"The Science and Theology of Creation" Toward an Integral & Contemplative Understanding of Creation

SC/TH 302 Syllabus

Spring 2022 Location: Annunciation Rm #129 Instructor: Br. Louis de Montfort Nguyen, OSB, MD Email: louis.nguyen@mtangel.edu Phone : 503-580-7863 Office hours : (Tues. 1-2 pm and Fri. 11am) –Office of Spiritual Ministries 2nd floor of Guesthouse

COURSE DESCRIPTION

This is a required science course that integrates the natural sciences with philosophy and Christian theology. It seeks to combine scientific theories from astronomy, cosmology, astrobiology, geology, physics, chemistry and biology with faith and philosophy to create an integral and systematic understanding of the universe and life. We will investigate major scientific questions of modern times: "How did the universe as we know it begin?" "How will it end?" "What makes the Earth uniquely fit for life?" "How did life originate and how did it evolve?" "How did human beings evolve?" "What makes human beings different from other living animals?" and "What is the ultimate goal and purpose of creation and man?" The most important question we will address is "What can a greater scientific knowledge and understanding of the universe, pregnant filled with beauty and meaning, teach us about the Christian Faith and how it can contribute to Christian Liturgy?"

Since the time of the Gospel, but particularly during the Middle Age, the human quest for understanding has been enlightened by other disciplines, especially philosophy. In the modern era, this growth in understanding of the cosmos has been greatly influenced through modern science. We live in an age of unprecedented scientific discoveries, one that can be aptly considered the era of "natural revelation" where God has lifted the veils to the mystery of creation. Through the study of science and reflecting on these scientific discoveries, the Christian faith is enriched and deepened in every respect.

Of equal importance is the investigation of how science can serve to enrich the Christian Liturgy. Through our ever-expanding knowledge of creation, we have an increasing awareness of how "good" creation is and how everything gives glory to its Creator by the sheer fact of its existence and majesty. Ultimately, science can further deepen the theology of the "Cosmic Liturgy," broadening its scope to encompass men, nature and all of creation. The phenomenal growth in scientific discoveries, such as the beauty and symmetry of the universe and of the intricacies and complexities of life, has increased our capacity for awe, which is usually seen as one of the abiding experiences of contact with the numinous.

The course begins with a study of the nature of science and its methodology and then proceeds by exploring its relationship with the Christian faith and its historical development in a Christian civilization. It will also briefly survey the relationship of early science, or "natural philosophy," to philosophy and theology since these are important foundations on which modern science is built. The bulk of the course is devoted to studying and understanding the natural history and development of the universe, the habitability of the Earth, the origin and evolution of life, with a particular emphasis on human biological evolution.

In summation, this course is ultimately a "deep reading" of the book of nature, a lectio scientia and contemplation of the cosmos, by which science provides the key to open and read the text; but together with the Christian faith, the meaning, purpose and beauty of this book is revealed.

"Finding God in All Things"

LEARNING OBJECTIVES & STUDENT LEARNING OUTCOMES

- 1. Upon completion of this course, students should be able to understand the nature of science, its development and history, its relationship to Christianity, and integrate the scientific perspective of the universe to a Christian understanding of creation. Students will demonstrate this through reading assignments and homework, exams and science project, both written and oral.
- 2. Understand the nature of science, its methodology, strengths and limitations.
- 3. Understand the proper relationship between science, faith and philosophy, their compatibility and complementarity.
- 4. Understand the history and development of science and evaluate the hypothesis that science was "born of Christianity."
- 5. Understand modern scientific theories pertaining to the origin of the universe, including the Big Bang theory, stars and galaxies formation, solar system and planetary formation and chemical nucleosynthesis.
- 6. Understand the origin and development of the Earth and examine the theory of a "privileged planet," and the factors that contribute it to its habitability for organic life, especially complex and intelligent life.
- 7. Be able to investigate and assess the validity of theories relating to the origin of and evolution of life.
- 8. Explore the origin and evolution of humanity and understand the validity of theories on human origins.
- 9. Study, meditate and reflect on natural phenomena and key elements in nature and their theological significances.
- 10. Understand the intrinsic properties of creation from a faith perspective: beauty, goodness, unity, rationality, order, complexity and dynamic progression.
- 11. Reflect and integrate science to a Christian theology of the cosmos, and develop a richer understanding of Genesis, Christology, Communion Ecclesiology, Sacramental Theology and finally Christian Liturgy and Worship.
- 12. Above all, this course seeks to develop a lectio and contemplative glance- a deep reading of the book of nature- to see the wonder, awe and beauty of creation through an integration of science and faith.

EVALUATION & GRADING

- 1. Attendance and participation in class (25%)
- 2. Homework Assignments (25%)
- 3. Midterm Exam Written (15%)
- 4. Final Oral Exam (25%)
- 5. Science & Faith project- one page paper and 5 minute presentation (10%)

REQUIRED READINGS

Baglow, Christopher T. (2019). *Faith, Science and Reason: Theology on the Cutting Edge.* 2^{-d} Ed. Illinois Midwest Theological Forum.

SUPPLEMENTAL READINGS

- 1. Thompson, Christopher J. The Joyful Mystery: Field Notes toward a Green Thomism. Emmaus Road Pub., 2017.
- 2. Schönborn, Christoph Von., and Hubert Philipp. Weber (2007). *Chance or Purpose? Creation, Evolution, and a Rational Faith.* San Francisco: Ignatius.
- 3. Trasancos, Stacy. (2014). *Science was Born of Christianity. The Teaching of Fr. Stanley L. Jaki.* Titusville, FL. Habitation of Chimham Publishing Co.
- 4. Verschuuren, G. M. N. (2012). God and Evolution?: Science Meets Faith. Boston: Pauline Books & Media.
- 5. Ward, Peter and Donald Brownlee. (2000). *Rare Earth: Why Complex Life is Uncommon in the Universe*. New York. Copernicus Books.
- 6. Spitzer, Robert J. New Proofs Gonzalez, Guillermo, and Jay W. Richards. The Privileged Planet: How Our Place in the Cosmos Is Designed for Discovery. Gateway Editions, 2020.
- 7. for the Existence of God: Contributions of Contemporary Physics and Philosophy. William B. Eerdmans Pub., 2010.
- 8. Maximus, and Paul M. Blowers. On the Cosmic Mystery of Jesus Christ. St. Vladimir's Seminary Press, 2003.
- 9. Nellas, Panayotis. Deification in Christ: Orthodox Perspectives on the Nature of the Human Person. St. Vladimir's Seminary Press, 1997.
- 10. Schönborn, Christoph, et al. Man, the Image of God: The Creation of Man as Good News. Ignatius Press, 2011.
- 11. Schönborn Christoph von, et al. Chance or Purpose?: Creation, Evolution, and a Rational Faith. Ignatius Press, 2016.

- 12. Graney, Christopher. "Setting Aside All Authority: Giovanni Battista Riccioli and the Science against Copernicus in the Age of Galileo."
- 13. Grant, Edward. "The Foundations of Modern Science in the Middle Ages: Their Religious, Institutional and Intellectual Contexts."

ELECTRONIC DEVICES POLICY

The use of laptops, tablets, smartphones, and devices with internet access are not permitted during class time. Exemptions will be provided upon request for those who need to use an them for the sole purpose of taking lecture notes.

SCHEDULE

WEEK	TOPICS	READINGS
1	1/11(Tues) Introduction: An Integral and Contemplative Understanding of Creation	Baglow Ch. 1 Seeing the Whole: Natural Science and Supernatural Faith
	1/14 (Fri) "Science's Faith & Humility" The Nature of Science: Its Methodology, Presuppositions and Limitations	
2	1/18 Tues.	Baglow Ch. 2 Science & the Christian Faith
	1/21 (Friday/no classes) The Relationship Between Faith & Science	
3	1/25 (Tues) Science and the Bible	Baglow Ch. 3 The Christian Doctrine of Creation
	1/28 (Fri)	
4	2/1 (Tues) The History of Christianity's Contributions to Modern Science	Baglow Ch. 4 The First Creation Account and Modern Science
	2/4 (Fri) "Science Was Born of Christianity "	
5	2/8 (Tues) The Book of Nature and the Book of Scripture	Baglow Ch. 5 Patroness or Persecutor?
	2/11 (Fri)	
6	2/15 (Tues) Science and Philosophy: A Bridge to Theology	Baglow Ch. 7 God and Modern Physics
	2/18 (Fri)	
7	2/22 (Tues)	Baglow Ch. 8 God and Biological Darwin
	2/25 (Fri)	
8	MIDTERM 3/1 (Tues)	Baglow Ch. 9 God and the Sciences of Human Origins
	3/4 (Fri)	
9	3/8 (Tues)- no classes Theological Symposium	Baglow Ch. 10 In His Image: The Human Person from the Divine Perspective
	3/11 (Fri)	
10	3/15 (Tues)	Baglow Ch. 11

		Human Sin and Modern Science: The Tragic History of the Image
		of God
	3/18 (Fri)	
11	3/22 (Tues)	Baglow Ch. 12 From Evolution to Resurrection: Jesus Christ, the True Origin of Humanity
	3/25 (Fri)	
12	3/29 (Tues)	
	4/1 (Fri)	
13	4/5 (Tues)	
	4/8 (Fri)	
14	Holy Week 4/11-4/15	
15	4/19 (Tues)	
	4/22 (Fri)	
16	4/26 (Tues)	
	4/29 (Fri) Last day of classes	
17	Final Exam Week- 5/2-5/5 Final Exam TBD	

Plagiarism Policy

All work submitted by students as their own work should indicate sources, published and unpublished, which were consulted and/or cited. It is the student's responsibility to know the proper method of citation as well as how to acknowledge sources when not citing directly. Failure to acknowledge source material is plagiarism and will be dealt with accordingly with disciplinary measures ranging from failure of the assignment, the course, or dismissal from the Seminary. In such matters, the judgment of the appropriate Academic Dean and the President–Rector is final.

Accessibility Statement

Mount Angel Seminary is committed to providing accessibility to its services, programs and activities for students with disabilities, recognizing its responsibilities to ensure the rights of students with disabilities and to identify and maintain the standards that are required to provide its academic and formational programs. Mount Angel Seminary will strive to accommodate students with disabilities, unless the accommodation would pose an undue burden to the Seminary or compromise the mission or integrity of the program.

Students seeking accommodation(s) must:

- Provide a written statement to the Vice President of Administration requesting an accommodation that includes a description of the specific disability, how the student is limited and the expected duration of the limitation.
- Submit proper professional/medical verification of the condition(s) that necessitate the request to the Vice President of Administration.