

## Syllabus – Elective Course

### Course title:

**The contentious relationship between science and religion: historical, theological, methodological, and ethical perspectives**

### Credits:

6 ECTS credits

### Teaching language:

English

### Target students:

This intensive summer course is intended to introduce students to the field of study known commonly as "Science and Religion." The course is open to university students enrolled in a bachelor degree program. Students at a more advanced level of study will be expected to complete additional assignments in order to attain graduate-level credit. This field of study is explicitly interdisciplinary and students in a broad variety of studies are encouraged to apply, such as physics, philosophy, biology, history, chemistry, theology, ecology, or anthropology, amongst others.

### Teacher in charge of the course:

Dr. Philippe GAGNON (*Research Professor, Chair in Sciences, Technosciences and Faith in the Era of Integral Ecology, Université Catholique de Lille*)

Prof. Paulo RODRIGUES (Dean, Faculty of Theology, Université Catholique de Lille)

## **COURSE PRESENTATION**

### Prerequisite:

To take this course, all participating students must be enrolled as degree-seeking students at bachelor level or above.

### Content:

For much of the history of the interaction of science and religion in the West, the two lived in harmony. In the West, science was for much of its history viewed as a support to religion. But since the Enlightenment, science has often been viewed as inimical to religion, and for many sciences has even become a substitute for religion. Thus, there are two great quests which claim the loyalties of mankind.

In this course, we shall explore the relationship between these two, including the ways in which one has implications for the other, the places where developments in one may benefit the other, and the possibility that the two can be harmonized.

This summer school proposal will examine issues of science and religion from two perspectives: theology and scientific theories as they bear on reality. For example, when examining the theory of

biological evolution and theological interpretations of creation, we will look at what contemporary scripture scholars are saying about the creation stories in Genesis and the Psalms. We shall also look at theories in systematic theology.

The nature, methods, and structure of science is not readily obvious. Often clashes between science and religion hinge on superficial or inaccurate images of science. We will look at what the contemporary philosophy of science says about issues of confirmation, proof, laws, models, theories, and probability in science. When examining the relationship between God and the world, we will look at philosophical models of the God-world relation—direct causality, secondary causality, and the process philosophy notion of persuasion.

The 400-year-old debate between science and religion seems poised for a fundamental change. Until recently it has presupposed a duality between the rationality of science (its factual quantitative and objective outlook) and the faith of religion (its valuational emotional and subjective outlook). This course will also examine postmodern efforts to replace such dualities with a quest for unity where rationality and faith are found in both science and religion. This course explores the relationship between scientific and theological methods and modes of knowledge, and considers some of the central topics of Christian theology—God, creation, providence, resurrection, and afterlife—in the light of modern scientific evidence and theories.

**Pedagogical strategies:**

In this course, we use three principal strategies to address these and similar questions about the intersections of science and religion:

1. To bring together students and faculty members representing different disciplines to enter into an explicitly interdisciplinary dialogue.
2. To place ourselves in foreign territory, alienating ourselves from what we are all too familiar with, and opening ourselves up for new perspectives.
3. To complement traditional methods of education – lectures, readings, discussions, and written assignments – with site visits to a selection of local places that represent the disciplines contributing to these debates in a paradigmatic manner.

**Course Outline:**

**1. History of the science-religion relationship: the case of Galileo**

The new scientific mode of thinking was introduced through idealization and abstraction; this lesson will help in situating the elements that helped in overturning the position of the problems, and the ones that have stayed in a modern-era derived scientific methodology.

**2. Darwin and the Theory of Evolution**

The transformist hypothesis was at first an occasion to question special providential interventions in Creation, but not through the slow action of the laws of nature, rather by organisms' own complexification. Darwin hypothesized that to common ancestry one needed to add natural selection. We will look at how his insight, if it has known an eclipse, has also been able to effect a come-back, and what is its theological significance.

**3. Cosmology and the Big Bang**

In positing a universe in expansion, cosmologists have seemingly made their way into a discourse about "beginnings." This seemed uncharted for use by religionists. This will be an occasion to see where physical theories are able to go, and to clarify in what sense there is something different in the idea of an origin of all things, as one will find in religions.

#### **4. The Natural History Museum of Lille**

#### **5. Theological anthropology**

Our era has lost reference points when it comes to a proper understanding of anthropology accepted by all. If we think of traits of human beings, we are led to think often that they should be emerging from the animal world, due to our common groundedness in an evolutionary process. This lesson will attempt at showing the challenges that lay ahead when it comes to identifying the proper essence of the human person in the contemporary setting.

#### **6. The Mind-Body Problem**

The success of neuroscience in showing that there are correlations between certain states of the brain and certain associated mental experiences, including religious ones, has been interpreted by some as a direct refutation of traditional beliefs about mystical experiences and the immortality of the soul. According to this skeptical stance, an experience can be caused by the brain or by an immaterial being (God or the soul) but not both: this will be critically evaluated

#### **7. Museum of the Institut Pasteur de Lille**

#### **8. Neuroscience and Faith**

Our conceptions of the function of bodily existence and the flesh on our capacities to think have been challenged by contemporary findings in neuroscience that question a certain number of possibilities as they seem to require preconditions. The doctrine of the dignity of matter, as bearer of the Spirit, that one finds as traditional in Christianity, also has ancient witnesses such as Irenaeus of Lyon, whose proposals we will here draw upon.

#### **9. Ecology and Environmental Ethics**

The message of the faith has sometimes been branded as one of “dominion” over the earth. Having been criticized, such a stance was the occasion of a reinterrogation of the proper biblical teaching on humanity’s place in Creation. The concept of “common house” and of living community that stemmed from this recent research also leads to looking with fresh eyes on the question of Christ’s role in the cosmic order.

#### **10. Biomedical Ethics**

The foundations of biomedical ethics were established in the 2nd half of the 20th century, but issues associated with medical practice continue to evolve from new technologies. Recent progress in genomics and genome engineering has changed the meaning of the basic words of medicine: disease, patient, and treatment.

#### **11. Villeneuve-d'Ascq Departmental Science Forum**

#### **12. Transhumanism**

When one looks at transhumanist origins, main figures, and main positions, one notices the fact that transhumanism shows little concern for environmental issues, as it is mostly focused on individual bodies, health, and longevity. Transhumanist activists address contemporary ecological disasters, focusing on the human engineering hypothesis first, and then the “good Anthropocene.”

### 13. Ethics of Science and Technologies

Science in its powerful conjunction with technology, has given rise to means of harnessing energy more efficiently, and to many other devices that were first developed in military contexts. One could say that science was neutral and that human passions have led it astray. Yet, the question as to whether one would ever suspend a scientific endeavor in the name of a superior value needs to be looked at again.

#### Learning Outcomes:

Upon completion of the course, students should be able to:

- Explain the ways in which science and religion have undermined, complemented, and reinforced one another in different historical periods.
- Critically compare differences in the research methods used by different disciplines, notably the physical sciences, on the one hand, and religious studies on the other hand.
- Discuss the ethical ramifications of the contentious relationship between science and religion, extending it to the area of health care.

#### WORKLOAD

*French contact hours = 60 minutes (in some countries/institutions, 1 contact hour = 45-50 minutes)*

| Form:                                    | Number of hours | Comments |
|--|-----------------|----------|
| Face-to-face, in-class, on-site learning | <b>39 hours</b> |          |
| Approximate personal work / homework     | 15 hours        |          |
| Student total workload                   | 54 hours        |          |

#### EDUCATIONAL METHODS

Lecture, discussion, presentations, sharing of experiences, group work, guided visits, on-site education

#### RESOURCES

All course materials will be supplied in class. References may be made to the following resources:

- Websites
- Course specific text books and works

#### ASSESSMENT

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|---|
| <b>Form</b>   |
| <b>Active participation in all on-site activities (35%)</b> |
| <b>Participation during on-site component (30%)</b>         |
| <b>Final scholarly paper (35%)</b>                          |

*This syllabus is based on information available at the time of publication (January 2024). Changes may occur*

*For updated information about course content, please contact us: [lilleprograms@univ-catholille.fr](mailto:lilleprograms@univ-catholille.fr)*