

TESP 86: Spirituality and Engineering — 27668 Fall, 2015

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Office Hours 10:15-11:30 AM TR + by Appointment
Location Kenna 105
Times 8:30-10:10 am

Course Description:

This course will reflect on and compare the methods and practice of the engineering sciences and theology, especially spirituality. Both affect the way we live, both endeavor to transform the world.

Required Readings:

Guy Consulmagno, S.J., *God's Mechanics: How Scientists and Engineers Make Sense of Religion*. San Francisco, CA: Jossey-Bass, 2008. [Digital Copy]

James E. Huchingson, *Religion and the Natural Sciences - The Range of Engagement*, Oregon: Wipf & Stock, Eugene, 2005.

Selected readings posted on Camino

CORE LEARNING OBJECTIVES

As an RTC 2 course for the Core, the course has the following Goals and Objectives:

Goals: Critical Thinking, Complexity, Religious Reflection

Objectives -- Students will

2a Students will be able to analyze complex and diverse religious phenomena (such as architecture and art, music, ritual, scriptures, theological systems, and other cultural expressions of religious belief).

2b Students will be able to integrate and compare several different disciplinary approaches to a coherent set of religious phenomena.

2c Students will be able to clarify and express beliefs in light of their critical inquiry into the religious dimensions of human existence.

Goals of the Course:

The Goals of the Core Curriculum is to develop habits of mind and heart that enables them to contribute to the rapidly changing, and complex and inter-related world. This means students are encouraged to develop ways of thinking, feeling, and acting that allow them to educate themselves for the rest of their lives with passion and purpose. Thus this course sets the following goals:

Knowledge: of the relationship between faith and experience in the Catholic tradition, of current theological expressions of the relationship in terms of Christian Spirituality. At the same time, the course will explore the relationship between the methodologies of the Engineering Sciences and theological reflection. There will be a focus especially on the idea of ‘sacramental beholders.’

Skills: ability to critically read and critique religious and theological statements and articles; ability to extract assumptions; ability to appreciate different points of view; ability to apply theological learning to meta questions of Engineering. (Critical Thinking)

Sensitivities: to the subtlety of religious and theological argument; to the requirement of faith to promote justice; to the relationship between religion and science. (Religious Reflection, Habits of Mind and Heart)

Structure, Evaluation, and Grading

The class will be taught by lecture and discussion. There will be a midterm examination [20% of grade], a final, comprehensive Paper [35% of the grade], and two written assignments [15% of grade]. There will be frequent Quizzes on the readings [15% of the grade]. All of these will test for both information and understanding of issues. The other 15% of the final grade is determined by attendance and participation in class discussion, completion of assigned readings in advance of the date assigned, or other requirements.

Course Requirements

Quizzes

There will be short quizzes. They will consist for the most part on the reading assigned. The aim is to assess the quality of the reading.

Papers

There will be two papers on subjects chosen by the students and approved by the professor.

Participation

Participation in the class discussions is important part of the course. Individual students will be assigned to lead the discussion. The leader will prepare notes and questions for the discussion.

Attendance

Attendance is required and recorded daily.

Examinations

The Midterm is on Monday, Oct 27, covering the material studied up to that point. The Final will be a paper making a synthesis on the material covered throughout the Quarter.

On Line Materials

Camino: You will find the detailed syllabus, calendar, and course materials on the SCU's Internet site, camino.instructure.com . You are automatically registered on this site when you enrolled in the course.

Academic Integrity

All written work must be uniquely and individually the student's own work. While in-class discussion and outside of class discussion is certainly desirable and encouraged, the material that a student hands in must reflect the student's own labor and ought to be clearly and decisively distinguishable from the work of all other students in the class. Failure to abide by the spirit and the letter of this policy may result in a zero for that assignment or examination.

Evaluation Scale:

A = 100-95; A- = 94-90; B+ = 89-87; B = 86-83; B - = 82-80; C+ = 79-77; C = 76-73; C- = 72-70; D+ = 69-67 ; D = 66-63; D- = 62-60.

Disability Accommodation Policy

To request academic accommodations for a disability, students must be registered with Disabilities Resources, located in Benson, room 216. In order to register, please go on-line to www.scu.edu/disabilities. You will need to register and provide professional documentation of a disability prior to receiving academic accommodations. It is best to read "Required Documentation" on the website before starting the registration process in order to determine what is needed. You may contact Disabilities Resources at 408-554-4109 if you have questions.

Schedule and Reading Assignments

[Tentative]

Week 1

T Sept 22 Introduction: Syllabus, Schedule, Starting Points

R Sept 24 Introduction: Faith, Meaning, Sacramentality

Reading: Francis Smith, S.J., Faith. [Camino]

Michael Himes, “Living Conversation: Higher Education in a Catholic Context” [Camino]

Week 2

T Sept 29 The Range of Engagement

Reading: Huchingson, pp. 2-39

Oxford Lecture: The nature of human beings and the question of their ultimate origin (Links to an external site.)

Paper 1 Due

R Oct 1 Introduction: *God’s Mechanics* – Part 1

Reading: Consolmagno, Introduction, Ch. 1-3, pp. 1-43.

Week 3

T Oct 6 *God’s Mechanics* – Part 2

Reading: Consolmagno, Ch. 4-6, pp. 47-86.

R Oct 8 TBA

Week 4

T Oct 13 *God's Mechanics* – Part 3

Reading: Consolmagno, Ch. 7-9, pp. 89-130.

***Cosmology: Making Sense of the Universe (Links to an external site.)

R Oct 15 *God's Mechanics* – Part 4

Reading: Consolmagno, Ch. 10-11, pp. 133-164.

Week 5

T Oct 20 *God's Mechanics* – Part 4 Continued + Part 5

Reading: Consolmagno, Ch. 12-14, pp. 165-229.

R Oct 22 Making Connections

Reading: Huchingson, pp. 40-73.

Week 6

T Oct 27 Words, Images, Stories

Reading: Huchingson, pp. 76-118.

R Oct 29 TBA

Mid-Term Paper Due

Week 7

T Nov 3 Two Storied Universe

Reading: Huchingson, pp. 122-178.

R Nov 5 The Cosmos

Reading: Huchingson, pp. 182-224.

Week 8

T Nov 10 Microcosmos

Reading: Huchingson, pp. 225-248.

R Nov 12 Life

Reading: Huchingson, pp. 250-297.

Week 9

T Nov 17 Life

Reading: Huchingson, pp. 298-343.

R Nov 19 Eros and Gaia

Reading: Huchingson, pp. 346-373.

Nov 23-27 Thanksgiving Holiday

Week 10

T Dec 1 Conclusion

Reading: Huchingson, pp. 374-401.

R Dec 3 Summing Up

T Dec 8 Final Term Paper Due at 12:00 pm