

Faith and Science

Grade 12

Course Description

“What is the origin of life? Does the Big Bang Theory prove God? Can a Christian accept the theory of evolution?” Through readings, presentations and discussions, the goal of this course is to help students find real answers to real questions about the intersection of science and faith and the Church’s teaching on the unity of faith and reason.

Portrait of the Crusader

Coursework emphasizes the importance of respecting human worth and dignity and guides each student to develop a socially just perspective that will help guide his/her life and the lives of others. In alignment with the school's *Portrait of the Crusader*, students are taught and encouraged to follow a moral compass rooted in respect, character, integrity, hope, and kindness and to demand fairness, respect others’ beliefs, and value the uniqueness of every human being.

Essential Questions for the Course

1. What does Christianity contribute to science?
2. Why should the theory of evolution from atoms not trouble our faith?
3. Why is saying “life begins at conception” a unity of faith and science?

Course Curriculum

Unit 1 - The Relationship of Faith and Science /Ontology

Guiding Questions

1. Does science provide answers to the *Why* of Creation?
2. Why do people believe that faith and science are in opposition?
3. Does the Big Bang Theory prove God?
4. Is there any evidence of a soul?
5. How can science and religion purify one another?

Enduring Understandings

- ❖ A personal relationship with God is accompanied by an expectation to live up to moral standards.
- ❖ We can evangelize through science.
- ❖ Science takes things apart to examine them and religion gives things meaning.
- ❖ Faith and science are manifestations of the same reality.
- ❖ Science *discovers* laws; it does not *create* them

Concepts and Skills

- Make a persuasive argument in support of Einstein’s claim: “Science without religion is lame; religion without science is blind.”
- Conclude why and how a Catholic appreciates scientific research.
- Explain what it means to say that science is provisional.
- Interpret what is meant by the term *creation ex nihilo*.
- Contrast how the biblical worldview was different from other ancient religions.
- Compare Fr. Robert Spitzer’s and Dr. Peter Hodgson’s views as to the evidence science can provide for faith.

Summative Assessment

- Present research into the life and work of a Catholic scientist. Connect research to one or more essential or guiding questions.

Unit 2 - The Soul and Moral Culpability

Guiding Questions for the Unit

1. How should we understand the world of atoms?
2. Does quantum mechanics allow for free will?
3. What does it mean to say that a Catholic must be the “most thorough materialist”?
4. How is it that free will does not oppose the laws of physics?

Enduring Understandings

- ❖ Whether a person of faith, or not, people see the world as governed by order and physical laws.
- ❖ “One only has to marvel at the periodic table to know that a wise and intelligent God has ‘disposed all things by measure and number and weight’ (Wisdom 11:20.” Trasancos, Particles of Faith, p. 72)
- ❖ Theories come along after many cycles of the scientific method; laws are simply observations of those things which are objectively real.

Concepts and Skills

- Deduce how an atheist scientist must adopt the worldview of Christianity.
- Compare angels, humans, and animals.
- Demonstrate the logical implications for free will if we reject the Catholic teaching of personhood and the Trinity.
- Summarize the Church’s teaching on why humans have free will and intellect.

Summative Assessment

- Write a paper addressing the prompt: “What does it mean to say that science is the handiwork of God?” Use argumentative writing format.

Unit 3 - Complementary Realities

Guiding Questions

1. Did we evolve from atoms?
2. Can a Christian accept the Theory of Evolution?
3. Why is the Theory of Evolution foundational to all biological sciences?
4. Why does evolution trouble some faithful people?

Enduring Understandings

- ❖ We can reconcile science with the book of Genesis.
- ❖ Science has no accounting for meaning or purpose as regards our individual existence.
- ❖ The writers of Scripture were not concerned with writing scientifically, but were writing to communicate knowledge.
- ❖ People were created in the image and likeness of God, with intellect and free will.
- ❖ Creation and evolution are “complementary realities.” (Pope Benedict XVI, *In the Beginning*)

Concepts and Skills

- Analyze whether evolution can prove the existence of Adam and Eve.
- Examine how the Theory of Evolution is foundational to all biological sciences.

Summative Assessment

- Read *The Creation* by James Weldon Johnson. Read the account of the Creation in Genesis. Look carefully at the painting *Creation of Adam* by Michelangelo.
 - Discuss how the poem and the painting give us an enlarged understanding of the Creation account found in scripture.
 - Answer the question: *What do these three portrayals contribute to the scientific theories behind human evolution?*

Unit 4 - Life - Dignity and Origins

Guiding Questions

1. When does human life begin?
2. Why don't people debate the beginnings of other organisms' life besides humans?
3. What does the Church teach about 'ensoulment'?

Enduring Understandings

- ❖ We do not need to choose between faith and science.
- ❖ Creation is a gift from God.
- ❖ Biology does not declare or define life; it observes life after it has begun.
- ❖ “Our actions as free agents change the course of nature as we play the song of human life on Earth.” (Trasancos, p. 212)

Concepts and Skills

- Cite *Catechism* teaching about the beginning of personhood.
- Explain the consequences of adopting the “brain-life theory” for personhood.
- Extrapolate how “life begins at conception” is a unity of faith and science.

Summative Assessment

- Dr. Francis Collins, Director of the NIH and former lead in the Human Genome Project, believes that scientific evidence makes it reasonable to believe in God. Defend or dispute this assertion based on evidence learned in this course. Present ideas in argumentative format: claim, points of argument, evidence, and original reasoning/insight.

Resources May Include:

- Textbook
- *Magis Center*, <https://magiscenter.com/>
- *Credible Catholic*, <https://www.crediblecatholic.com/>