# PH3A9-15 Philosophy of Nature

## 22/23

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? Are there natural laws? 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 philosophy's history to interrogate and alter our understanding of nature. Along the way we will examine the political and normative implications of how we think about 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 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. We begin with an overview of the various meanings of 'nature' in the philosophical tradition. Our first port of call is the shifting meaning of the Greek word 'phusis' in the Presocratic poets, which raises a basic question for the module: is natural science a vain attempt to control the chaotic powers of nature?
- 2. Next we undertake a comparative study Zhuangzi's Daoist writings on 'tian', which is often translated as 'nature'. We explore the ways in which Zhuangzi discredits the view that nature is delimitable by humans alone, opens a non-anthropocentric account of nature that maintains its mysteriousness.
- 3. 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.
- 4. Next we explore Aristotle's immense influence on scholastic philosophy in the work of Aquinas. We contextualise Aquinas' work in the context of the Islamic tradition of Aristotelianism, and consider whether the Christian doctrine of creation is compatible with Aristotle's theory of generation. Finally, we examine how this fusion established the basis of modern science.
- 5. The so-called 'scientific revolution' turns on the 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.
- 6. This week we examine Kant's ambitious legacy for natural science. Kant combines the Aristotelian tradition with modern physics, imbuing the physical investigation of nature with a dynamic foundation. While this could be viewed as a last-ditched attempt to domesticate nature to the constraints of rationality, Schelling held that Kant opened a Romantic vision of nature in which the human mind, despite nature's antagonism, 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. We consider the extent to which the questions of mind, consciousness and value should be subservient to natural science.
- 9. We conclude with the question of power: has the mechanistic conception of nature at the heart of the scientific revolution been used to control human bodies? We consider how the

concept of nature might be reimagined to deflate fantasies of control and guide a new mode of being in our environment.

#### Learning outcomes

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

- Students will develop a critical understanding of key phases in 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. Zhuangzi The Inner and Outer Chapters
- 3. Aristotle Physics I-III
- 4. Aquinas The Principles of Nature I-II, De Potentia Dei 4.2, Summa Theologica I.118.1-2
- 5. Descartes and Newton Descartes, Discourse on Method IV-V; Newton, 'Preface' to Principia + General Scholium
- 6. Kant and Schelling Kant, Prolegomena §§36-38; Schelling, Introduction to the Outline §§I-VI.
- 7. Darwin and naturalism Darwin, The Origins of the Species ch. 4.
- 8. Responses to naturalism Sellars, 'Philosophy and the Scientific Image of Man'.
- 9. Nature and normativity Spencer, 'Are Biological Races Real?'; Daston, Against Nature.

## Interdisciplinary

This module examines the philosophical foundations of natural science. It will be of interest to students working in STEM subjects, who would like to reflect on the assumptions of their discipline, and to students in the GSD program seeking to gain a philosophical understanding of the issues underpinning the climate emergency.

## International

This module challenges geographical distinctions in philosophy, such as east and west, continental and analytic, by examining literature from a variety of traditions, including the ancient Near East, China, Greek antiquity, medieval Islam and Christianity, modern Europe and contemporary Anglo-American philosophy.

## 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

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

Туре	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 D1

Critical review

Weighting

20%

#### Weighting

#### Study time

Students are required to select a piece of contemporary media in which the concept of nature plays an important role. Using the skills they have gained from the module, students are required to write a critical review that examines the presuppositions that underpin the use of nature, drawing connections to at least one of the topics covered in 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 historical sources.

Online Examination80%Students will answer two out of six questions.

~Platforms - AEP

• Online examination: No Answerbook required

## Feedback on assessment

Critical reviews 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:

- UHIA-V1V8 Undergraduate History and Philosophy (with Year Abroad and a term in Venice)
  - Year 3 of V1V8 History and Philosophy (with Year Abroad and a term in Venice)
  - Year 4 of V1V8 History and Philosophy (with Year Abroad and a term in Venice)
- Year 3 of UHIA-V1V7 Undergraduate History and Philosophy (with a term in Venice)
- 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)
- Year 4 of UPHA-V702 Undergraduate Philosophy (with Work Placement)

This module is Core option list A for:

 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 Core option list C for:

• Year 4 of UMAA-GV19 Undergraduate Mathematics and Philosophy with Specialism in Logic and Foundations

This module is Core option list F for:

- UMAA-GV18 Undergraduate Mathematics and Philosophy with Intercalated Year
  - Year 4 of GV18 Mathematics and Philosophy with Intercalated Year
  - Year 4 of GV18 Mathematics and Philosophy with Intercalated Year

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:

- UPHA-VQ72 Undergraduate Philosophy and Literature
  - Year 2 of VQ72 Philosophy and Literature
  - Year 3 of VQ72 Philosophy and Literature
- Year 4 of UPHA-VQ73 Undergraduate Philosophy and Literature with Intercalated Year

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)

This module is Option list D for:

- UHIA-V1V5 Undergraduate History and Philosophy
  - Year 2 of V1V5 History and Philosophy
  - Year 3 of V1V5 History and Philosophy
- Year 4 of UHIA-V1V6 Undergraduate History and Philosophy (with Year Abroad)
- Year 2 of UHIA-V1V7 Undergraduate History and Philosophy (with a term in Venice)