9 EVOLUTION AND GOD'S CREATION

Can accepting evolution be a faithful option for Christians?

MEET
- Biologist April Maskiewicz Cordero

GROW
- Peace

ENGAGE
- Theories in Science
- Christian Views on Creation and Evolution
- Journeys to Peace with Evolution

EXPERIENCE
- Defining Evolution
- Evidence for Evolution

INTEGRATE
- Moving Forward in Faith

BIOLOGOS INTEGRATE

CONTENTS

Unit 9: Evolution and God's Creation

9 Evolution and God's Creation

Can accepting evolution be a faithful option for Christians?

TEACHING TIME
7:00–10:00
HOURS

Unit Overview

Unit 9: Evolution and God's Creation presents evidence that evolution is the best explanation for the diversity of life on earth. It also explores how biologists who are Christians reconcile acceptance of evolution with their belief that God is the Creator and the Bible is true. This unit features:

- A video introduction to biology professor April Maskiewicz Cordero.
- A devotional Bible study on the virtue of peace.
- A study of the definition and role of a theory in science.
- An exploration of Christians' positions on evolution and the creation account in Genesis.
- Stories of Christians who have come to peace with evolution.
- Case studies that help students understand key principles of evolution.
- An exploration of evidence for evolution in bacteria, stickleback fish, and whales.
- An opportunity to see how evolution could prompt worship when viewed through the eyes of faith.

QUICK LINKS

User Introduction and Overview

Units List

Course Pairing

Next Gen Science Standards Alignment

Glossary

Learning Outcomes

What will students know or be able to do after this unit?

- Plan how they can emulate the peace of Christ in difficult discussions.
- Explain how a ***scientific theory*** is distinct from a hypothesis.
- Identify areas of agreement and disagreement between the three main Christian views on ***evolution*** and age of the earth.
- Empathize with the stories of Christians who have accepted evolution.
- Explain how the principles of evolution operate to change ***traits*** within a population over generations.
- Describe at least three compelling lines of scientific evidence for evolution.
- Collect and analyze data and draw evidence-based conclusions.

How to Use This Unit

Please see the **User Introduction and Overview** (biologos.link/user-intro) for important information and links, such as the difference between the five module types (Meet, Grow, Experience, Engage, and Integrate); our terms of use (how documents may be modified and distributed); and advice for communicating with parents or others in your community about potentially controversial topics.

This document contains lesson plans for the entire unit. Other files, such as student handouts, images for the Grow module, teacher instructions for specific activities, answer keys, and slide presentations, are accessible via links within this document.

Teacher's Notes and sample answers are formatted with italics.

Scope and Sequence

This unit presents the evidence for evolution and ways Christians can reconcile this evidence with their faith. After completing *Unit 9: Evolution and God's Creation*, you can continue with other units (biologos.link/units-list) that pair well with your science or Bible course (biologos.link/course-pairing). The modular design gives you flexibility to pick and choose the activities that best suit your goals, time constraints, and students' interests.

This unit builds on principles introduced in *Unit 8: Bible Interpretation and Science*. Further exploration of fossil evidence and common descent is found in *Unit 10: The Fossil Record and Faith*. How to reconcile human evolution with Genesis and important Christian doctrines is introduced in *Unit 11: Humans and the Rest of Creation*. An emphasis on seeing truth about God in the natural world is found in *Unit 12: Seeing God in Creation*.

For an introduction to questions at the intersection of faith and science, see *Unit 1: Faith and Science Foundations*. A comparison between theological and scientific knowledge and the methods scientists and theologians use to arrive at a consensus are explored in *Unit 2: Ways of Knowing*. To explore how science can be a way to serve God, see *Unit 3: Science as a Christian Vocation*. Open questions and debated issues about how to best reconcile theological and scientific knowledge are explored in *Unit 4: Cells and Design*, *Unit 5: Genetic Diversity and Human Dignity, Unit 6: DNA Technologies and Ethics*, *Unit 7: Fearfully and Wonderfully Made, Unit 13: Caring for People and the Planet, Unit 14: Climate Change and Our Commission,* and *Unit 15: Biodiversity and Conservation*.

Pedagogy of Hospitality

Integrate presumes acceptance of, or directly teaches, the scientific consensus on some matters of controversy within the Christian community: namely, modern cosmology, the age of the earth, evolution, and anthropogenic climate change. At the same time, we as authors recognize that in any community of Christians, there is likely a diversity of viewpoints. Our goal is education, not indoctrination. As such, we include opportunities to explore various Christian perspectives within the Integrate units. Reflection assignments and discussion questions are intentionally open-ended, without an expectation that students adopt any one "correct" perspective. We also believe practicing gracious dialogue is more important than winning an argument. For this reason the curriculum includes opportunities for respectful engagement with others who think differently. For tips on how to create a welcoming environment in your community, see biology professor Kerry Fulcher's article **A Pedagogy of Hospitality** (biologos.link/hospitality).

Corequisite Science

While Integrate is flexible and may be used as a standalone resource for enrichment, it is designed to supplement, not replace, science instruction. Students will be prepared to engage with the material in this unit assuming concurrent or previous study of evolution.

NGSS Alignment

The **Next Generation Science Standards** (NGSS; biologos.link/ngss) are research-based, cutting-edge K-12 science standards. They set expectations for what students should know and be able to do. While not an NGSS curriculum, Integrate has many points of alignment with NGSS. If you refer to NGSS in your lesson planning, please see the **NGSS Alignment for Integrate** (biologos.link/ngss-alignment).

Vocabulary

The following terms and concepts are used in this unit or in the additional resources. Definitions and explanations are found in the Unit Glossary at the end of the unit. Many additional terms are included in the main **Integrate Glossary** (biologos.link/glossary).

accommodation
adaptation
alleles
baraminology
biblical literalism
common descent
concordism
creation science
cultural evolution
Darwinism
evo-devo
evolution
evolutionary creation (EC)
evolutionism
fall (of humanity)
fitness
flood geology
founder effect
gene
genetic bottleneck
genetic drift
genome
genotype
geocentrism
global flood
heliocentrism
Intelligent Design (ID)
kinds (or biblical kinds)
macroevolution
microevolution
mutation
natural selection
nested hierarchies
old earth creation (OEC)
peer review
phenotype
phylogenetics
phylogenetic tree
population genetics
progressive creation
randomness
rapid speciation
scientific consensus
scientific laws
scientific method
scientific theory
selective pressure
speciation
theistic evolution (TE)
trait
transitional fossil
young earth creationism (YEC)

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