Where Science Meets Faith

An ECLAS course for church small groups



Welcome

Welcome to this five-week course on Science and Faith for church small groups.

This resource was developed from a pilot course run by Clifton Parish Churches, York, by Tom and Julie McLeish. They are grateful for helpful feedback from the participants of the pilot courses, with the support of Revd. Andrew Gready.

Equipping Christian Leadership in an Age of Science (ECLAS) is a collaboration between the universities of Durham and York, and the Church of England's Faith and Public Life team. Supported since 2013 by the Templeton Foundations, it works to support churches to engage with science and support scientists. ECLAS was born from the conviction that science is a gift from God, but that too often Christian leaders lack the confidence and tools to engage with scientific questions.

Course background

Firstly, you don't need any background in science to lead or take part in this course. It is supposed to be fun and accessible to people from any background. We will explore some wonderful Bible passages that talk about the way human beings relate to the natural world. We will also encounter some beautiful aspects of nature, from the glories of distant galaxies to the ever-branching 'tree of life'.

Together we will explore topics including the Big Bang, evolution and climate change. We hope you finish the course with a greater understanding of and appreciation for the many ways in which science and faith interact with and enrich one another.

How the course works

Each session follows a similar order: some introductory videos on a particular scientific topic, followed by readings from the Bible and from the Book of Job, which forms a continuous thread throughout the course. These materials then form the basis of a discussion to explore the group's responses to the material. Finally, there are some optional ideas for further study.

We hope this topic will interest people, including friends and neighbours, who are not currently members of your church family. To facilitate newcomers, you might consider starting or finishing the study series with public events, such as dinner and a talk or a panel discussion featuring scientists of faith. You might also consider bringing the small groups together at one or two occasions midcourse, where questions can be shared. It is especially helpful to have one or more scientists who are Christians at these meetings.

WEEK 1: WHAT IS SCIENCE, ANYWAY?

Prepare

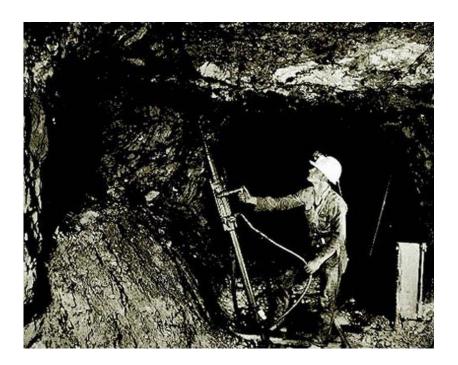
Watch this short video which reveals that:

- 'Science' means 'knowledge' but used to be called 'natural philosophy'.
- Science was linked in the past to 'wisdom about nature'.

Lessons from Job

Read Job 28 on the search for wisdom, focussing on the picture of the miner in verses 1-11.

- 1. What strikes you?
- 2. Why do you think a discussion of wisdom starts with mining under the Earth?



Discuss

Scientists have described science in many ways:

- "...science consists in grouping facts so that general laws or conclusions may be drawn from them." Charles Darwin, Naturalist
- "Science is at the base of all the progress that lightens the burden of life and lessens its suffering." Marie Curie, Chemist
- "Science makes people reach unselfishly for truth and objectivity; it teaches people to accept reality, with wonder and admiration." Lise Meitner, Physicist
- "Science is a game... In the presentation of a scientific problem, the other player is the good Lord. He has not only set the problem but also has devised the rules of the game." Erwin Schrodinger, Physicist
- "Science is not a heartless pursuit of objective information; it is a creative human activity."
 Stephen J. Gould, Palaeontologist

3. Do any of these definitions resonate with you more than others?

Bible reading

Think about the way the Bible talks about humans working with nature in the following passages.

Isaiah 28:23-29 Genesis 2:19-20 Romans 1:20 Psalm 8

- 4. What strikes you about these passages?
- 5. Do you have a favourite discovery or insight from science?

Taking it further

Watch this <u>longer talk</u> from Revd. Prof. David Wilkinson about the Bible and cosmology.

Read this <u>short article</u> on *how* we know about the Big Bang (note that this does use a number of technical terms).

WEEK 2: GOD, THE BIG BANG, AND CREATION

Prepare

- Watch an 8-minute introduction to this week's topic.
- Watch this optional further background video.

Lessons from Job

Read Job 38:4-11 on God's own account of creation. What strikes you about it?

Bible reading

It may surprise you to learn that there are *lots* of creation stories in the Bible, not just one. The Bible authors talk about creation over and over again, in the Law, the praises of the Psalms, the Prophets, and in the Wisdom books. Many are quite short, so you can read them quickly:

Psalm 33:6-7 Psalm 104:2-9 Jeremiah 10:12-13

Job 26:7-10 Isaiah 40:21-22

- 1. What strikes you about any or all of these?
- 2. Do you see any common patterns?
- 3. How does the account in the first Job passage (38:4-11) differ from the others?

Other Ancient Middle East civilisations all had creation stories, with a general pattern of earth arising out of warfare between ancient 'gods' or monsters. Now read the two creation accounts in Genesis 1:1-2:3 and Genesis 2:4-14.

- 4. Do these familiar stories sound fresh in any way after reading the other ones?
- 5. How do they contrast with them, and with each other?



Discuss

Here is Bible scholar John Walton explaining the world-view of the ancient Middle East in and into which the Old Testament creation stories were written:

"They [the OT writers] believed the sky was material (not vaporous), solid enough to support the residence of deity as well as hold back the waters. In these ways, and many others, they thought about the cosmos in much the same way that anyone in the ancient world thought, and not like anyone thinks today. And God did not think it important to revise their thinking ... In contrast, it makes perfect sense that God communicated his revelation to his immediate audience in terms they understood ... God could communicate what he desired regardless of one's cosmic geography."

(The Lost World of Genesis One, Downers Grove, IL: IVP Academic, 2009, pp16-18.)

- 6. What will you take away from today's study?
- 7. What further questions would you like to think on?

Taking it further

There is another longer, more developed creation story in Proverbs 8. What strikes you in this creation account?

Watch The Bible Project resources on Creation Stories.

WEEK 3: LIFE ON EARTH, THE TREE OF LIFE AND EVOLUTION

Prepare

- <u>Watch</u> an introduction to this week's topic.
- Watch a 3-minute video from Revd Prof David Wilkinson on 'Can someone believe both in God as Creator and in Evolution?'

What strikes you about the way the phrase 'Tree of Life' is used theologically in Genesis, and scientifically? Are there similarities as well as differences?



Bible reading

Read the different ways that Genesis 1:20-30 describes animal creation:

Let the water teem with living creatures...

So God created the great creatures ...

Let the land produce living creatures ...

Read again the centrepiece of this section which describes the relationship of the creatures to humans in Genesis 1:26. Contrast the ways that the Genesis 1-2:3 and Genesis 2:4-14 stories describe the creation of humans.

- 1. What strikes you about Genesis' description of the creation of living creatures?
- 2. How does the description of human creation differ?
- 3. How do humans and animals relate?

Lessons from Job

Read Job 38:39 -39:30 on God's questions to Job about animals.

- 4. What does this passage about animals tell us about wisdom?
- 5. In what ways does this passage on animals differ from the Genesis ones?
- 6. Are there any answers to God's questions now?

Discuss

When Darwin proposed his evolutionary Tree of Life, contemporary theologians responded in the following ways:

- "After Darwin we see further into the wisdom of God: He makes all things make themselves." Charles Kingsley (priest and author).
- "Until now science had pushed a deistic God [a God that only acts as the creator of the world, not its sustainer] further and further away; now Darwin, disguised as a foe, has done the work of a friend." Aubrey Moore (Oxford theologian).
 - 7. What do you think about these reactions to Darwin's theory of evolution?
 - 8. What will you take away from today's study?
 - 9. What further questions would you like to think on?

Taking it further

Watch a short film on the connection between evolution and the fallenness of creation.

Watch Sir David Attenborough explain the evolutionary 'tree of life'.

<u>Watch this one-hour video</u> from Dr Lizzie Coyle of the Faraday Institute for Science and Religion on 'Fossils, Evolution and the Bible'.

<u>This video</u> from biologist and Christian Prof. Graeme Finlay describes what we understand now about human evolution.

WEEK 4: INTELLIGENCE, THE MIND, AND BEING HUMAN

Prepare

Watch a short introduction to this week's topic.

Watch this 3-minute video What Does it Mean to be Made in the Image of God?

Watch a short video on what we know about the way the human brain works.

Bible reading

Read Genesis 1:26-31, Genesis 9:1-7 and Psalm 8.

- 1. What strikes you about the two Genesis passages where humans are described as made 'in the image of God'?
- 2. In what different ways might we understand being made in God's image?

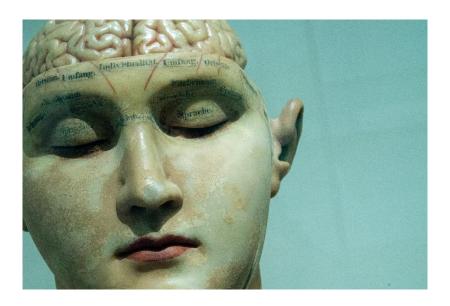
Read Exodus 31:1-11.

3. The first time that the Holy Spirit is mentioned as 'gifted' in the Bible it is for the work of creation through art and craft. How does the way we create compare with the way God does?

Lessons from Job

Read Job 40:1-14 where Job first responds to the Lord's answer, and God asks Job in what ways Job is like him.

4. What do you think the two voices are saying?



Discuss

This passage comes from a 4th century book by Greek theologian Gregory of Nyssa. His elder sister Macrina (whom he called 'the Teacher') explains how we know that the mind is real, rather than an illusion of the brain, from what it deduces about things in the world that we don't actually see:

"It is by an abuse of language that a jar is said to be 'empty'; for when it is empty of any liquid it is none the less, even in this state, full, in the eyes of the experienced. A proof of this is that a jar when

put into a pool of water is not immediately filled, but at first floats on the surface, because the air it contains helps to buoy up its rounded sides; till at last the hand of the drawer of the water forces it down to the bottom, and, when there, it takes in water by its neck; during which process it is shown not to have been empty even before the water came; for there is the spectacle of a sort of combat going on in the neck between the two elements, the water being forced by its weight into the interior, and therefore streaming in; the imprisoned air on the other hand being straitened for room by the gush of the water along the neck, and so rushing in the contrary direction; thus the water is checked by the strong current of air, and gurgles and bubbles against it."

You could try the experiment at home!

- 5. Does Macrina's argument apply to 'artificial intelligence'?
- 6. What will you take away from today's study?
- 7. What further questions would you like to think on?

Taking it further

<u>Watch</u> this recorded 1.5-hour lecture from Prof. John Wyatt on *Being Human in a Technological Setting.*

Watch this talk by Revd Prof. Alistair Coles: Mind, Brain and the Search for God.

Neurologist Oliver Sacks' book *The Man who Mistook his Wife for a Hat* (Duckworth 1985) is a sensitive and fascinating view of the human mind.

WEEK 5: LOOKING AFTER OUR WORLD, THE CLIMATE, AND ECO-DIVERSITY.

Prepare

- Watch the introduction to this week's topic.
- Watch a 10-minute interview with Dr Ruth Valerio on the environment and the gospel.
- <u>Watch</u> Christian climate scientist Dr Katherine Hayhoe explain how talking about climate change is a key tool in combatting it.
- Watch 'Climate Change in 60 seconds' from the Royal Society.

Bible reading

Read Isaiah 24:1-13 and Romans 8:18-23.

1. What strikes you about the way the Earth seems to suffer in these two passages?

Lessons from Job

Read Job 12:7-10, Job 37:14-18 and Job 38:22-30.

- 2. What might it mean that the Earth can 'teach us'?
- 3. What do God's questions to Job make you think about?
- 4. Do these three passages from Job raise other questions?



Discuss

In 2015 Pope Francis published his first complete encyclical (letter) on the urgency of a new care for our world, its environment and fellow creatures. *Laudato Sī* (the name is taken from a prayer of St. Francis) is a long and influential document, but contains many pithy summaries, such as:

"I would like to offer Christians a few suggestions for an ecological spirituality grounded in the convictions of our faith, since the teachings of the Gospel have direct consequences for our way of thinking, feeling and living. More than in ideas or concepts as such, I am interested in how such a spirituality can motivate us to a more passionate concern for the protection of our world.

"The ecological crisis is also a summons to profound interior conversion... Living our vocation to be protectors of God's handiwork is essential to a life of virtue; it is not an optional or a secondary aspect of our Christian experience."

- 5. What would an 'ecological spirituality' mean for us and our churches?
- 6. In what practical ways could we respond to the knowledge that our current lifestyles are not 'protecting God's handiwork'?
- 7. What will you take away from today's study? What further questions would you like to think on?

Taking it further

Your group might like to explore what it means to be an 'eco-church' here.

Read this helpful article from Tearfund, which ends with a prayer to use individually or together.

As an example of how Christian thinking can inform climate-related policy, see this panel discussion.

REFERENCES AND FURTHER READING

The Lost World of Genesis One, John H Walton. IVP Academic (2009).

Of Popes and Unicorns: Science, Christianity, and How the Conflict Thesis Fooled the World, David Hutchings and James C. Ungureanu. Oxford University Press (2022).

Let There Be Science, David Hutchings and Tom McLeish. Lion Hudson (2017).

Faith and Wisdom in Science, Tom McLeish. Oxford University Press (2014).

The Language of God, Francis Collins. Free Press (2006)

Introducing Science and Religion: A Path Through Polemic, Gillian Straine. SPCK Publishing (2013).

Useful Websites for Resources:

ECLAS project: https://www.eclasproject.org

The Faraday Institute: https://www.faraday.cam.ac.uk

Biologos: https://biologos.org