- 3. Aquinas The Principles of Nature I-II, De Potentia Dei 4.2, Summa Theologica I.118.1-2
- 4. Descartes and Newton Descartes, Discourse on Method IV-V; Newton, 'Preface' to Principia + General Scholium
- 5. Kant Kant, Prolegomena §§36-38; Kant, Critique of the Power of Judgment Introduction §§I-V
- 6. Naturphilosophie Spinoza, Ethics Part I (Def., Axioms, Prop. XXIX); Schelling, Introduction to the Outline §§I-VI
- 7. Darwin and naturalism Darwin, The Origins of the Species ch. 4; Dewey, Experience and Nature ch. 1
- 8. Responses to naturalism Sellars, 'Philosophy and the Scientific Image of Man'; Price and Jackson, 'Naturalism and the Fate of the M-Worlds'
- 9. Ecofeminism and the Extended Evolutionary Synthesis Gaard, 'Ecofeminism Revisited'; Laland 'The Extended Evolutionary Synthesis'

General reading:

Collingwood, R. J. 'The Idea of Nature'. Oxford: Oxford University Press, 1945.

Dear, P. 'The Intelligibility of Nature: How Science Makes Sense of the World.' Chicago: University of Chicago Press, 2006.

Feyerabend, P. 'Philosophy of Nature.' Cambridge: Polity, 2016.

Lovejoy, A. O. 'The Great Chain of Being: A Study of the History of an Idea.' Cambridge, MA: Harvard University Press, 1936.

Koyré, A. 'From the Closed World to the Infinite Universe.' Johns Hopkins University Press, 1957.

Subject specific skills

Students will develop their understanding of the central questions, concepts and debates in the philosophy of nature. They will be able to situate various conceptions of nature within the western philosophical tradition, and have a greater appreciation of the diversity of positions regarding the metaphysics of the natural world. Students will refine their ability to discuss in speech and writing the philosophy of nature based on close reading and critical analysis of the set texts and relevant secondary literature. Finally, they will develop the capacity to critically reflect on their own assumptions about nature.

Transferable skills

Students will develop the capacity to analyse explicit and implicit conceptions of nature that underpin natural science, philosophy of mind, environmental philosophy and ethics. They will be

able to contextualise contemporary debates surrounding the climate emergency within an ongoing conversation about the place of human beings in the natural order.

Study

Study time

Type Required

Lectures 9 sessions of 2 hours (12%)
Seminars 8 sessions of 1 hour (5%)

Private study 124 hours (83%)

Total 150 hours

Private study description

Students will prepare for lectures and seminars by detailed and critical readings of the set texts, accompanied by further reading of secondary literature.

Costs

No further costs have been identified for this module.

Assessment

You do not need to pass all assessment components to pass the module.

Students can register for this module without taking any assessment.

Assessment group D

Weighting Study time

Take-home exam 20%

Students will choose one question based on the first part of the module. The assignment will examine (a) their ability to analyse historical texts in their context, and (b) their capacity to critically reflect on our present understanding of nature in light of a historical source.

Online Examination 80%

Students will answer two out of six questions.

• Online examination: No Answerbook required

Feedback on assessment

Take home assignments will receive feedback via moodle. 2 hour exams will receive feedback via final grades.

Past exam papers for PH3A9

Availability

Courses

This module is Optional for:

- UPHA-V700 Undergraduate Philosophy
 - Year 2 of V700 Philosophy
 - Year 2 of V700 Philosophy
 - Year 3 of V700 Philosophy
 - Year 3 of V700 Philosophy
- Year 4 of UPHA-V701 Undergraduate Philosophy (wiith Intercalated year)

This module is Core option list A for:

- UMAA-GV17 Undergraduate Mathematics and Philosophy
 - Year 3 of GV17 Mathematics and Philosophy
 - Year 3 of GV17 Mathematics and Philosophy
 - Year 3 of GV17 Mathematics and Philosophy
- Year 3 of UMAA-GV19 Undergraduate Mathematics and Philosophy with Specialism in Logic and Foundations

This module is Core option list B for:

- UMAA-GV17 Undergraduate Mathematics and Philosophy
 - Year 2 of GV17 Mathematics and Philosophy
 - Year 2 of GV17 Mathematics and Philosophy
 - Year 2 of GV17 Mathematics and Philosophy
- Year 2 of UMAA-GV19 Undergraduate Mathematics and Philosophy with Specialism in Logic and Foundations

This module is Option list A for:

- UPHA-VL78 BA in Philosophy with Psychology
 - Year 2 of VL78 Philosophy with Psychology
 - Year 3 of VL78 Philosophy with Psychology
- Year 4 of UPHA-VL79 BA in Philosophy with Psychology (with Intercalated year)

This module is Option list B for:

- Year 2 of UHIA-V1V5 Undergraduate History and Philosophy
- UPHA-VQ72 Undergraduate Philosophy and Literature
 - Year 2 of VQ72 Philosophy and Literature
 - Year 3 of VQ72 Philosophy and Literature

This module is Option list C for:

- Year 3 of UHIA-V1V5 Undergraduate History and Philosophy
- Year 4 of UHIA-V1V6 Undergraduate History and Philosophy (with Year Abroad)