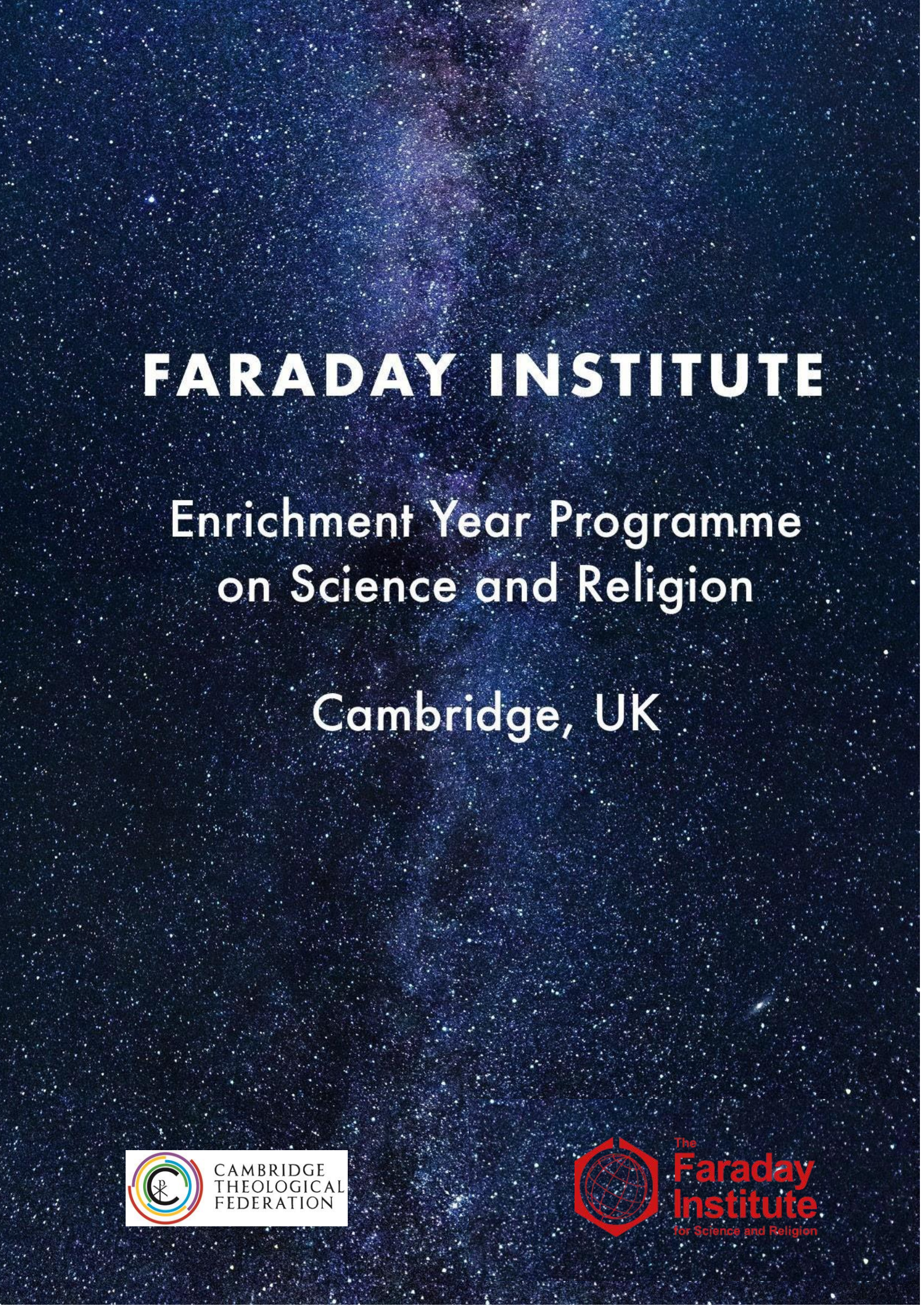
FARADAY INSTITUTE
Enrichment Year Programme
on Science and Religion
Cambridge, UK
CAMBRIDGE
THEOLOGICAL
FEDERATION
The
Faraday
Institute
for Science and Religion

INTRODUCTION

The Faraday Institute for Science and Religion is an educational charity with a Christian ethos based in Cambridge, UK [www.faraday.cam.ac.uk]. As a member of the Cambridge Theological Federation, the Institute is affiliated to the University of Cambridge. Its physical location is within the brand-new Woolf Building which is on the Westminster College campus.

The aims of the Institute are "to advance education in the field of science and religion by carrying out research in all aspects of that subject, publishing the useful results in academic journals and books and improving the public understanding of issues in the field of science and religion by disseminating research results more widely beyond the academic community and through lectures, courses and the publication of other educational resources".

This one-year programme is aimed at providing an enrichment through immersion in the contemporary intellectual dialogue between science and religion. It is a programme of the Cambridge Theological Federation, facilitated by the professional staff of The Faraday Institute and Cambridge University faculty. Students will be accommodated in one of the Cambridge Colleges.

The University of Cambridge is based on a 3-term system for one Academic Year, each term being 8 weeks long. The Faraday Programme will run from 28th August 2023 – 27th May 2024 and will therefore be organised as a two- semester programme spanning one complete Cambridge Academic Year.

THE PROGRAMME

The full programme will last for 10 months – Late August-May (30 weeks of teaching). The programme will offer a tailored educational experience delivered by The Faraday Institute on the subject of science and religion. It will comprise two 15-credit modules:

- An introduction to Science and Religion (Semester 1 – 15credits)
- Topics in Science and Religion (Semester 2 – 15 credits)

making a total of 60 credits.

	Semester 1	**Semester 2**
Modules	An Introduction to Science and Religion (15 credits)	Topics in Science and Religion (15 credits)

The *programme aim* is to enhance and enrich the students' total learning experience and personal development through engagement with the science and religion dialogue in order to

- Sharpen their critical intellectual enquiry
- Engage them in tackling intellectual issues over which there may be divergent views
- Enhance their skills in guided self-directed study
- Through critical self-reflection to develop a greater understanding of others whilst at the same time developing a view of their own
- Enrich their intercultural understanding and experience of global citizenship through being part of the Cambridge University community
- Develop their skills in communication and collaboration

Students will have to demonstrate proficiency in English to a minimum of IELTS level 6 (or equivalent such as English DSE level 5*).

Mode of delivery

Because the group size will be small (3-5 students) most of the teaching and learning will take place via seminars and supervisions rather than formal lectures. This means that the level of teaching and interaction will be intense, but on the other hand there will be a high level of private study. In practice this will have two important outcomes:

1. Students will benefit from more direct engagement with their tutors;
2. Students will develop a high level of independent learning skills – through their guided supervisions.

In addition there will be site visits/ field trips for experiential learning and the placing of taught topics into a broader cultural context.

Students will be assessed by their engagement in seminar presentations and supervisions, reflective journals and through written essays. Private study sessions will include reading set books and journal articles but also accessing the extensive video archive of Faraday lectures where the topic for consideration is taught in depth. Students will also have access to the Faraday Institute Library, the Woolf Institute Library, and to the vast resources provided by the Cambridge Theological Federation.

A *supervision* will normally be a small group teaching session which is tutor-led and based around some prior reading. Some supervisions will be individual and used to help students prepare for their presentations.

A *seminar* is also a small group teaching session which is tutor-led but involves a student presentation and subsequent tutor-led student discussion.

In a typical week the programme of study will be as follows:

Monday 10.30-12.30
Introductory Lecture. Meeting with the supervisor of the week. The subject of the week will be introduced and readings set. A task for the Friday presentation will be set.

Tuesday 1.00 pm
Faraday Research Seminars. These will be given by a world-leading experts addressing a topic relevant to Science & Religion. These are only held during Cambridge University term time. For the coming year, the seminars will be mostly in-person, held at The Woolf Building where the Faraday Institute is based. The seminars will also be livestream online.

Wednesday 14.00-15.30
- **Supervision**. Meeting with the supervisor of the week to discuss the readings and clarify any difficulties of understanding
- **Meeting with personal Tutor**: update on progress for the week, to discuss general progress in the course, and any other issues (including non-academic issues, if there are any)

Friday 14.00-15.30
Student presentation seminar. Meeting with the supervisor of the week. Students will make presentations of their learning in a format guided by the supervisor for the week (eg a read essay or a power point presentation). Please note that this task will have been set on the Monday. This work, in the form of an essay, will be assessed according to an assessment criteria . There will be further Q&A and follow-up discussion with the supervisor on the presentations. **Please note that HKBU students will be assessed by essay only.**

In addition to the above, once every week in term time there are Faraday Public Lectures or internal Faraday seminars which students will be expected to attend. These are given by well-known speakers in the science-religion field.

A provisional calendar is appended below. It should be noted that Cambridge University teaching terms are eight weeks long and are from
- early October until early December,
- mid-January until mid-March
- end April until mid-June

This means that some of the teaching on this programme would be conducted outside the Cambridge teaching terms.

Provisional calendar

	Faraday programme	Cambridge teaching
Week	**Semester 1**	
21-Aug-23	Arrival	
28-Aug-23	Teaching week 1	
04-Sep-23	Teaching week 2	
11-Sep-23	Teaching week 3	
18-Sep-23	Teaching week 4	
25-Sep-23	Teaching week 5	Freshers Week
02-Oct-23	Teaching week 6	Michaelmas week 0
09-Oct-23	Teaching week 7	Michaelmas week 1
16-Oct-23	Teaching week 8	Michaelmas week 2
23-Oct-23	Teaching week 9	Michaelmas week 3
30-Oct-23	*Reading Week*	Michaelmas week 4
06-Nov-23	Teaching week 10	Michaelmas week 5
13-Nov-23	Teaching week 11	Michaelmas week 6
20-Nov-23	Teaching week 12	Michaelmas week 7
27-Nov-23	Teaching week 13	Michaelmas week 8
04-Dec-23	Teaching week 14	
11-Dec-23	Teaching week 15	
18-Dec-23	*Christmas Break*	
25-Dec-23	*Christmas Break*	
01-Jan-24	*Christmas Break*	
Week	**Semester 2**	
08-Jan-24	*Christmas Break*	
15-Jan-24	Teaching week 1	Lent week 0
22-Jan-24	Teaching week 2	Lent week 1
29-Jan-24	Teaching week 3	Lent week 2
05-Feb-24	Teaching week 4	Lent week 3
12-Feb-24	Teaching week 5	Lent week 4
19-Feb-24	Teaching week 6	Lent week 5
26-Feb-24	Teaching week 7	Lent week 6
04-Mar-24	Teaching week 8	Lent week 7
11-Mar-24	Teaching week 9	Lent week 8
18-Mar-24	*Easter Break*	
25-Mar-24	*Easter Break*	
01-Apr-24	*Easter Break*	
08-Apr-24	*Easter Break*	
15-Apr-24	Teaching week 10	
22-Apr-24	Teaching week 11	Easter week 0
29-Apr-24	Teaching week 12	Easter week 1
06-May-24	Teaching week 13	Easter week 2
13-May-24	Teaching week 14	Easter week 3
20-May-24	Teaching week 15	Easter week 4
27-May-24	*Review and departure*	Easter week 5

THE SOCIAL ENVIRONMENT OF CAMBRIDGE UNIVERSITY

The Faraday Enrichment Programme on Science and Religion will be embedded within the cultural and educational life and activities of Cambridge University. In addition, the Faraday Institute for Science and Religion has its own rhythm of activities which include weekly seminars or research talks during Cambridge terms, and termly day courses and/or short courses which students will attend. Cambridge University has an intensive offering of thousands of research seminars per year in different departments. Guidance will be given to students as to those seminars that will be useful for their programme of study.

THE COURSE DIRECTOR

The Course Director is Dr Pui Him Ip who has taught in a variety of educational contexts. including teaching at Cambridge and Oxford Universities as well as The Perse School, Cambridge. Dr Ip is a specialist in early Christianity who has received a formation that includes studies in theology, philosophy and theoretical physics. He was formerly Departmental Lecturer in Patristics at the University of Oxford and Tutor in Theology at Christ Church, Oxford. He earned a PhD in Theology at the University of Cambridge, holds an MA (with distinction) in Philosophy and Theology from Heythrop College, University of London and a MSci (first class) in Theoretical Physics from Imperial College London. His current research focuses on natural philosophy in early Christianity. Dr Ip is originally from Hong Kong.

FARADAY COURSE TUTORS

Students will mainly be taught by Faraday Staff and Associates (listed below) and Cambridge University academics. Normally an assigned tutor will teach a full week on the main modules. A range of University tutors (not listed here) will also contribute to the Core modules.

Dr Roger Abbott	Disaster relief, theology
Dr Denis Alexander	Genetics, evolution, scientism
Dr Andrew Davison	Extended evolutionary synthesis, exterrestial life, theology
Prof. Paul Ewart	Physics, randomness
Prof. Keith Fox	Biochemistry, gene editing
Dr Rodney Holder	Cosmology, theology
Chris Oldfield	Philosophy, physics
Prof. Sarah Perrett OBE	Biochemistry, science as a vocation
Dr Jon Thompson	Philosophy, theology
Prof. Bob White FRS	Geophysics, disasters, environmental care

THE MODULES

SEMESTER 1

AN INTRODUCTION TO SCIENCE AND RELIGION (ISR)
*(5 * 6-credit modules; 5 * 120 hours study = 40 hrs/week)*

Historically, the fields of Science and Religion are portrayed as in conflict – a view maintained by popular media, but not supported by serious scholarship. This module will introduce the major themes in the study of Science and Religion and seek to unravel the popular polarisation of view. It will be in part based on the text by McGrath (2020) (see below). The module will be delivered as five sub-modules (ISR-1 to -5) and each sub-module will be separately assessed. The five sub modules will cover the themes – An introduction to the debate (ISR-1), A brief history of Science (ISR-2), Ways of knowing in Science and Faith (ISR-3), Natural Theology (ISR-4) and The Science and Religion Debate – Why does it matter? (ISR-5).

Teaching, Learning and Assessment
Teaching will be in small groups. Instead of lectures, each week will begin with an introductory one-hour supervision in which the topic will be introduced. Reading will be set. There will be a follow-up supervision later in the week. Towards the end of the week there will be a three-hour student-led, tutor guided seminar in which the reading will be discussed. Students will be also directed to the Faraday video archive of lectures and seminars given over the past 12 years. Assessment tasks are described below and will be submitted every three weeks, at the end of each sub-module.

Learning Outcomes
(a) Knowledge
On the completion of this module, students will be able to
1. Understand the nature of the science-religion debate and why understanding the debate is important in modern society
2. Understand the elements of the history of science
3. Have a working knowledge of epistemology and scientific reductionism
4. Outline some major themes within Natural theology

(b) Skills
On the completion of this module students will be able to
1. critically evaluate competing models in the science religion debate, epistemology, natural theology
2. reflect upon their own learning in this field
3. articulate the results of their reading and express their own thoughts in the forum of a seminar or in the form of a written essay

Indicative Reading
Some weekly themes/ topics will be based on The Faraday Papers, a series of twenty 4000-word Papers, published as *Has Science Killed God?* (SPCK, 2019), will be provided to students. Authors of Faraday Papers will be involved in teaching these themes.

- Harris, M. and Pritchard, D. 2017. Philosophy, Science and religion for Everyone. Routledge.
- Harrison, P. 2015. The territories of science and religion. University of Chicago Press.

- McGrath, A., E., 2020. Science and Religion: A New Introduction (3nd Ed). Wiley Blackwell.
- McKaughan, D.J. and Vande Wall, H. (eds), 2018. The History and Philosophy of Science: A Reader. Bloomsbury Academic.
- Staley, K.W., 2014. An introduction to the philosophy of science. Cambridge University press, Cambridge, UK.
- Watts, F. and Dutton, K. 2006. Why the science and religion dialogue matters. Templeton Press.

Module outline

Sub module ISR-1 - An Introduction to Science and Religion

Week 1. An introduction to Science and Religion

Different models relating science and religion. Conflict, Independence, Dialogue, Integration.

Week 2. Science, Religion and Truth

Defining the boundaries of scientific enquiry. Distinguishing between science and non-science. 'Baconian science'. Verification and falsification principles. Popperian 'deductive science'. Kuhnian paradigms shifts as a model of scientific progress. Relativism, incommensurability, rationality. Scientific progress through 'research programmes' (Imre Lakatos). Feyerabend's anarchic concept of scientific progress.

Week 3. Introduction to Christian Theology

What is Christian Theology? Doctrine of God. Doctrine of Creation. Theological anthropology.

Activity	**Study hours**
Faraday seminar	0
Supervision x6	6
Seminar x 3	9
Private study – video archive	20
Private study/ reading	45
Assessment – Essays x 3	40
Total	**120**

Assessment

Assessment Type	Brief Details	Weighting	Alignment with learning outcomes
1,500-2,000 words Essays x 3	Students will produce a written essay at the end of each week	100%	(a)-1 (b)-3
Total		100%	

Sub module ISR-2 – A brief History of Science

Week 4. The history of Science – Science in antiquity.

Natural Philosophy or Science? Greco-Roman science. Aristotle. Ancient medicine. Ancient Mathematics. Relation between natural philosophy and theology in antiquity. *Visit to Whipple Museum of the History of Science, Cambridge.*

Week 5. The history of Science – the rise of Modern Science

Rise of the experimental method (Bacon). Newton on Space and Time. Newton on Gravity. The Rise of the Mechanical Worldview and determinism. Galileo and the Church.

Week 6. The history of Science – the Emergence of the Conflict between Science and Religion in the 19th century

Science and religion conflict narrative; Scientific Naturalism; Cultural Authority; Charles Darwin and evolution; Science and Christian theology; Atheism

Activity	**Study hours**
Faraday seminar	6
Supervision x 6	6
Seminar x 3	9
Private study – video archive	20
Private study/ reading	31
Field visit (one day)	8
Assessment – Essays x 3	40
Total	**120**

Assessment

Assessment Type	Brief Details	Weighting	Alignment with learning outcomes
Essays (1,500-2,000 words) x 3	Students will produce a written essay at the end of each week	100%	(a)-2 (b)-3
Total		100%	

Sub module ISR-3 – Ways of knowing in Science and faith

Week 7. Reason and Faith as Two Ways of knowing

The different types of knowing. Faith and Reason. Faith vs Reason? Reasoned faith. Faith and Reason in the Middle Ages. Separation between Reason and Faith in Modern Philosophy. Implications for Science and Religion today.

Week 8. Immanuel Kant and the Copernican Revolution in Epistemology

Introduction to Immanuel Kant. The problem of knowledge in early modern philosophy. David Hume's empiricism. Leibniz's rationalism. Kant's Copernican Revolution. Implications for natural science and religion.

Week 9. John Polkinghorne's Critical Realism.

Introduction to Polkinghorne. Interaction between Science and Theology. Multilayered reality. Verisimilitudinous knowledge. Reductionism. Trans/im/personal dimensions of reality. Bottom-up thinking. *Visit to Oxford.*

Activity	**Study hours**
Faraday seminar	6
Supervision x3	6
Seminar x 3	9
Field visit (one day)	8
Private study – video archive	20
Private study/ reading	31
Assessment – Essays x 3	40
Total	**120**

Assessment

Assessment Type	Brief Details	Weighting	Alignment with learning outcomes
Essays (1,500-2,000 words) x 3	Students will produce a written essay at the end of each week	100%	(a)-3 (b)-1 (b)-3
Total		100%	

Sub-module ISR 4 – Natural Theology

Week 10. An Introduction to Natural Theology.

What it is. Rejection by Karl Barth. Natural theology and the Bible. Post Barthian Thinking.

Week 11. Divine action – how does God work in the world?

Divine action – what do we mean? Deism, Thomism, Process Theology. Divine action in Christianity and Islam. Scientific problems posed by divine action. Science and Miracles. A critique of Hume. A biblical understanding of miracles.

Week 12. Philosophical arguments for the existence of God.

Anselm of Canterbury's ontological argument; Thomas Aquinas' five ways. Science and arguments for the existence of God.

Brief survey of cosmological (including the Kalam) arguments and biological arguments. Dangers of Intelligent design arguments. *Field visit*

Activity	**Study hours**
Faraday seminar	6
Supervision x6	6
Seminar x 3	9
Field visit (one day)	8
Private study – video archive	20
Private study/ reading	31
Assessment – Essays x 3	40
Total	**120**

Assessment

Assessment Type	Brief Details	Weighting	Alignment with learning outcomes
Essays (1,500-2,000 words) x 3	Students will produce a written essay at the end of each week	100%	(a)-4 (b)-1 (b)-3
Total		100%	

Sub-module ISR 5 – The Science-Religion debate. Why does it matter?

Week 13. The rise of fundamentalism.

Definition of fundamentalism. Religious and non-religious fundamentalism. Historical, political, sociological and ideological roots. Varieties of fundamentalism. The New Atheists. *Field visit.*

Week 14. Science and society

Science and contemporary culture (literature/film/sci-fi/art). The modern distrust of the expert and scientists (post-modern view on the authority of science). Examples where science may bring benefits/dis-benefits to society – nuclear physics; genetic engineering, etc. Communicating science, exploring the ways in which science is communicated in our societies today.

Week 15. The implications of the Science religion debate: Science and medicine as a case study

Scientific and 'alternative' medicine. Concept of medical care in scientific medicine. Death and the body in scientific and theological perspectives.

Activity	**Study hours**
Faraday seminar	0
Supervision x3	3
Seminar x 3	9
Field visit (one day)	8
Private study – video archive	20
Private study/ reading	43
Assessment – Essays x 3	40
Total	**120**

Assessment

Assessment Type	Brief Details	Weighting	Alignment with learning outcomes
Essays (1,500-2,000 words) x 3	Students will produce a written essay at the end of each week	100%	(a)-1 (b)-2 (b)-3
Total		100%	

SEMESTER 2

TOPICS IN SCIENCE AND RELIGION (TSR)
*(5 * 6-credit modules; 5 * 120 hours study = 40 hrs/week)*

Module description
This module develops the knowledge gained in the module 'An Introduction to Science and Religion' in a number of specific themed areas. The 'topics' developed in this module are designed to be illustrative of the breadth of the Science–Religion field, but are chosen to enable the student to engage in greater depth in some specific areas.

The module will be delivered as five sub-modules (TSR-1 to -5) and each sub-module will be separately assessed. The five sub-modules will cover the themes – Creation, evolution and biblical interpretation (TSR-1), Physics and Cosmology (TSR-2), Faith and the Human brain (TSR-3), What does it mean to be Human (TSR-4), and Environmental issues – a Christian perspective (TSR-5).

Teaching, Learning and Assessment
The teaching will be in small groups. Instead of lectures, each week will begin with an introductory one-hour supervision in which the topic will be introduced. Reading will be set. There will be a follow-up supervision later in the week. Towards the end of the week there will be a three-hour student-led, tutor guided seminar in which the reading will be discussed. Students will be also directed to the Faraday video archive of lectures and seminars given over the past 12 years.
Assessment tasks are described below and will be submitted every three/four weeks, at the end of each sub-module.

Learning Outcomes
(a) Knowledge
On the completion of this module, students will be able to
1. Understand in some depth the Christian doctrine of creation in the context of both modern science and modern biblical studies
2. Appreciate the arguments for the fine tuning of the Universe from modern cosmology
3. Explain the reductionist arguments of neuroscience
4. Show an appreciation of the challenge of Artificial Intelligent to the concept of what it means to be human.
5. Demonstrate a good understanding of the Christian perspective on the natural environment

(b) Skills
On the completion of this module students will be able to
1. critically evaluate contemporary arguments in favour of creationism, intelligent design, neuroscientific reductionism and the human as a machine.
2. reflect upon their own learning in this field
3. articulate the results of their reading and express their own thoughts in the forum of a seminar or in the form of a written essay

Indicative Reading

Some weekly themes/ topics will be based on The Faraday Papers, a series of twenty 4000-word Papers, to be published as a book in 2018, will be provided to students. Authors of Faraday Papers will be involved in teaching these themes.

- Bostrom, N., 2014. Superintelligence: paths, dangers, strategies. Oxford University Press.
- Hayhoe, K. and Farley, A., 2009. A climate for change: global warming facts for faith based decisions. Faithwords, USA.
- Holder, R., 2013. Big Bang, Big God: A Universe designed for life. Lion.
- Hulme, M., 2009. Why We Disagree About Climate Change: Understanding Controversy, Inaction and Opportunity, Cambridge University Press. 393pp.
- McGrath, A., E., 2020. Science and Religion: A New Introduction (3nd Ed). Wiley Blackwell.
- McGrath, A., E., 2011. Darwinism and the Divine. Evolutionary thought and natural theology. Wiley-Blackwell.
- Moo, D.J. and Moo, J.A., 2018. Creation Care: A biblical theology of the natural world. Zondervan, USA.
- Spencer, N. and White, R., 2007. Christianity, Climate Change and Sustainable living. SPCK, UK.
- Walton, J., H., 2009. The lost world of Genesis One. Ancient cosmologies and the origins debate. IVP Academic.
- Wilkinson, D., 2013. Science, religion and the search for extra-terrestrial intelligence. Oxford University Press.

Module outline

TSR-1: Creation, Evolution and Biblical interpretation

Week 1. Charles Darwin and natural selection.

Summary of Darwin's main findings. History of the impact of the ideas in 19th and early 20th century. The tree of life.

Visit Cambridge University Library (Darwin papers) and the Zoology Museum .Neo-Darwinism – Richard Dawkins

Modern palaeontology. Discovery of DNA and genomics. Paley and refutation of arguments for design.

Week 2. The meaning of creation in Christian Theology

Creation *ex nihilo*. Creation as an event, as a process.

Week 3. Interpreting Genesis in the 21st Century.

Human origins. Creationist movements. Intelligent design. Modern biblical studies and ways to read Genesis. God's action in the evolutionary process.

Activity	**Study hours**
Faraday seminar	6
Supervision x 6	6
Seminar x 3	9
Field visit (one day)	8
Private study – video archive	20
Private study/ reading	31
Assessment – Essays x 3	40
Total	**120**

Assessment

Assessment Type	Brief Details	Weighting	Alignment with learning outcomes
Essays (1,500-2,000 words) x 3	Students will produce a written essay at the end of each week	100%	(a)-1 (b)-1 (b)-3
Total		100%	

TSR-2: Physics and Cosmology

Week 4. A brief history of time.

The Big Bang and the history of the Universe. Stellar evolution and the origin of the elements. Early planetary history and the early history of the earth. *Lab or radio telescope visit.* Is the Universe Designed? The fine tuning of the Universe - physical constants and initial conditions. Alternatives to design. Multiverses and their problems.

Week 5. The Anthropic Principle and the Science and Religion Debate

Why is our planet 'just right' for the emergence of life? Can fine tuning be extended from cosmology to the origin of life on Earth? Explanations of the principle and its link to ideas of fine tuning; weak and strong versions.

Week 6. Are we alone in the Universe?

Evidences for extrasolar planets. Life on other planets. Probability arguments and Drakes equation. Theological consequences of extra-terrestrial life.

Activity	**Study hours**
Faraday seminar	6
Supervision x 6	6
Seminar x 3	9
Field visit (one day)	8
Private study – video archive	20
Private study/ reading	31
Assessment – Essays x 3	40
Total	**120**

Assessment

Assessment Type	Brief Details	Weighting	Alignment with learning outcomes
Essays (1,500-2,000 words) x 3	Students will produce a written essay at the end of each week	100%	(a)-1 (a)-2 (b)-3
Total		100%	

TSR-3. Faith and the human brain

Week 7. Are we more than a pack of neurons?

Reductionism and materialism of modern neuroscience. Cognitive neuroscience and artificial intelligence. The mind-brain dualism. Dual aspect monism – consciousness, free will. Brain and soul.

Week 8. Is the brain hard-wired for faith?

Areas of the brain and their relationship to personality. Differences in brain wiring and hindrances to faith. Understanding the human mind and emotions. Areas of the brain which are 'faith sensitive'? Is there a neurological expression of religious activity?

Week 9. The psychology of faith

Faith as a coping mechanism. Hearing the voice of God. Mystical experiences during seizures. Near death experiences.

Activity	**Study hours**
Faraday seminar	2
Supervision x 6	6
Seminar x 3	9
Private study – video archive	20
Private study/ reading	43
Assessment – Essays x 3	40
Total	**120**

Assessment

Assessment Type	Brief Details	Weighting	Alignment with learning outcomes
Essays (1,500-2,000 words) x 3	Students will produce a written essay at the end of each week	100%	(a)-3 (b)-1 (b)-3
Total		100%	

TSR-4. What does it mean to be Human?

Week 10. The meaning of the term 'created in the image of God'

Ways of understanding the term – substantive, functional, relational. Old and New Testament views and extra-biblical views. Implications for transhumanism

Week 11. Artificial intelligence and the future meaning of human identity.

Review of rise in artificial intelligence. Implications of 'made in the image of God' for transhumanism. Ethical issues in Artificial Intelligence (AI)/robotics

The limits of AI; potential harm from AI. Risks from AI – threat to humankind, decrease in demand for human labour, devaluation of humanity. AI and weapons. AI and morality. *Visit to AI lab.*

Week 12. Ethical Issues in Genetic Modification

Discovery of DNA and the possibilities of genetic modification. Relevant technologies. Genetic modification of plants and animals. Gene editing and the genetic modification of humans

Activity	**Study hours**
Faraday seminar	6
Supervision x 6	6
Seminar x 3	9
Private study – video archive	20
Private study/ reading	41
Field visit (one day)	8
Assessment – Essays x 3	40
Total	**120**

Assessment

Assessment Type	Brief Details	Weighting	Alignment with learning outcomes
Essays (1,500-2,000 words) x 3	Students will produce a written essay at the end of each week	100%	(a)-1 (a)-4 (b)-3
Total		100%	

TSR-5. Environmental issues – a Christian perspective

Week 13. What do we mean by the environment? How much are humans part of the environment. The Anthropocene. The Creation Ethic – a Christian understanding of the need for environmental care. The rise of the Christian environmental movement and a discussion of the major players. Contrasting Christian theologies of the Environment. The biblical foundation of Christian values. The genesis creation stories, environmental ethics in the Old Testament prophets and in the New Testament. *Site visit to environmental charity.*

Week 14. Global climate change – the evidence: A review of scientific evidence for rising carbon dioxide levels over human history. The implications: Weather vs Climate. Storms-hurricanes-tornados. Drought vs flooding. Mitigation policies: Global policy initiatives – Paris 2015. Local policy initiatives. Societal responses: Climate deniers – the basis for their ideas – scientific and social.

Week 15. Natural disasters – a Christian theological understanding of and response to earthquakes, volcanic eruptions, floods and drought. Site visit to disaster response organisation. The sustainable management of natural resources.

Activity	**Study hours**
Faraday seminar	4
Supervision x 6	6
Seminar x 3	9
Private study – video archive	20
Private study/ reading	43
Field visit (one day)	8
Assessment – Essays x 3	40
Total	**120**

Assessment

Assessment Type	Brief Details	Weighting	Alignment with learning outcomes
Essays (1,500-2,000 words) x 3	Students will produce a written essay at the end of each week	100%	(a)-1 (a)-5 (b)-2 (b)-3
Total		100%	