Origins: Chance or Design
University of Minnesota
Institute of Technology Freshman Seminar 1905
Fall 2001
Thursdays 2:30-4:10
1701 University Av, Room 218

Instructors
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Course Description
How did we get here? What do we know about our origin and the origin of the universe? Is there any meaning to existence? Is there evidence for design and purpose in the universe? These are questions which humans have asked since the dawn of history.

This course is an interdisciplinary seminar looking at the interfaces between scientific, philosophical, and religious ways of looking at origins. Standard scientific accounts of the origin of the universe, life, species diversity, humankind, and culture will be explored together with their implications and limitations.

Syllabus

Class Meetings
The class will meet weekly for 1 hour and 40 minutes. The class period will consist of:
- An initial discussion on the readings using questions submitted by students
- A presentation by one of the instructors, a guest instructor, or a student
- Further discussion.

What will be Expected of Students
- Buy the reader at Alpha Print (on 4th St in Dinkytown)
- Do assigned readings before each class.
- Submit the following on the web site (www.geocities.com/elemeno123/life.htm) one day before the class:

AWARD WINNER, SCIENCE & RELIGION COURSE PROGRAM
THE CENTER FOR THEOLOGY AND THE NATURAL SCIENCES
FUNDED BY THE JOHN TEMPLETON FOUNDATION
- Where the authors of the readings agree and where disagree.
- An evaluation of the readings (e.g. “this one is very clear”; “cut out these pages”).
- One question for discussion.
- Participate in the class discussion.
- Write a paper about origins and make a 15-minute presentation. (Submit a topic by the fifth class meeting, and an outline with references by the tenth meeting. The paper should be about 10 pages in 12-point type double-spaced, including a title page with abstract—a summary of the paper—and a bibliography. Use section headings. Use only one staple. The presentation should have a visual, auditory, or participatory component.)
- There will be no final exam; the exam period will be used for a wrapup.

Course Schedule

1. Introduction (Sep 6)
   Instructors.
   Course plan and requirements.
   Scientific & religious dimensions of “Origins: Chance or Design”.
   Student introductions: What do you think about the beginning of the world?
   Video “The Question is…,” BBC and the John Templeton Foundation.

2. Origin Stories (Sep 13)
   Read:
   *The Scandinavian, Mesopotamian, biblical, Taoist, and scientific stories: what do they have in common, how do they differ? According to each, what is our place in the scheme of things?*

3. Major Worldviews in History (Sep 20)
   Read:
   *Animism, monotheism, Greek philosophy, monism, Confucianism. What is the most important feature of the world for each of these worldviews? According to each, why*
does the sun rise every morning? What is attractive about each? How are these worldviews represented today?

The Copernican Revolution and the Enlightenment. How science can change its mind. The worldview shift from Christian theism to scientific naturalism, which we are still struggling with.

4. Evolution & The Scopes Trial (Sep 27)
   Watch Video: Inherit the Wind.
   Read:
   What was the significance of the Scopes trial? How have things changed since then?

5. The Origin of the Universe (Oct 4)
   Read:
   The big bang: where did it come from? How did the development of the universe proceed? What about “inflation”? The fine tuning of the universe?

6. The Origin of Life (Oct 11)
   Read:
   What scientific explanations are there for the origin of life? Do non-scientific explanations have a place here?
   Guest lecturer: Gary Nelsestuen, Biochemistry

7. Molecular Evolution (Oct 18)
   Read:
   Michael Behe, Darwin’s Black Box, Free Press, 1996, pp. 69-75.
What does Behe mean by “irreducible complexity”? What is Coyne’s objection? Does this have relevance for the existence of God?

8. The Fossil Record (Oct 25)
Read:
How does each of these readings deal with the gaps in the fossil record?

9. Human Evolution (Nov 1)
Read:
What are the major stages envisioned? What is it to be human?

10. The Origin of Language (Nov 8)
Read:
What fossil and archeological evidence is there for the origin of language?
What are the positions of Chomsky, the behaviorists, and Pinker on the origin of language?

11. The Origin of Morality (Nov 15)
Read:
What are ethical codes? Has sociobiology explained morality? Has it explained it away?
12. Science and Religion (Nov 29)

Read:

Ways of relating science and religion. Science and religion deal with different dimensions of experience; do they also deal with different dimensions of reality? Do they interact?

Knowing in Science and Religion. Both fields involve interaction between experience and beliefs.

13. Student presentations (Dec 6)

14. Student presentations (Dec 13)

Exam Period: Wrapup