



SAINT LOUIS UNIVERSITY

1818 ADVANCED COLLEGE CREDIT PROGRAM

<<REQUIRED: <https://www.slu.edu/registrar/calendars/1818-calendar.php>>> (We recommend you also post this link to your classroom management site)

THEO 2820 Religion and Science

3 credits

<<High School Name>>

<<High School Course Name and Number>>

Course Syllabus

Semester:

<<TERM and YEAR>>

Instructor:

<<Instructor Name>>

Contact Information:

<<Office Address>>

<<E-mail Address>>

<<Phone>>

<<Availability/Office Hours>>

Textbook(s)/Resources:

<<<<**REQUIRED.** insert here>>

Course Description:

THEO 2820 Religion and Science

3 Credits

This course examines the history and recent development of three disciplines--cosmology, physics, and biology--to show how religion and science have related to one another in the past and relate to one another in contemporary research and reflection. A final part of the course considers some issues that involve multiple scientific disciplines (e.g., extraterrestrial intelligence, environmentalism, etc.). Credit not given for both THEO 2820 and BIOL 2560. Cross-listed with PHIL 3600.

Attributes: Catholic Studies-Theology, Theology BA Requirement (A&S), Theology BS Requirement (A&S)



Additional Description

<<OPTIONAL. Insert HS course description info/additional descriptive info>>

Course Learning Outcomes:

Students will be able to:

1. Identify key individuals and their contributions to the dialogue between religion and science.
2. Define and describe faith, reason, theology, math, and science and their goals.
3. Explain the historical and modern perspectives on cosmology.
4. Compare and contrast various religious truth claims (including intelligent design) with the principles and methods of modern scientific truth claims; e.g., conflicting/competing/compatible truth claims concerning creation, evolution, action, causation, and providence.

Additional [HIGH SCHOOL NAME HERE] Learning Outcomes:

<<OPTIONAL: insert any high school, district, state or instructor developed outcomes here>>

Attendance Policy:

<<REQUIRED: Please list the attendance policy for the class, the policy on late/missing exams and work, in addition to penalties on missed classes and/or tardiness. NOTE we recommend when discussing attendance to not delineate between excused or unexcused just define it as absences>>

Method for Determining Final Grade for Course:

<<insert here (i.e. Tests 500 points (30%), Quizzes 100 points (ten 10 point), etc.)>>

SLU Grading Information/Scale:

<<REQUIRED: Saint Louis University's undergraduate grading system follows a 0 - 4.000 grade point scale. Grading is at the discretion of the 1818 instructor, who will be guided by the course description, shared learning outcomes, and shared assessment as well as professional experience and collaboration. Use of the LLC grading scale is required for your syllabus, and the instructor must outline how grades are determined at the end of the course in accordance with the provost's required syllabus components:

https://www.slu.edu/provost/policies/academic-and-course/policy_course-syllabus_12-12-18.pdf.

Grades are assigned to the SLU transcript as follows: >>



Grade	Grade Points	Interpretation
A	4.000	High achievement and intellectual initiative
A-	3.700	
B+	3.300	Above average, approaching high achievement
B	3.000	Above average achievement
B-	2.700	
C+	2.300	Midway between B and C
C	2.000	Average achievement
C-	1.700	
D	1.000	Inferior but passing achievement
F	0	Failure

The following grading scale applies for this LLC course:

A (4.0)	93-100	High achievement and intellectual initiative
A- (3.7)	90-92	Approaching high achievement
B+ (3.3)	87-89	Slightly higher than above average achievement
B (3.0)	83-86	Above average achievement
B- (2.7)	80-82	Approaching above average achievement
C+ (2.3)	77-79	Slightly higher than average achievement
C (2.0)	73-76	Average achievement
C- (1.7)	70-72	Below average achievement
D (1.0)	65-69	Inferior, but passing achievement
F (0)	<64	Course failure

Note on SLU Undergraduate Cumulative GPA:

The grades earned through the 1818 Advanced College Credit Program are Saint Louis University grades, and will be part of each student's permanent undergraduate SLU academic record and transcript.

Significant Learning Activities / Evaluation Strategies and Approximate Deadlines and/or Calendar:

<<Please insert here a listing of each of the major units and assignments.>>

Academic Integrity Syllabus Statement

Academic integrity is honest, truthful and responsible conduct in all academic endeavors. The mission of Saint Louis University is “the pursuit of truth for the greater glory of God and for the service of humanity.” Accordingly, all acts of falsehood demean and compromise the corporate endeavors of teaching, research, health care, and community service through which SLU fulfills its mission. The University strives to prepare students for lives of personal and professional integrity, and therefore regards all breaches of academic integrity as matters of serious concern. The full University-level Academic Integrity Policy can be found on the Provost's Office website at:

https://www.slu.edu/provost/policies/academic-and-course/policy_academic-integrity_6-26-2015.pdf.

Additionally, each SLU College, School, and Center has its own academic integrity policies, available on their respective websites.

Students participating in the 1818 Advanced College Credit Program are held to and should be familiar with the College of Arts and Sciences Academic Honesty policy available at: [Academic Honesty : SLU](#)

Disability Accommodations

Students with a documented disability who wish to request academic accommodations must formally register their disability with the University. Once successfully registered, students also must notify their course instructor that they wish to use their approved accommodations in the course.



Please contact the Center for Accessibility and Disability Resources (CADR) to schedule an appointment to discuss accommodation requests and eligibility requirements. Most students on the St. Louis campus will contact CADR, located in the Student Success Center and available by email at accessibility_disability@slu.edu or by phone at [314.977.3484](tel:314.977.3484). Once approved, information about a student's eligibility for academic accommodations will be shared with course instructors by email from CADR and within the instructor's official course roster. Students who do not have a documented disability but who think they may have one also are encouraged to contact CADR. Confidentiality will be observed in all inquiries.

Title IX

Saint Louis University and its faculty are committed to supporting our students and seeking an environment that is free of bias, discrimination, and harassment. If you have encountered any form of sexual harassment, including sexual assault, stalking, domestic or dating violence, we encourage you to report this to the University. If you speak with a faculty member about an incident that involves a Title IX matter, **that faculty member must notify SLU's Title IX Coordinator and share the basic facts of your experience.** This is true even if you ask the faculty member not to disclose the incident. The Title IX Coordinator will then be available to assist you in understanding all of your options and in connecting you with all possible resources on and off campus.

Anna Kratky is the Title IX Coordinator at Saint Louis University (DuBourg Hall, room 36; anna.kratky@slu.edu; 314-977-3886). If you wish to speak with a confidential source, you may contact the counselors at the University Counseling Center at 314-977-TALK or make an anonymous report through SLU's Integrity Hotline by calling 1-877-525-5669 or online at <http://www.lighthouse-services.com/slu>. To view SLU's policies, and for resources, please visit the following web addresses: <https://www.slu.edu/about/safety/sexual-assault-resources/index.php>.

<<<<END OF SYLLABUS TEMPLATE>>>>

SAMPLE SYLLABUS



THEO 2820 RELIGION AND SCIENCE

Professor Michael J. McClymond
Department of Theological Studies
Fall Semester 2017

Office: Adorjan Hall 300
Email: michael@slu.edu
Cell/Text: 314-397-6512

SYLLABUS AND COURSE OUTLINE

COURSE DESCRIPTION

This course examines the history and recent development of three disciplines--cosmology, physics, and biology--to show how religion and science have related to one another in the past and relate to one another in contemporary research and reflection. The final part of the course looks at issues pertaining to science and its ethical, technological, and humanistic applications.

COURSE OUTCOMES

1. Identify key individuals and their contributions to the dialogue between religion and science.
2. Define and describe faith, reason, theology, math, and science and their goals.
3. Explain the historical and modern perspectives on cosmology.
4. Compare and contrast various religious truth claims (including intelligent design) with the principles and methods of modern scientific truth claims; e.g., conflicting/competing/compatible truth claims concerning creation, evolution, action, causation, and providence.

REQUIRED TEXTS

- 1) Barbour, Ian. *Religion and Science: Historical and Contemporary Issues* (HarperCollins, 1997).
- 2) Collins, Francis. *The Language of God: A Scientist Presents Evidence for Belief* (Free Press, 2007).
- 3) Course Readings #1-#24 (listed below)—Made available by email in PDF files to all students.

PROCEDURES



1. The Midterms and Final Examination. There will be two midterm examinations and a final examination. The exams will cover both the material in the lectures and in the texts. Whereas the midterms are non-cumulative, each covering a little more than a third of the readings and the lectures, the final will be comprehensive, i.e., it will cover all the material in the course.

2. Class Discussions on Course Readings. Each student in the class will be assigned one course reading in the course of the semester, and will have the responsibility to read it carefully, summarize it in one single-spaced page, and pose two questions for discussion based on the reading. The student is also responsible for distributing this (by email is fine) to the other students in the class, for showing up in class the day the course reading is listed, and for briefly presenting the summary (@ 5 minutes) on that text. Failure to do the summary of the reading on the appointed day will result in a lowering of the class participation grade (15% of the total).

3. Group Assignments. Throughout the semester, we will be using Ian Barbour's categories (in

adapted form) to analyze the issues from the standpoint of conflict, independence, and integration for each of the readings. Each student will be part of one of three groups, and the groups will need to present a response for the readings for each class session. One person in each group will be responsible for offering an analysis of the readings each day, but group members are encouraged to collaborate with one another. More information on this will be given out within the first or second week of class.

4. Research Paper. One of the course requirements is a 10-12 pp. (double-spaced) research paper on some aspect of religion and science. The topic is to be chosen by the student in consultation with the professor. More information on the research paper will be given out later.

The research paper is due on December 7, 2017. Late papers will lose one-third of a grade point for every day they are late (i.e., a "B" paper that is one day late receives a "B-" grade).

5. Digital Device and Internet Policy. Because computer laptops, tablets, and cell phones can so easily lead to distraction within the classroom, such digital devices are not to be turned on and used during the class period, unless there is express permission to do so from the instructor. Those looking at or listening to their devices will be asked in class to turn them off.

6. Grading. The course grades will be calculated as follows:
20% First Midterm Examination; 20% Second Midterm Examination 20% Research Paper
15% Class Participation

25% Final Exam Grade 100% Course Grade

SOME KEY DATES

OCT. 12 - FIRST EXAMINATION NOV. 30 - SECOND EXAMINATION DEC. 7 -
RESEARCH PAPER DUE DEC. 19 - FINAL EXAMINATION

THE FINAL EXAMINATION: The Final Exam will be held on DECEMBER 19, from

NOON - 2 P.M. NOTE: Students are not permitted to change examination dates to suit their travel plans. Any questions regarding the examination dates should be directed to the professor.

CLASS SCHEDULE AND READING ASSIGNMENTS

I. Approaches to Relating Religion and Science.

Aug. 29 - Course Introduction; Ways of Relating Religion and Science.

Aug. 31 - FILM: "The God Delusion Debate" (Richard Dawkins vs. John Lennox).

II. Cosmology.

Sept. 5 - Discussion of Dawkins-Lennox Debate and Related Readings (READING #1—DAWKINS; READING #2—NAGEL).

Sept. 7 - Concepts of the Cosmos: From the Ancient Greeks to the Scientific Revolution (BARBOUR, 195-204).

Sept. 12 - FILM: "Galileo's Battle for the Heavens" (YouTube).

Sept. 14 - The Strange Case of Galileo (COLLINS 57-84; READING #3—RUSSELL).

Sept. 19 - God and the Big Bang, I: The Development of Modern Cosmology (BARBOUR, 195-204; READING #4—KAKU [advanced]).

Sept. 21 - God and the Big Bang, II: "Fine Tuning" and the Anthropic Cosmological Principle (READING #5—BRADLEY).

Sept. 26 - Exotheology—Speculations on the Possibilities of Extraterrestrial Life (BARBOUR, 214- 220; READING #6—VARIOUS AUTHORS).

Sept. 28 - The Fate of the Universe (READING #7—POLKINGHORNE/STOEGER).

III. Physics.

Oct. 3 - FILM: James Burke, "The Day the Universe Changed: Infinitely Reasonable." (BARBOUR, 9-24; READING #8—STOEGER).

Oct. 5 - The Development of Physics (BARBOUR, 165-184; COLLINS, 145-211).

Oct. 10 - God and the World: Some Basic Models (READING #XX--BARBOUR, 33-48, 305-325; READING #9—POLKINGHORNE).

Oct. 12 - FIRST EXAMINATION

IV. Biology.

Oct. 17 - The Evolution of Darwinism (BARBOUR, 49-67, 223-237; READING #10—AYALA). Oct. 19 - FILM: James Burke, "The Day the Universe Changed: Fit to Rule." (READING #11—FLANNERY; READING #12—MILLER).

Oct. 24 - FALL BREAK, NO CLASS

Oct. 26 - The Origin of Life: Past and Present Perspectives (READING #13—MEYER). Nov. 2 - The Debate Over Intelligent Design (BARBOUR, 237-242; COLLINS, 85-108). Nov. 7 - FILM: "Unlocking the Mystery of Life." (BARBOUR, 243-249)

Nov. 9 - A Quest for Synthesis: The Life and Vision of Teilhard de Chardin (READING #14—BEHE; READING #15—DEMBSKI; READING #16—TEILARD; COLLINS, 109-142).

Nov. 14 - Whatever Happened to the Soul? Scientific and Theological Perspectives (BARBOUR, 258-263; READING #17—WARD).

V. Science and Society.

Nov. 16 - Social Darwinism and Sociobiology (BARBOUR, 253-258 and 263-277; READING #18—RACHELS, pp. 173-207; READING #19—RACHELS, pp. 208-223).

Nov. 21 - Biology and Ethics, I: Egotism and Altruism (READING #20—POST). Nov. 23 - THANKSGIVING BREAK, NO CLASS

Nov. 28 - Biology and Ethics, II: Genetic Determinism and Genethics (READING #21—PETERS; READING #22—VARIOUS AUTHORS ON GENETHICS; COLLINS, 235-272).

Nov. 30 - SECOND EXAMINATION

Dec. 5 - The Mind: Cognitive Science and Artificial Intelligence (READING #23—KAKU; READING #24—KAKU).

Dec. 7 - FILM: "The Day After Trinity" (documentary on the making of the atomic bomb).
TERM PAPER DUE

Dec. 19 - FINAL EXAMINATION, Tues., Noon – 2 p.m.

SELECTED READINGS FOR THE COURSE (numbered #1 to #24) INTRODUCTION

1. Dawkins, Richard. *The Blind Watchmaker*, 77-109. New York: W. W. Norton, 1987.



2. Nagel, Thomas. "Introduction." In *Mind and Cosmos: Why the Materialist Neo-Darwinian Conception of Nature is Almost Certainly False*, 3-12. New York: Oxford University Press, 2012.

COSMOLOGY

3. Russell, Robert John. "Cosmology from Alpha to Omega," *Zygon* 29 (1994) 557-577.
4. Kaku, Michio. "Einstein's Prophetic Legacy." In *Einstein's Cosmos: How Albert Einstein's Vision Transformed Our Understanding of Space and Time*, 201-233. New York: W. W. Norton, 2004.
5. Bradley, Walter L. "The 'Just So' Universe: The Fine-Tuning of Constants and Conditions in the Cosmos." In William A. Dembski and James M. Kushiner, eds., *Signs of Intelligence: Understanding Intelligent Design* (Grand Rapids, Michigan: Brazos Press, 2001), pp. 157-170.
6. Exotheology—Readings By Various Authors.
7. Polkinghorne, John; and William Stoeger, SJ. *The End of the World and the Ends of God*, 1-13, 17-28. Harrisburg, Pennsylvania: Trinity Press International, 2000.

PHYSICS

8. Stoeger, William R., S. J. "Key Developments in Physics Challenging Philosophy and Theology." In W. Mark Richardson and Wesley J. Wildman, eds., *Religion and Science: History, Method, Dialogue*, 183-200. New York and London: Routledge, 1996.
9. Polkinghorne, John. "Chaos Theory and Divine Action." In W. Mark Richardson and Wesley J. Wildman, eds., *Religion and Science: History, Method, Dialogue*, 243-252. New York and London: Routledge, 1996.

BIOLOGY

10. Ayala, Francisco. "Darwin's Revolution." In John Campbell and William Schopf, eds., *Creative Evolution?*, 1-17. Boston: Jones and Barlett, 1994.
11. Flannery, Michael A.; ed. "Shedding Light on Darwin's Shadow: Alfred Russel Wallace and Intelligent Evolution." In *Alfred Russel Wallace's Theory of Intelligent Evolution*, 1-34. Riesel, TX: Erasmus Press, 2011.
12. Miller, Keith. "Finding Darwin's God." In *Finding Darwin's God: A Scientist's Search for Common Ground Between God and Evolution*, 269-292. New York: Harper Perennial, 2007.
13. Meyer, Stephen C. "The Evolution of a Mystery and Why It Matters." In *Signature in the Cell*, 33-59. New York: Harper One, 2009.
14. Behe, Michael. "Darwin's Breakdown: Irreducible Complexity and Design at the Foundation of Life." In William A. Dembski and James M. Kushiner, eds., *Signs of Intelligence: Understanding Intelligent Design*, 90-101. Grand Rapids, Michigan: Brazos Press, 2001.



15. Dembski, William A. "Signs of Intelligence: A Primer on the Discernment of Intelligent Design." In William A. Dembski and James M. Kushiner, eds., *Signs of Intelligence: Understanding Intelligent Design*, 171-192. Grand Rapids, Michigan: Brazos Press, 2001.
 16. Teilhard de Chardin, Pierre. *The Phenomenon of Man*. 31-36, 291-313. New York: Harper and Row, 1961.
 17. Ward, Keith. "The Soul." In *God, Faith, and the New Millennium: Christian Belief in an Age of Science*, 123-131. Oxford, UK: Oneworld Publications, 1998.
- SCIENCE AND SOCIETY
18. Rachels, James. *Created from Animals: The Moral Implications of Darwinism*, 173-207. New York: Oxford University Press, 1990.
 19. Rachels, James. *Created from Animals: The Moral Implications of Darwinism*, 208-223. New York: Oxford University Press, 1990.
 20. Post, Stephen. *Unlimited Love: Altruism, Compassion, and Service*, 57-88. Radnor, PA: Templeton Foundation Press, 2003.
 21. Peters, Ted. *Playing God? Genetic Determinism and Human Freedom*, 27-62. New York and London: Routledge, 1996.
 22. *Selected Readings on Genethics*.
 23. Kaku, Michio. "Unlocking the Mind." In *The Future of the Mind*, 13-40. New York: Anchor Books, 2014.
 24. Kaku, Michio. "The Artificial Mind and Silicon Consciousness." In *The Future of the Mind*, 214-49. New York: Anchor Books, 2014.

Academic Integrity Syllabus Statement

Academic integrity is honest, truthful and responsible conduct in all academic endeavors. The mission of Saint Louis University is "the pursuit of truth for the greater glory of God and for the service of humanity." Accordingly, all acts of falsehood demean and compromise the corporate endeavors of teaching, research, health care, and community service via which SLU embodies its mission. The University strives to prepare students for lives of personal and professional integrity, and therefore regards all breaches of academic integrity as matters of serious concern. The governing University-level Academic Integrity Policy was adopted in Spring 2015, and can be accessed on the Provost's Office website at:

http://www.slu.edu/Documents/provost/academic_affairs/University-wide%20Academic%20Integrity%20Policy%20FINAL%20%206-26-15.pdf.

Additionally, each SLU College, School, and Center has adopted its own academic integrity policies, available on their respective websites. All SLU students are expected to know and abide by these policies, which detail definitions of violations, processes for reporting violations,



sanctions, and appeals. Please direct questions about any facet of academic integrity to your faculty, the chair of the department of your academic program, or the Dean/Director of the College, School or Center in which your program is housed.

Specific College of Arts and Sciences Academic Honesty Policies and Procedures may be found at:

<http://www.slu.edu/x12657.xml>

Title IX Syllabus Statement

Saint Louis University and its faculty are committed to supporting our students and seeking an environment that is free of bias, discrimination, and harassment. If you have encountered any

form of sexual misconduct (e.g. sexual assault, sexual harassment, stalking, domestic or dating violence), we encourage you to report this to the University. If you speak with a faculty member about an incident of misconduct, that faculty member must notify SLU's Title IX coordinator, Anna R. Kratky (DuBourg Hall, room 36; akratky@slu.edu; 314-977-3886) and share the basic fact of your experience with her. The Title IX coordinator will then be available to assist you in understanding all of your options and in connecting you with all possible resources on and off campus.

If you wish to speak with a confidential source, you may contact the counselors at the University Counseling Center at 314-977-TALK. To view SLU's sexual misconduct policy and for resources, please visit the following web address: <http://www.slu.edu/general-counsel-home/office-of-institutional-equity-and-diversity/sexual-misconduct-policy>

www.slu.edu/here4you

Student Success Center Syllabi Statements

In an effort to be inclusive of students' learning styles and needs with regard to academic support, the following statement has been developed for use in course syllabi which identifies resources for student support in various areas of learning. As faculty members construct their syllabi for future courses, it is requested that they update materials to include new language regarding academic and career related support offered to students through the Student Success Center.

The syllabus statement will be available throughout the year by visiting the following websites, but we encourage you to place these resources on any departmental websites you feel necessary:

- Student Success Center: www.slu.edu/success
- Reinert Center for Transformative Teaching & Learning: www.slu.edu/ctl



Student Success Center Syllabus Statement:

In recognition that people learn in a variety of ways and that learning is influenced by multiple factors (e.g., prior experience, study skills, learning disability), resources to support student success are available on campus. The Student Success Center, a one-stop shop, which assists students with academic and career related services, is located in the Busch Student Center (Suite, 331) and the School of Nursing (Suite, 114). Students who think they might benefit from these resources can find out more about:

- Course-level support (e.g., faculty member, departmental resources, etc.) by asking your course instructor.
- University-level support (e.g., tutoring services, university writing services, disability services, academic coaching, career services, and/or facets of curriculum planning) by visiting the Student Success Center or by going to www.slu.edu/success

Disability Services Academic Accommodations Syllabus Statement

Students with a documented disability who wish to request academic accommodations are encouraged to contact Disability Services to discuss accommodation requests and eligibility requirements. Please contact Disability Services, located within the Student Success Center, at Disability_services@slu.edu or 314.977.3484 to schedule an appointment. Confidentiality will be observed in all inquiries. Once approved, information about academic accommodations will be shared with course instructors via email from Disability Services and viewed within Banner via the instructor's course roster.