1. COURSE DESCRIPTION
Considering the exponential growth of scientific knowledge over the past century, there is growing evidence of an asymptotic convergence between science and religion. Evidence extends from the far reaches of the universe to atomic structure to the evolution of human consciousness. This course will emphasize the dialogue between faith and science from the standpoint of the awe of nature. Parallels will be drawn between scientific evidence and theistic beliefs with particular emphasis on Christianity and Catholicism. Students will be encouraged to formulate personally informed conclusions. We will explore the current debates on God’s role in the universe with respect to determinism-indeterminism, relationality, emergence, and entanglement. The course objective is to provide students an integrated understanding of the relationship between modern science and spirituality. FC 6354 is for students pursuing an M.A. degree in Faith and Culture (MAFC) but is also meant for: non-scientists with a desire to understand the consistency of their faith with modern science in language they can understand, scientists and engineers seeking to incorporate their faith into a consistent worldview, and religious and clergy interested in using science in their ministry.

2. TOPICAL OUTLINE

2.1 KNOWLEDGE: Rationality, Non-Reductionism, Synthesis, Holism, Logic, God (1/12/15)
2.2 UNIVERSE: Energy, Forces, Singularity, Relativity, Invisible, Branes, Anthropic (1/26/15)
2.3 ATOMIC: Quantum, Uncertainty, Entropy, Entanglement, Chaos, DNA, Emergence (2/2/15)
2.4 EVOLUTION: Theory, Human Evolution (2/9/15)
2.5 CONSCIOUSNESS: States, Conscience, Consciousness, Neuroscience, Emergence (2/16/15)
2.6 RELATIONALITY: Prayer, Neurotheology, Mysticism, Contemplation, Meditation (2/23/15)
2.7 WHOLENESS: Nature’s Oneness (3/2/15)
2.8 PROPOSALS: Student Groups, Progress Reports (3/16/15)
2.9 GROUP #1: (3/23/15)
2.10 GROUP #2: (3/30/15)
2.11 GROUP #3: (4/6/15)
2.12 GROUP #4: (4/13/15)
2.13 GROUP #5: (4/20/13)
2.15 EXAM: Final (5/4/15)

3. COURSE TEXTS
The following are the relevant texts for the course.
3.1 Required Text

3.2 Required Readings
Statements and readings from Pope John Paul II and Pope Benedict XVI are available on the following websites and in PDF format on Blackboard:

• Faith Can Never Conflict with Reason: http://www.its.caltech.edu/~nmcenter/sci-cp/sci-9211.html
• A Thought on the Faith of the Scientist: http://www.its.caltech.edu/~nmcenter/sci-cp/sci-fth.html
• Science and Faith in the Search for Truth: http://www.its.caltech.edu/~nmcenter/sci-cp/sci80111.html
• Science and Religion Can Renew Culture: http://www.its.caltech.edu/~nmcenter/sci-cp/culture.html
• Science and Human Values: http://www.its.caltech.edu/~nmcenter/sci-cp/sci85072.html
• Scientists and God: http://www.its.caltech.edu/~nmcenter/sci-cp/sci85073.html
• The Value of Cosmology: http://www.its.caltech.edu/~nmcenter/sci-cp/sci85074.html
• Human Person Reason for Scientific Research: http://www.its.caltech.edu/~nmcenter/sci-cp/sci94111.html
• Science Serves Humanity only When it is Joined to Conscience: http://www.cin.org/jp2/jp970111.html
• Christian Faith Sees Science as Good in Itself: http://www.its.caltech.edu/~nmcenter/sci-cp/sci79031.html
• The Question of Evolution: http://www.its.caltech.edu/~nmcenter/sci-cp/evolution.html

3.3 Related Texts
Group discussions described herein will draw on at least the following texts.

GENERAL OVERVIEW

PHYSICS TO METAPHYSICS
CHEMISTRY TO LIFE


BIOLOGY TO CONSCIOUSNESS


PSYCHOLOGY TO MYSTICISM


4. PEDAGOGICAL METHOD

This will consist of graduate level lecture, assigned student book/reference reviews, presentations, and Socratic discussions.

5. COURSE REQUIREMENTS

5.1 Class Attendance: Regular and punctual attendance and preparation for class.

5.2 Class Participation: Active participation in class discussions.
5.3 Group Discussions:
Groups of 4-5 students each will be appointed to research and present to the class on controversial topics related to faith and science. Suggested topics will be given but each group may propose any topic provided it is accepted by the professors and draws on the content of the previous classes.

5.4 Final Exam: Comprehensive final written exam

6. COURSE GRADING
All papers must be grammatically correct and reflect graduate level competency. Any delay in submission of papers without express permission from the professor prior to the due date of the paper, will result in an automatic reduction of one letter grade from the determined grade of the paper. Final grade for the course will be determined on the following basis:

- 40% - Class Participation
- 30% - Group Presentations
- 30% - Final Exam

7. DISABILITIES
Any student with a disability requiring accommodations in this course is encouraged to contact us after class or during office hours. Additionally, students will need to contact Counseling and Disability Services in Crooker Center. This office can be reached at (713) 525-6953 or ext. 3162.

If you have a learning disability that requires special accommodations for taking the final exam, please be sure to schedule an appointment at the Testing Center. Students are individually responsible for scheduling their own exam times and must notify us one week in advance of the arrangement. An exam scheduled at the testing center must be taken on the same date and time as the regularly scheduled classroom exam. The Testing Center is located in the office of Career Services and Testing on the second floor of Crooker Center. You can call (713) 525-3160 to schedule a testing appointment.

8. ACADEMIC DISHONESTY
Unfortunately both cheating and plagiarism have become rampant at UST. University policies on academic dishonesty are spelled out on pp. 73-74 of the Undergraduate Catalog and in the Student Handbook, available online at http://www.stthom.edu/ . Again, be aware that ALL writing assignments must be submitted electronically to frohlich@stthom.edu and hesser@stthom.edu for credit to be awarded. Text will be submitted to a web based search engine and compared against a worldwide data base that will look for similarities between the submitted work and published documents. Cases of cheating, plagiarism, or copying the homework of other students, will be aggressively prosecuted and treated with the utmost gravity.

7. SEMESTER SCHEDULE
There will be 14 regularly scheduled weekly evening classes of 2¾ hours each in the 2015 spring semester on Mondays, 5:30-8:15 PM; Anderson Room 103, University of St. Thomas (UST) Campus. The actual 2015 dates of the classes are listed under Topical Outline above. The final exam will be on May 4.