The Teachers' File

CORNELL COLLEGE: PROGRAM IN SCIENCE AND RELIGION

by William E. Carroll

Abstract. Cornell College in Mount Vernon, Iowa, has established a new interdisciplinary program in science and religion. One of the features of this program is an undergraduate major in science and religion that requires substantial course work in at least one of the natural sciences as well as course work in philosophy, religion, and history. As a result of a grant from the John Templeton Foundation, Cornell College will offer a special course, God and Physics: From Aquinas to Quantum Mechanics (April 1998), and will sponsor an international symposium on creation and contemporary cosmology (April 1999). Opportunities exist for interested scholars to come to Cornell as Templeton Visiting Fellows in order to participate in these activities.

Keywords: Aquinas; Aristotle; Big Bang; biology; William Carroll; chemistry; Cornell College; cosmology; creation; evolution; Galileo; geology; God; history of science; Peter Hodgson; nature; Newberry Library; philosophy; physics; quantum mechanics; religion; science; John Templeton Foundation; time; Whitehead.

Cornell College has established the interdisciplinary Program in Science and Religion to foster sustained, systematic discourse among the various disciplines that reflect on our knowledge of nature and of God. The program offers an undergraduate interdisciplinary major in science and religion, sponsors lectures and symposia, and welcomes scholars from other institutions to come to the college to participate in the various offerings of the program. Professors of religion, history, philosophy, biology, chemistry, and physics are founding members of the program. The director is

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An Interdisciplinary Undergraduate Major in Science and Religion

Cornell's major in science and religion is one of the first such majors in the United States. One of the distinguishing characteristics of the interdisciplinary major is that it requires substantial systematic work in both the natural sciences (including mathematics) and those disciplines in the history and philosophy of science that seek to understand the study of nature in a broad context, especially concerning the relationship between the natural sciences and religion. Required course work in religion has as its focus the relationship between developments in the natural sciences and an understanding of God and God's relation to the world. The major integrates the study of science and religion in a coherent program of study rather than offering a few isolated courses. It requires, for example, that each student who majors in science and religion have completed at least a minor in one of the natural sciences or mathematics before the student does advanced work in courses in the humanities that reflect on the natural sciences.

Specific Requirements

1. Each student completes at least a minor in biology, chemistry, biochemistry, geology, physics, or mathematics by the end of the student's third year at the college. A minor at Cornell consists of a minimum of five four-semester-hour courses designated by the respective department. Students who choose to major in one of these disciplines must have made substantial progress in the major by the end of their third year.

2. Each student completes three required courses: (*a*) an introductory seminar, Galileo: Religion and Science, in either the first or second year at the college; (*b*) an upper-level course, The Idea of God, in the Department of Religion in the third or fourth year; and (*c*) either Philosophy of Science or Philosophy of Religion (each an advanced course in the Department of Philosophy) in the third or fourth year. The course on Galileo is taught in the Department of History and introduces students to major themes in the relationship between religion and science by examining the details of the encounter between Galileo and the Inquisition in the seventeenth century. The seminar The Idea of God examines the relationship between contemporary scientific theories and traditional conceptions of God. In addition to topics in cosmology and causality, the course investigates the application of Alfred North Whitehead's process philosophy to theological discourse. Philosophy of Religion is a philosophical

examination of the rationality of religious belief. Focusing almost entirely on Western religions, the course examines arguments for and against the existence of God, using texts from Saint Anselm, Thomas Aquinas, René Descartes, and William Paley, as well as contemporary authors who discuss the logic of religious claims and their relationship to scientific claims about the nature of the universe. Philosophy of Science is a philosophical examination of the natural sciences as a source of information about the world. It looks at how scientific claims are adjudicated, what the rationality of science consists in, and the kind of knowledge that the natural sciences can provide. The course raises questions about the epistemological status of scientific theories and whether science is progressing toward an increasingly accurate account of the world. The texts for this course are drawn from contemporary sources.

3. Students select four of the following advanced courses—at least two in each of their final two years at the college: (*a*) Aristotle and the Origins of Western Science; (*b*) Creation and Science: The Mediaeval Heritage; (*c*) Science and Religion in the Seventeenth Century (seminar at the Newberry Library in Chicago); (*d*) the Scientific Revolution of the Seventeenth Century; (*e*) God and Physics: From Aquinas to Quantum Mechanics; (*f*) Philosophy of Science *or* Philosophy of Religion—depending on the option selected in 2(*c*); (*g*) Philosophical Topics: Evolution. The last course examines the theory (or theories) of evolution and its implications for our understanding of ourselves and our relation to the world, with special emphasis on implications for religious belief and morality. Future course offerings will include additional electives: a course on astronomy and the Bible, taught by a professor of physics, and a course on the hermeneutics of sacred texts, taught by a professor of religion. The former will examine topics in astronomy in the nineteenth and twentieth centuries and the ways in which discoveries in astronomy have been related to the Bible. The latter will examine the challenges of modern science, including the historical sciences, to the reading of sacred texts in Islam, Judaism, and Christianity.

Cornell College has an unusual academic calendar. The year is divided into nine three-and-one-half-week terms, and in each term a student takes only one course. A faculty member teaches one course (each is the equivalent of a four-semester-hour course) in each of six or seven of the nine terms. This calendar allows for the intensive exploration of complex topics and is particularly well suited to interdisciplinary study. Students are able to devote their full academic attention to the course in which they are enrolled. The course Science and Religion in the Seventeenth Century, noted earlier, meets for one term at the Newberry Library in Chicago. The Newberry is one of the great private research libraries in the United

States, and students who take the course are able to spend an entire term in Chicago, using the library's rich resources of primary documents.

Special Programs

In April 1998 Peter Hodgson, nuclear physicist from the University of Oxford, will come to Cornell to join with William E. Carroll in offering a course on God and physics from Aquinas to quantum mechanics. In April 1999, in conjunction with a course on creation and science in the Middle Ages, Cornell will host a three-day international symposium on time, creation, and contemporary cosmology. In the academic year 1999–2000 the college will have a distinguished visiting professor teaching a term-long course on the relationship between science and religion.

The enhancements to the program, noted in the previous paragraph, are made possible by a generous three-year grant from the John Templeton Foundation. The grant also allows scholars from other institutions to come to Cornell for two or three days to participate in special activities. Five such Templeton Visiting Fellowships will be available in 1997–98; fifteen in 1998–99—in conjunction with the international symposium on time, creation, and cosmology; and five in 1999–2000, during the tenure of the distinguished visiting professor. These visiting fellowships will provide housing and meals for two to three days for each Fellow.

In conjunction with Hodgson's residency at Cornell, the program will sponsor a conference on Thomas Aquinas and Big Bang cosmology, on Friday and Saturday, 17–18 April 1998. As noted previously, five Templeton Visiting Fellowships are available for those interested in attending this conference.

Further information about Cornell's Program in Science and Religion, including information about the Templeton Visiting Fellows and syllabi of the courses offered, can be obtained by writing to Professor William E. Carroll, Department of History, Cornell College, 600 First Street West, Mount Vernon, IA 52314; fax 319/895-4492; e-mail <carroll@cornell-iowa.edu>