

Apologetics Course

Lesson Three

Science vs God?

- Questions we may face about Science.
 - Questions LAB
- What is Science?
- Framing the Debate – Two Roads within the Church
- Three Battlegrounds in Science
- Fine-Tuning of the Universe – the Goldilocks Effect
- The Grand Canyon – Flood Geology Case Study
- The Cumulative Case – Science points to a mind
- Class Discussion Questions
- Key Scholars – Quick References
- Conclusion & Common Questions
- Workshop

SECTION 1 | What Is Science?

Root Meaning: The word science comes from the Latin *scientia* — meaning knowledge. Originally it covered ALL organized knowledge: theology, law, history, grammar, and natural philosophy. The narrowing of 'science' to mean only lab experiments is a modern philosophical choice, not the original meaning.

The Two Types of Science You Must Know

	Operational Science	Historical / Origins Science
What it studies	Present, repeatable phenomena	Past, one-time events (origins, crimes, history)
Method	Observation + experiment + repetition	Evidence, inference, analogy, eyewitness testimony

Can be re-tested?	Yes — repeat the experiment	No — the event is over and cannot be repeated
Examples	Chemistry, medicine, physics, engineering	Archaeology, forensics, geology, paleontology
Role of assumptions	Minimized by controlled conditions	Unavoidable — every framework carries assumptions
Evolution uses this?	Some (genetics, microevolution)	Yes — origins of life and species are historical
Creation uses this?	Yes (where applicable)	Yes — interprets same evidence through biblical framework

The Forensic Science Analogy

A crime scene detective did NOT witness the crime. They cannot repeat it. They work from physical evidence and build the most coherent explanation. Origins scientists work exactly the same way — both evolutionists and creationists. The question is not which side is doing 'science.' The question is whose framework better fits the evidence.

Key Quote: *"You can't prove the Bible by the scientific method. But you can't prove George Washington was the first US president that way either. History is judged by eyewitnesses, documents, and evidence — not by repeatable lab experiments."* — Voddie Baucham

What Science CANNOT Answer

Science CAN answer (How)	Science CANNOT answer (Why / Who)
How chemicals react	Why there is something rather than nothing
How genes are inherited	Why the universe is orderly and rational
How planets orbit	Whether there is meaning or purpose in existence
How diseases spread	Who (if anyone) is responsible for what exists

Scientism — the claim that only science can give us truth — is itself not a scientific claim. It cannot be tested in a laboratory. It is a philosophical position that collapses under its own standard.

3 Statements You Should Be Able to Say

- "Origins science is historical science — neither evolution nor creation can be tested in a lab. We both interpret the same evidence through different frameworks."
- "Everyone brings presuppositions. The naturalist assumes no God is allowed; the Christian uses Scripture as a historical framework. Neither assumption can itself be proven by experiment."
- "Science answers HOW — it cannot answer WHY or WHO. A rational, orderly universe is itself evidence that demands an explanation science alone cannot provide."

SECTION 2 | Framing the Debate — Two Roads in the Church

	Syncretism (Theistic Evolution)	Biblical Creationism / Intelligent Design
Core claim	Evolutionary science is correct; harmonize with Genesis	The evidence, examined honestly, does NOT support macroevolution
Genesis 1–3	Read as literary/poetic, not historical	Read as historical narrative with theological intent
Adam & Eve	Symbolic representations of humanity	Historical persons — essential for the Fall and redemption
Key risk	If no historical Fall, what is the basis for needing a Savior? (Romans 5:12–21)	Must engage the science honestly and rigorously
Key advocates	BioLogos, Francis Collins, John Polkinghorne	Stephen Meyer, Michael Behe, Answers in Genesis, ICR

Historical Note: Charles Lyell (1830s) deliberately sought to 'free science from Moses.' His uniformitarianism — the assumption that geological processes have always been slow and steady — was a philosophical choice, not a scientific conclusion. Darwin built his entire framework on Lyell's geological foundation.

The Real Battle: Micro vs. Macro

Microevolution ✓ Accepted by all	Macroevolution ✗ The contested claim
Adaptation within a species	New body plans arising from scratch
Antibiotic resistance in bacteria	The first cell arising from non-life (abiogenesis)
Beak size variation in finches	A dinosaur producing the first bird
Coat colour changes in moths	Entirely new genetic information spontaneously appearing

Accepting microevolution does NOT commit you to macroevolution. These are two entirely different claims requiring entirely different evidence. Conflating them is the most common rhetorical move used against Christians.

SECTION 3 | Three Battlegrounds in the Science

1 The Fossil Record — The Cambrian Explosion

Darwin himself admitted: the sudden appearance of most animal body plans at the base of the fossil record was a 'serious problem' for his theory. 150+ years of searching has not resolved it.

The Problem for Evolution	The Creation/ID Explanation
Nearly all major animal phyla appear suddenly, fully formed, with no fossil ancestors below them	Rapid, catastrophic burial during the Genesis Flood explains sudden appearance

'Disparity before diversity' — large differences appear BEFORE small ones (opposite of Darwin's prediction)	Intelligent design: body plans were created top-down, not built bottom-up by chance
Probability of 1 new functional gene forming by chance: 1 in 10^{600}	Information of this complexity requires an intelligent source — not random mutation
Probability of the first living cell self-assembling: less than 1 in 10^{200}	Effectively impossible by any mathematical standard — demands an outside cause

*** **Butterfly Illustration** ***

Analogy: The probability of forming one new gene by random mutation is like picking one specific grain of sand from all the beaches on Earth — blindfolded — on your first try.

2 Irreducible Complexity — Michael Behe

Michael Behe (Darwin's Black Box, 1996): Many biological systems are 'irreducibly complex' — remove one part and the entire system stops working. Natural selection cannot build such systems step-by-step because partial systems provide no survival advantage.

- Bacterial flagellum — a rotary motor with ~30 precisely matched proteins
- Blood-clotting cascade — multiple proteins must all be present simultaneously to function
- Immune system antibody generation — interlocking multi-component machinery

Key point: Evolution proposes possible pathways — but has never demonstrated the mathematical probability of those pathways being achieved within the available time. The math makes it effectively impossible.

3 DNA & the Information Problem — Stephen Meyer

Meyer (Signature in the Cell, 2009): Darwin never addressed the origin of the first cell. DNA contains more specified, functional information than any human technology. Information of this kind — in all known human experience — only ever comes from a mind.

The Question	The Materialist Answer	The Design Answer
How did DNA's information originate?	Chemical self-organization over billions of years	Specified complexity always traces to intelligence
Can natural selection explain it?	Natural selection requires DNA to exist first — it cannot explain DNA's origin	The cause must precede and explain the effect
What does information always point to?	No explanation — it's an assumed brute fact	Every information system we know traces to a mind

Analogy: The probability of abiogenesis (life from non-life) is like picking one specific atom from all 10^{80} atoms in the observable universe — blindfolded — on your first try.

SECTION 4 | Fine-Tuning of the Universe — The Goldilocks Effect

Even if we set aside all the biological questions, the universe itself demands explanation. Physicists have discovered that the fundamental constants of nature are calibrated to extraordinary precision for life to exist at all.

Constant	Fine-Tuning Required	What Happens if Off by a Fraction?
Cosmological Constant (Λ)	1 part in 10^{120}	Universe either collapses immediately or expands too fast for galaxies to form
Gravitational Constant (G)	~1% of plausible range	Stars and galaxies cannot form
Strong Nuclear Force	~0.5% of plausible range	Either only hydrogen exists, or stars cannot produce heavier elements

Electromagnetic Constant	~2–4% of plausible range	Atoms destabilize; chemical bonding becomes impossible
Proton/Electron Mass Ratio	~10% of plausible range	Atoms and molecules cannot form stably

The Joint Probability: The collective probability that all 15 key cosmological constants arrived at their life-permitting values by chance is approximately 1 in 10^{148} . There are only $\sim 10^{80}$ atoms in the entire observable universe. The number is incomprehensibly smaller than any random chance could produce.

The Three Options — And Why Design Wins

- Necessity — the constants had to be this way (but no physical law forces them to be)
- Chance — they happened to align (probability of 1 in 10^{148} renders this effectively impossible)
- Design — a rational mind set them intentionally (the only explanation that matches the evidence)

The Multiverse Objection

Some propose infinite parallel universes — one of which happened to get the right constants. Problems:

- The multiverse is entirely unobservable and untestable — not science by the standards applied to creation
- A multiverse would itself require fine-tuned laws to generate universes — the problem is merely moved, not solved
- Stephen Meyer: 'The multiverse doesn't explain fine-tuning; it merely shifts the explanatory burden without resolving it'

Fred Hoyle — a lifelong atheist astrophysicist — predicted the existence of a carbon resonance level before it was found. When it was confirmed, Hoyle said the universe looked like a 'put-up job.' The evidence led a committed atheist to the language of design.

Scripture: *Romans 1:20 — 'For since the creation of the world God's invisible qualities — his eternal power and divine nature — have been clearly seen, being understood from what has been made, so that people are without excuse.'*

SECTION 5 | The Grand Canyon — Flood Geology Case Study

The Grand Canyon is perhaps the most famous geological exhibit in the origins debate. Both evolutionists and creationists look at the same rocks, layers, and fossils — and reach opposite conclusions. Same evidence, two worldviews, two interpretive frameworks.

The conventional view depends on Lyell's uniformitarianism — 'a little water over a long time.' Flood geology says the evidence points to 'a lot of water over a short time.' The geological signature of the Canyon fits the second model better in five specific ways.

Grand Canyon Feature	Conventional View	Flood Geology View
Flat, horizontal rock layers stretching for miles	Deposited slowly over millions of years	Rapid mass deposition by catastrophic floodwaters
Bent Tapeats Sandstone (hard rock bent like clay)	Bent after millions of years of hardening	Sediment was still soft when bent — only weeks/months old
Redwall Limestone: ~1 billion nautiloid fossils in a 6-foot bed, oriented NW–SE	Calm shallow sea over vast time	Catastrophic debris flow — direction proves powerful current; upright fossils demand rapid burial
Polystrate fossils (trees/creatures standing through multiple rock layers)	Somehow survived millions of years between layers	Rapid successive burial — a tree cannot stand upright across geological ages
Great Unconformity: clean global boundary, worldwide, where fossils begin	Local erosion events across vast time	Single worldwide catastrophic event — the Genesis Flood
Knife-edge contacts between layers (no erosion, preserved raindrop marks)	Millions of years between layers	Rapid sequential deposition — erosion would have destroyed these features

Mt. St. Helens 1980: A 1/40th-scale version of the Grand Canyon formed in 5 days. Layered strata formed in hours. Trees deposited upright in Spirit Lake sediments.

This is an observed, documented modern event that demonstrates how catastrophic water can produce what is attributed to millions of years of slow deposition.

The Circular Reasoning Problem

How do geologists date fossils? By the age of the rock layer they're in. How do they date the rock layer? By the fossils in it. This is circular reasoning — deep time is assumed, not independently demonstrated.

The Ice Age — Genesis Flood Connection

The biblical sequence (Missionary Jaeman Lee's Creation Science framework):

- Genesis Flood → massive volcanic activity → warm post-Flood oceans
- Warm oceans → massive evaporation → heavy snowfall at higher latitudes
- Heavy snowfall builds glaciers over centuries → the Ice Age
- The Book of Job — written near the Dead Sea (hot today) — is saturated with ice, snow, frost, and frozen water language (Job 6:16; 37:9–10; 38:29–30)
- This fits Job having been written during or just after the post-Flood Ice Age — an eyewitness literary record

Scripture: 2 Peter 3:5–6 — *'They deliberately forget that long ago by God's word... the world of that time was deluged and destroyed.'*

SECTION 6 | The Cumulative Case — Science Points to a Mind

No single argument proves everything. The power of the Christian apologetics case for creation is cumulative — multiple independent lines of evidence all converging on the same conclusion.

Line of Evidence	What It Shows
Cambrian Explosion	Abrupt appearance of complex life with no ancestors — unexplained by gradualism

Irreducible Complexity	Molecular machines cannot be built step-by-step — they require all parts simultaneously
DNA Information	Specified, functional code always traces to intelligence — never to random processes
Fine-Tuned Constants	1 in 10^{148} probability of chance — the universe is calibrated with mind-level precision
Grand Canyon geology	Physical evidence fits catastrophic rapid deposition better than millions of years
The Ice Age / Book of Job	Biblical post-Flood timeline fits the physical and literary evidence coherently

Synthesize or Debunk? — Your Framework		
Question	Syncretist Says	ID / Creationist Says
Can DNA self-organize?	Possibly — RNA World hypothesis	No — specified informational complexity always implies intelligence
Genesis 1–3?	Literary/poetic framework	Historical narrative with real theological stakes
Fine-tuning proves God?	Consistent with, but not proof of, God	Best and most parsimonious explanation available
Adam and Eve?	Symbolic	Historical — essential for the Fall and redemption

SECTION 7 | Class Discussion Questions

On Science & Assumptions

- When someone says 'science proves evolution,' what type of science are they referring to — operational or historical? Does the distinction matter?
- Lyell said he wanted to 'free science from Moses.' Was that a scientific conclusion or a philosophical starting point? How does this affect how we read his geological claims?

- If strict mathematical probability shows abiogenesis is 'effectively impossible,' why is it still taught as scientific consensus? What does that tell us about how assumptions shape conclusions?

On Design & Fine-Tuning

- Is the multiverse a scientific explanation or a philosophical escape hatch? How would you test it?
- Fred Hoyle was an atheist who used design language after discovering carbon resonance. What does it mean when the evidence leads committed non-believers to the language of intentional design?
- Why does the same inferential logic we use to detect design in a written message or computer code NOT apply to DNA — and is that a scientific or ideological distinction?

On the Grand Canyon & Geology

- The Tapeats Sandstone bent like clay rather than fracturing like hard rock. What does this physical evidence tell us about how old the sediment was at the time? Which framework explains this better?
- How does the Mt. St. Helens eruption (1980) function as a modern, observed analogy for flood geology? What does it demonstrate about the relationship between water volume and geological formation time?
- If polystrate fossils cross multiple rock layers that supposedly represent millions of years — what is the simplest explanation for how they got there?

On Biblical Integration

- If Adam and Eve are non-historical, what happens to Paul's argument in Romans 5:12–21 that death entered the world through one man? What theological stakes are involved in this question?
- The Book of Job is saturated with ice-age language — snow, ice, frost, frozen water — yet Job likely lived near the Dead Sea. How does the post-Flood Ice Age model explain this, and what does it imply about the historical reliability of the earliest biblical texts?

** Research compiled and prepared by Mark Fineman **

SECTION 8 | Key Scholars — Quick Reference

Scholar	Position	Key Argument	Key Book
Stephen Meyer	ID Proponent	DNA's information points to an intelligent cause; Cambrian Explosion proves no gradual ancestry	Signature in the Cell; Darwin's Doubt; Return of the God Hypothesis
Michael Behe	ID Proponent	Molecular machines are irreducibly complex — impossible to build by gradual selection	Darwin's Black Box; Darwin Devolves
Charles Lyell	Historical Context	Deliberately sought to 'free science from Moses' — uniformitarianism was a philosophical choice	Principles of Geology (1830–33)
Paul Davies	Agnostic Physicist	The universe's fine-tuning is undeniable — even agnostics speak of 'design'	The Goldilocks Enigma
Fred Hoyle	Atheist Astrophysicist	Called the universe a 'put-up job' after discovering carbon resonance	Various papers
William Lane Craig	Christian Apologist	Kalam Cosmological Argument: everything that begins to exist has a cause; the universe has a cause	Reasonable Faith
Missionary Jaeman Lee	Creation Scientist	Genesis Flood → Ice Age → Book of Job as eyewitness record; Grand Canyon field evidence	YouTube: Creation Science Trip
Voddie Baucham	Theologian	The Bible is a reliable historical document judged by historical standards	Various sermons

SECTION 9 | Take-Home — Numbers and Phrases to Remember

The Number / Phrase	What It Means	Where to Use It
1 in 10^{200}	Probability of abiogenesis (life from non-life)	Responding to 'life could have started by chance'
1 in 10^{600}	Probability of one new functional gene forming by chance	Responding to 'mutations can create new information'
1 in 10^{148}	Probability all 15 cosmological constants aligned by chance	Responding to 'the universe doesn't need a designer'
10^{80}	Atoms in the observable universe (for comparison)	Showing how absurdly small the above probabilities are
Operational vs. Historical Science	Two types of science with different rules	Any conversation about whether creation is 'scientific'
Disparity before diversity	Body plan differences appear before species variety — opposite of Darwin's prediction	Discussing the Cambrian Explosion
Polystrate fossils	Fossils crossing multiple rock layers — demand rapid burial	Grand Canyon / flood geology discussions
The Great Unconformity	Worldwide boundary where fossils begin — consistent with a single global event	Discussing Genesis Flood geology
Scientia = knowledge	Science was never limited to lab experiments — all rigorous knowledge qualifies	Responding to 'religion isn't scientific'
'Put-up job'	Fred Hoyle (atheist physicist) describing the designed appearance of the universe	Fine-tuning conversations

Workshop

1. Learn to articulate at least 2 or 3 of these arguments from this lesson