PLAYING GOD: GENETICS, ECOLOGY, AND RELIGION

Fall, 2002

Dr. Cynthia S.W. Crysdale

crysdale@cua.edu

Objectives:

The purpose of this course is to introduce students to the intersection of science and religion by examining current issues in ecological science and genetics. Recent developments in both these fields raise questions for traditional Christian views on the relations between humans and "nature," between God and the created world, and between God and humans. Through the study of particular issues in genetics and the environment, we will explore the limits and complications of human intervention into natural processes: when and how we ought to, or ought not to, "play God" in altering the created order.

Texts:

Except for Farley Mowatt, Never Cry Wolf (available at the CUA bookstore), the readings will be available through electronic reserve in the Aladin system. Please log on to Aladin and click on "Electronic Reserves." Choose the course – REL 413 and put in the password for this semester, which I will give you in class. You will see a list of readings from which to choose. If there is ever confusion about just which item on the list is due for a certain class period, please contact me.

Class Schedule:

I. Introduction: Science and Religion in Dialogue

8/26 – Introduction [Initial readings will be handed out: "Seeds of Discord: Monsanto's Gene Police Raise Alarm on Farmers' rights, Rural Tradition," The Washington Post, Wednesday, Feb. 3, 1999; "Genetics: The Future is Now," Time (Jan. 17, 1994): 46-57.] – Start reading Never Cry Wolf.

8/28 -Issues in Science and Religion-- "Science Finds God," Newsweek article

9/04 – More on Science and Religion -- Haught, chaps. 1 & 2

II. Environmental Science

9/09 – Botkin and Keller, chaps. 1 and 2

9/11 – Botkin and Keller, chaps.3 and 4

9/16 – Botkin and Keller, chaps.6 and 7

9/18 -- Botkin and Keller, chaps. 6-7 -- initial discussion of Never Cry Wolf

III. Christian Views of Nature

9/23 – Botkin and Keller, chap. 30 and Never Cry Wolf

9/25 – Santmire, chaps. 1 and 2

9/30 – Santmire, chaps. 3 and 4

10/02 – Santmire, chap, 5

IV. Ecological Stewardship

10/07--Lynn White, "The Historical Roots of Our Ecological Crisis" ; John E. Carroll, "Catholicism and Deep Ecology," in Deep Ecology and World Religions.

10/09 – United States Catholic Conference, "Renewing the Earth: an Invitation to Reflection and Action on Environment in Light of Catholic Social Teaching," Nov. 14, 1991 (available in booklet form at campus bookstore).

10/16– Group work on Church documents

10/21– Group work on Church documents

V. Human Genetics

10/23– Walters and Palmer, Introduction and Chap. 1; various websites

10/28– Walters and Palmer, Appendices A and B,

10/30 – Horace Freeland Judson, “A History of the Science and Technology Behind Gene Mapping and Sequencing,” and James D. Watson, “A Personal View of the Project,” both in D.J. Kevles and L. Hood, eds., The Code of Codes: Scientific and Social Issues in the Human Genome Project (Cambridge, MA: Harvard Univ. Press, 1992) (RR).

11/04 – Haught, chap. 4, and Evelyn Fox Keller, “Nature, Nurture, and the Human Genome Project,” in Kevles and Hood, The Code of Codes

VI. “Imago Dei” – Created in the Image of God

11/06 – Anthony A. Hoekema, Created in God’s Image (Grand Rapids, MI, William B. Eerdmans Publishing Co., 1986), chap. 1 and selected Bible passages TBA.

11/11-- Jurgen Moltmann, God in Creation: A New Theology of Creation and the Spirit of God (San Francisco: Harper and Row, 1985), chap. 9.

11/13 – More on Imago Dei

VII. Playing God with DNA

11/18 -- Arthur Allen, “Brave New Frontier,” The Washington Post Magazine, Oct. 15, 2000; Rick Weiss, “Test-tube Baby Born to Save Ill Sister,” Washington Post Oct. 3, 2000.

11/20 –Group work on Cloning and Stem Cell research.

11/25 – Group work on Cloning and Stem Cell research

12/02 – Student presentations

VII. Conclusion

12/04 –Haught, chaps. 6 and 8.

Final Exam: Friday, Dec. 13, 1:30—3:30

Assignments: There will be no mid-term exam in this class. Rather, I have chosen to put emphasis on class work, group discussions, and internet research. This will be designated as follows, in terms of your grade:

Reading assignments and quizzes (15% of your grade) – On the Wednesday class of each week you will either (1) have a quiz on the readings or (2) hand in a brief written assignment on one of the readings. The point of this is to keep you up to date on the readings so that you can adequately participate in class discussion.

Participation (15%) of your grade. This class involves both group work and interaction on WebCt. There will be several projects in which you will need to research a topic, with others in your group, in order to discuss it with one another in class or to present the issue to the rest of the class.

Written assignments and presentations (worth 40% of your grade) – Four or five times throughout the term, you will be given a written research assignment on an issue or case study (e.g., wolves in Yellowstone National Park or gene testing for Huntingdon's disease, etc.). At least once during the term you (along with a group) will present your case or issue to the entire class. (All grades will be given to individuals, however – I will not give "group" grades.)

Final Exam (worth 30%of your grade) -- During exam period at the end of the semester there will be a two hour written exam.

Attendance – Attendance is essential in this class. Your absences hurt not only yourself but everyone in the class, since they take away from the cooperative learning environment. I will not give a grade for attendance. HOWEVER, beyond three "free" absences for illness, travel, etc., each absence will count 1 point (out of 100) against your final grade.

Expectations: Since many of your assignments will involve written work, please be advised that I have very high standards regarding use of the English language. After finding the first four typographical errors, spelling mistakes, punctuation errors, or syntactical blunders in a paper, I will stop reading and hand it back to the student for revision. There is a Writing Center on campus if you need help with your writing.

Grading Scale: Although there is no university wide scale equating numbers with grades, I go by the following, general schema:

A = 93-100; A- = 90-92

B+ = 87-89; B = 83-86; B- = 80-82

C+ = 77-79; C = 73-76; C- = 70-72

D = 65-70;

F = 65 and below