

Contents

Brief Description of the Course

Texts

Evaluation

Other Requirements

Calendar

Reading Guides

Exams

Bibliography for Papers

Religion and Science

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Brief Description of the Course:

Many people separate religion from science. They assign religion to the realm of private inner opinion and devotion, and assign science to the realm of public knowledge about the world. Western religious traditions, however, propose that One God is the Creator and Providential Orderer and Goal of the universe. This course will explore the relation between God and the world as understood by (primarily Western) religion and by modern science. This includes topics of miracles, the nature and existence and activity of God, of the origin, order, and destiny of the universe, of the evolution of life, especially of the place of humankind in the process of the universe. It will also examine the methods by which religions and science may arrive at their conclusions. Many of the readings for the course will be taken from classical sources, from Cicero to Augustine, Aquinas to Galileo, Pascal to Darwin. Other readings will be from contemporary writers.

Texts

- John Haught, Science and Religion: From Conflict to Conversation (Paulist Press, 1995)
- Michael Barnes, Religion and Science Reader and Notes for Rel. 477.

Additional readings on reserve in the library; see the table of contents in the Reader

Evaluation

The final grade will be based on a possible maximum of 400 points: 90% = A; 80% = B; etc.

There are three take-home essay exams, including the final, each worth 20% of the grade = 60% in all.

(80 points maximum per exam)

The one paper is worth 20% of the grade (up to 80 points).

Six reading guides, together worth 15% of the grade (10 points ea.).

The assignment page explains these three types of work more thoroughly, especially the paper. Also see the two pages listing the reading guide assignments, and the two pages with the questions for the three exams.

Of the remaining 5%, everyone will receive that free of charge (worth 20 points out of 400), as compensation

for the degree of uncertainty in grading essay exams and papers--UNLESS a person misses many classes without giving good reasons, or does a *generally* sloppy job on the reading guides.

Class participation will count in your favor in any marginal situation, provided the participation is relevant and cogent, helpful to the class, or raises interesting questions relevant to the material.

Other Requirements

As in any course you are responsible for whatever happens in class, even in your absence. In case of your absence sure to have someone who can inform you about class material and announcements.

If you are going to miss an exam or be late on an assignment, please call me in advance if at all possible.

All assignments for this class must represent new learning for this course; papers done for other courses are not acceptable, though you are welcome to build upon your work in another course *provided you clear it with me*, *Barnes*, *in advance*.

Cooperative learning is good. If you are having trouble with aspects of the course, please feel free to work with others in the course to learn from them. But on the exams and on the paper, the material you hand in must be your own understanding and your own wording of that understanding. Always be sure to identify any sources from whom you are taking material. When you are taking it from the GreenBook or from Haught, you can refer simply to GB or H with a page number. It is especially important that you cite your source when you quote; and it is important to use quotation marks when you are quoting. (See the student handbook, 37-39 for more on this.) (As always any instance of plagiarism can earn an "F" for the entire course. See the student handbook for descriptions of plagiarism.)

Calendar

Aug Th. 28 Intro. Do reading guide ("RG") #1 for next class [see syllabus for explanation of reading guides.

Sept. T. 2 Begin ch.1 in GreenBook and ch.1 in Haught. Topic = METHOD in religion & science. **Hand in RG#1.**

Th 4 continue chs.1 GreenBook and Haught, on method

T. 9 Finish "Method." Lecture on God will begin topic of ch.2 GreenBook: GOD. For next class, read Philo on p. 28, ##50-55; and Anselm, pp. 30-31, and the summary of Aquinas, 30-31. What is their God like?

<u>Th. 11</u> Lecture and discussion on God. Handouts on evolution of religion, Rig Veda, Unpanishads, Tao Te Ching, Aquinas' I, 2, art.4, *S.T.*

T. 16 Lecture on Rahner's approach to God; & on 19th century atheism. For next class: **RG#2 on Haught, ch.2.**

<u>Th.18</u> Hand in RG#2. Group discussions in class: Haught's alternatives on the existence of a personal God

T 23 **EXAM #1 DUE TODAY** (See the Exam sheets for the assignment for this exam)

Th. 25 Begin Ch. 3 in GreenBook on Miracles. (Videos on Lourdes, stigmata, Christian Science)

(Get the handouts, excerpts from David Hume & Norman Geisler, for RG#3)

T. 30 **RG#3 due today.** Discuss possibility, plausibility, and actuality of miracles.

Oct. <u>Th. 2</u> History of belief in miracles in Christianity. Liberal theology today. **REFERENCE FOR PAPER DUE**

T. 7 Begin GreenBook, ch.4 on Cosmic Order. Ancient mythic views; Ptolemy's universe; the Copernican revolution. Introduce Deism's general proof for God as Intelligent Designer.

<u>Th. 9</u> Modern cosmology, from LaPlace to Hawking, and from Hubble (person) to Hubble (telescope).

(Video from Hubble telescope; ideas from Sagan's (*Contact*) concerning a hidden order to universe)

T. 14 Haught, ch. 5 on Creation, Aquinas's first three proofs (handout). God as 'First' Cause of a fundamentally contingent universe?

<u>Th.16</u> Haught, chs. 6 on Anthropic Principle, and 8 on Purpose vs. Entropy. RG #4 due next class.

T. 21 **RG** #4 due. Discussion groups, to discuss general view of cosmic order and the Anthropic Principle.

<u>Th. 23</u> **EXAM #2 DUE TODAY** (See the exam sheet for the assignment for this exam. It is the toughest exam.)

T. 28 Review exams; check on status of work on papers. Take mid-term survey of how things are going.

<u>Th. 30</u> Begin GreenBook ch. 5 on Evolution. General theory & historical background. Naturalism & creationism.

Nov. T. 4 Guest lecture on fossil evidence — Michael Sandy, Geology Dept.

Th. 6 Guest lecture on geographical biology -- Randy Breitwisch, Biology Dept..

T. 11 Background on Haught, ch. 3, on evolution and issue of compatibility with theism.

<u>Th. 13</u> Background on Haught, ch. 7, on complexity and order in universe; chaos theory and a creative universe.

T. 18 Background on Haught, ch. 4, whether mind and soul are reducible to chemistry. Do RG #5 for next class.

Th. 20 RG #5 due. Discussion groups on alternative ideas about the human place in the universe.

T. 25 [AAR — no class (compensated for by two class days we meet on days take home exams were due)]

Th. 27 [Thanksgiving]

Dec. T. 2 Return RG #5. Final discussion on evolution. Begin technology and environment. RG #6 due next class.

Th. 4 RG #6 due. Discussion groups on the role of human person as agents of change.

T. 9 Discuss RG #6. Review relations among basic ideas of God, universe, life, humans.

[Th. 11 No class for Rel. 477: MW classes meet today]

T. 16 FINAL EXAM, 2:00 - 3:50 **EXAM #3 DUE BY 4:00**

<u>Leave your exam in room 466</u>, or slide it under the door to 466, not in the religious studies dept. office

Reading Guides

PLEASE TYPE YOUR ANSWERS ON A SEPARATE SHEET OF PAPER, **WITH YOUR NAME AND THE RG** #. SHOW YOU HAVE READ AND UNDERSTOOD THE READINGS AND HAVE GIVEN THEM SOME THOUGHT.

General instructions. You will normally receive from 8 to 9 points out of a possible 10 for a good reading guide, (A "10" is an A+). They need not be very lengthy. Even a double spaced one need not take more than a single side of paper, though you may want to write a bit more in order to use your reading guides as means to review the material for the exams.

The reading you do to respond to these questions will prepare you for discussions in class. The written answers you prepare and the informed discussion you then participate in will help you prepare for writing good exams. Think of these reading guides as opportunities to think over in advance what you will say on your exams.

RG #1: Basic relations between religion and science: Galileo's letter + Ch. 1 in Haught. **Due Sept.2**

- Galileo is trying to justify placing human science in a position to judge whether the bible is correct or not about how the heavens go. Give two or more of his reasons why it is all right to do this, why the bible does not have to be taken literally on this. [Write full enough sentences to be clear on how you understand what he is saying.]
- Among the four types of relations that Haught cites between religion and science [conflict, contrast, contact, and confirmation], select the one that you think is the best normal model of how religion and science ought to relate, and explain why you think this is the best. Select the one you think is most incorrect, and explain why.

RG #2: Haught, ch.2, discusses four alternatives on whether a personal God exists. Due Sept. 16.

Note that Haught will not settle for a vague sense of "mystery." He wants to address the question of whether the mystery is the Divine Mystery of God as conceived of by Western religions. [But he has omitted the issue of whether this God works any miracles.]

Assignment: select the position that you find most plausible and explain why. Give your explanation in the light of relevant material in the Green Book. Do the same with the position that you find least plausible. [If you want to devise your own version of most and least plausible, diverging from Haught, that is fine; but

make it clear to me how you are doing that; spell it out.]

RG #3: On the handouts on Hume and Geisler: Due, Sept. 30

In material from Geisler which we will <u>not</u> read, he distinguishes among the possibility, the plausibility, and the reality of miracles. They might be possible, but not plausible; even if plausible, they might never occur. The underlying issue here is method: how do you know what is the case?

- After Hume explains why miracles are highly improbable, he give four reasons why we should not trust the testimony of people who have seen miracles. Describe those four reasons briefly.
- Summarize Geisler's response to Hume: a) why Hume is wrong; b) why we can trust early Christian testimony, and c) why Christianity's special miracles make it more plausible than other religions.

[As before: PLEASE TYPE YOUR ANSWERS ON A SEPARATE SHEET OF PAPER, **WITH YOUR NAME AND THE RG** #.]

RG #4. The topic is cosmic origins and order and purpose.

This is to focus on chs. 5, 6, and 8 in Haught (ch. 7 is later) to prepare for small group discussions and for exam #2.

- 1. In three paragraphs, one for each chapter, explain which of the four positions (the 4 c's) in each of the chapters seems most plausible to you. You will probably have to narrow things down even further, because sometimes Haught slips in more than one position under a given heading.
- 2. In a fourth paragraph comment on whether the three positions you have selected fit coherently with each other: do you have a single coherent picture of the universe and its history?

RG #5. The nature and meaning of evolution. On chs 3, 7, and 4 in Haught.

As with the previous RG, this is to focus your attention on material for small group discussion and for the last exam.

- 1. As you did for the previous RG, in three paragraphs, one for each chapter, 3, 7, and 4, explain which of the four positions (the 4 c's) in each of the chapters seems most plausible to you. You may have to narrow things down further, because at times Haught describes more than one position under a given heading.
- 2. Again, in a fourth paragraph comment on whether the three positions you have selected fit coherently with each other: do you have a single coherent picture of the universe and its history?

RG #6. The Human person as influence on the environment through technology.

This is a relatively light assignment. There are only a couple brief handouts. The class lecture on the four attitudes towards the environment is another resource to use. In four brief paragraphs:

- 1. Take a position about the value of the physical world: to be used by people for their happiness? Of intrinsic worth on its own? Part of a cosmic purpose?
- 2. Take a position concerning the place of the human person in that world: a random by-product of mindless evolution? The goal of the evolutionary process? A small step towards an unimaginable higher purpose?
- 3. Take a position on how we should think of our use of technology: whatever we want as long as it doesn't hurt us? Worth developing hell-bent for leather [whatever that means]? As dangerous as it is helpful?
- 4. Agree or disagree with the following, explaining why: "By creative activities, including the ongoing development of new technologies, we human beings are changing ourselves and our worlds, and thus are the agents of our own ongoing evolution."

Exams

EXAM #1 TOPICS: METHOD AND GOD

Due: Sept. 23, Tuesday. Hand it in at the beginning of class. Typed. (See below)

The basic assignment is to repeat RG #2, in which you opted for one of the four positions described in ch. 2 of Haught. That RG and the subsequent discussion in class has probably made you conscious of various elements, including both which position or positions seem more plausible, and which method is the basis for your decision on this. Here is the single exam assignment:

Propose and defend a particular way of thinking about God; this should include a defense of the method you use to arrive at that position.

Remember that the goal of these exams is to give you incentive to review the materials of the course and come to a better understanding of them. The relevant materials are chs. 1 & 2 in the GreenBook and chs. 1 & 2 in Haught. For me to grade you on your understanding, I have to see it. Write as though you were explaining things to a highly intelligent high school senior who is not familiar with this material. Provide enough specific information on the major points so that even that high school senior can understand what you are saying. The limit on this, of course, is that you have limited space.

For this first exam, let me remind you of some relevant aspects of a good answer.

First of all, you will have to articulate a clear statement of your conclusion about God. Is this an everyday God as well as a cosmic God? Is this mainly a metaphysical God that may have other attributes as well. Is this the Creator of the Universe? Is God able to be understood well or at all by the human mind? You may chose to take an agnostic or atheistic position on God. That is fine; it is one of the possibilities.

Secondly, you will need to address the issue of method. Haught's four positions represent different approaches. The conflict approach trusts either science or the bible totally. The contrast approach sees the God topic to be one that entirely escapes the reaches of the method of science and must be known in some other way. The contact approach allows for some similarity of methods. The confirmation approach begins by assuming the truth of belief in God and then sees how this belief can support the basic orientation or values of science. By this point you should already be drawing on the first chapter of the GreenBook on method. Haught gets away with just assuming the truth of God, but I am asking you to identify as best you can at this point what method you are using to arrive at your position. (If you are just following what you were taught because you are not sure of the alternatives at this point, that is fine; we all have to do this at time. Just articulate that that is what you are doing.)

There is no single correct answer to this assignment, obviously. You may arrive at any conclusion that seems correct to you. But I do want to see that you understand the various major alternatives open to you. So a significant aspect of your defense should be to show why other positions or methods than the one you are following are not adequate.

This assignment is starting to sound very difficult, I know. It would be possible to write 20 pages on it. So let the assigned length of 7-8 pages guide you. Think big, by first articulating your major conclusion and method concerning Haught's ch.2, and then work backwards, to give the more specific pieces of information and analysis, available to you in the other chapter in Haught and the first two chapters in the GreenBook, that show why you think this conclusion is better than alternatives and why this method is a valid one to you. Different people will do different things with this assignment. That also is fine. Just impress me with the clarity and coherence of your thought, even if just by acknowledging that you have not yet achieved clarity and coherence on a particular point or two but are aware of this.

EXAM #2 TOPIC: TOPIC: HOW THE UNIVERSE OPERATES

Due: Oct. 23, Thursday. Hand it in at the beginning of class (Typed)

As with the first exam, you will find that this assignment repeats the work of RG#2 and builds upon that and the small group discussion that follow. Here is the simplest wording of the exam assignment:

Propose and defend a particular way of thinking about the universe, including its operations and its history and its possible meaning or purposes.

Include the issue of miracles. (Ch. 3, GreenBook) This is the question of whether the universe operates in a fully naturalistic way, whether because there is nothing but nature or because God has made it to operate in this way, without specific divine interventions, or whether God does intervene miraculously, for whatever purposes. Comment on whether Hume or Geisler or some other position seems most plausible to you; and say why. Your answer on miracles is connected to the larger topic of how the universe generally operates. Material on this is contained in Ch. 4 GreenBook and in Haught: ch. 5, on the Big Bang and creation; ch. 6, on the anthropic principle; and ch. 8, on whether the universe has a purpose. Your goal is to now do a full 7-8 page job of RG #4, answering much more fully which of the many positions that Haught describes is most plausible to you on each of these positions, and exploring how well your answer creates a coherent picture of the origin, history, and purpose of the universe. Remember that your purpose is to show me how well you understand all the material we have been looking at, particularly in Haught's book.

EXAM #3 FINAL EXAM. TOPIC: THE EVOLUTION OF LIFE AND CONSCIOUSNESS

This also builds upon a reading guide, RG #5, and subsequent small group discussion. The relevant chapters are GreenBook, ch. 5, and Haught, chs. 3, 7, and 4 (note also the handout out the evolution of the soul)

Propose and defend a particular way of thinking about the story of life, from pre-life to human life, in the context of the evolution of the whole universe.

There are different issue here that you may want to deal with one at a time. The first is whether the theory of evolution is plausible or not, especially by contrast with creationism (young-earth interventionist type). This is tied closely to the question of whether the enormous complexity in the universe, including especially that of proteins and proto-life and cells, could be accidental. A special aspect of evolutionary theory is whether we

human beings are entirely a product of this process, including even the inner self-aware mind or spirit that is called "soul." Finish up with some comments on the human role in the universe, starting with our role as the creators of technology by which we transform ourselves and our environment. (You can say something about our role in the whole cosmos, if you like, but since we cannot know much about this now, it may be best not to spend too much time on it, except to the extent that it helps to illustrate or clarify the larger question: the story of life, especially human life, in the cosmos.

Bibliography for Papers

Barbour, Ian G. Ethics in an Age of Technology: The Gifford Lectures, 1989-1991. VOL II. HarperSanFrancisco, 1993.

Berra, Tim M. Evolution and the Myth of Creationism: A Basic Guide to the Facts in the Evolution Debate. Stanford, Stanford University Press, 1990.

William Bloom, The New Age, 1991.

Richard Byrne, <u>The Thinking Ape: Evolutionary Origins of Intelligence</u> (Oxford UP, 1995). Based on field study observations and interaction with chimpanzees, promotes the "social intelligence" theory, connects cognitive skills of apes and humans.

Cole-Turner, Ronald, <u>The New Genesis: Theology and the Genetic Revolution</u>. Philadelphia: Westminster / John Knox Press, 1993. Mixes information about advances in biological knowledge and medical possibilities with some reflections arising from Christian morality.

Crick, Francis, <u>The Astonishing Hypothesis: The Scientific Search for the Soul</u>. NY: Chas Scribner's Sons, 1994. Tendentious, but representative of science-minded skeptics today. [Codiscoverer of DNA]

Currer-Briggs, Noel, Shroud Mafia: The Creation of a Relic? Lewes: Book Guild, 1995. This is probably a jaundiced view of those who still promote the legitimacy of the Shroud of Turin as the wrapping cloth for Jesus's burial, in spite of the carbon-14 dating done a few years ago.

de Lubac, Henri, <u>The Religion of Teilhard de Chardin</u>. NY: Image Books, 1967. You will read a little Teilhard in class. De Lubac was a fellow Jesuit with Teilhard and a young disciple and friend of his. He also writes well.

Diamond, Jared. <u>The Third Chimpanzee</u>. (NY: Harper Perennial, 1992). Readable; enjoyable. We are the 3rd chimp.

Fruchtman, Jack, <u>Thomas Paine and the Religion of Nature</u>. Baltimore: Johns Hopkins, 1993. A good example of a late eighteenth century Deist who was quite critical of traditional religion.

Fuller, Robert C. <u>Alternative Medicine and American Religious Life</u>. New York: Oxford University Press, 1989.

Gazzinaga, Michael S. ed., <u>The Cognitive Neurosciences</u>. MIT Press, 1995. See part XI on "Consciousness," 1291-1400 for an intro plus 8 articles on the topic. The author is one of the leaders in the field. He writes fairly clearly (but it is still a difficult subject).

Gendron, Bernard. Technology and the Human Condition. New York: St. Martin's Press, 1977.

Gilkey, Langdon. <u>Nature, Reality, and the Sacred: The Nexus of Science and Religion</u>. Minneapolis: Fortress Press, 1993.

Godfrey, Laurie r., ed., <u>Scientists Confron Creationism</u>. NY: Norton, 1983. This is a collection of expert articles on specific topics raised by creationists, but defending evolution. A few of these chapters could form the basis for a paper, or one of them in relation to a specific creationist's position..

Gross, Paul, and Norman Levitt, <u>Higher Superstition: The Academic Left and its Quarrels with Science</u>. Baltimore: Johns Hopkins, 1994. Not really on religion, except for a few references, this is a defense of the validity of science in the face of some peculiar but influential critics.

Guthrie, Stewart Elliott. <u>Faces in the Clouds: A New Theory of Religion</u>. New York: Oxford University Press, 1993.

Hofstadter, Douglas R., and Daniel C. Dennett, <u>The Mind's I: Fantasies and Reflections on Self and Soul</u>. NY: Bantam, 1981. Invigorating explorations.

Holmes, Rolston, <u>Science and Religion: A Critical Survey.</u> NY: Random House, 1987. Any one of the major sections of this book is good on its own merits; in particular it is a source on the relation of religion and the *social* sciences.

Hoodboy, Pervez. <u>Islam and Science: Religious Orthodoxy and the Battle for Rationality</u>. Foreword by Mohammed Abus Salam. London: Zed Books Ltd, 1991. A Pakistani complains that his government and society are hurting themselves by restricting science.

Hopper, David H. <u>Technology</u>, <u>Theology</u>, <u>and the Idea of Progress</u>. Louisville: Westminster/John Knox Press, 1991. (We will look at parts of this in class.)

Huchingson, James E. <u>Religion and the Natural Sciences: The Range of Engagement</u> Fort Worth: Harcourt Brace Jovanovich College Publishers, 1993.

Kauffman, Stuart A. <u>The Origins of Order: Self Organization and Selection in Evolution</u>. New York: Oxford University Press, 1993.

Kauffman, Stuart A. <u>At Home in the Universe: The Search for Laws of Self Organization and Complexity</u>. New York: Oxford University Press, 1995.

In these two book Kauffman argues that various structures that appear in nature are not rare and difficult events that may happen only by statistical fluke. The basic structure of the atom tends towards simple compounds, and compounds tend towards more complex structure, etc. Thus the appearance of organic compounds and eventually even life forms is to be expected.

Kinsley, David. <u>Health, Healing, and Religion: A Cross-Cultural Perspective</u>. Upper Saddle River, NJ: Prentice Hall, 1996.

Kitcher, Philip, <u>The Lives to Come: The Genetic Revolution and Human Possibilities</u>. Simon and Schuster, 1997. Popular but interesting.

Kung, Hans. Global Responsibility: In Search of a New World Ethic. New York: Continuum, 1993.

Lane, William, <u>Theism</u>, <u>Atheism</u>, and <u>Big Bang Cosmology</u>. Oxford: Clarendon Press, 1993. Highly competent work; perhaps more than one wants to know.

Larmer, Robert A., ed. Questions of Miracle. McGill Queen's University Press, 1996. Brief?

Larmer, Robert A. Water Into Wine?: An Investigation of the Concept of Miracle. McGill Queen's University Press, 1996).

Lewis, James R., ed. <u>The Gods Have Landed: New Religions from Other Worlds</u>. SUNY, 1955. Various articles about UFO beliefs, including specific movements such as Unarius, Raelian, and the Bo and Peep (Do and Ti) movements.

Manfred Eigen, <u>Steps Towards Life: A Perspective on Evolution</u>. Oxford UP, 1992. Vivid descriptions of the biochemistry behind the origin of life.

Matt, Daniel C. <u>God & the Big Bang: Discovering Harmony Between Science & Spirituality</u>. Woodstock, VT: Jewish Lights Publishing, 1996.

Matthews, Clifford N., and Roy Abraham Varghese, eds., <u>Cosmic Beginnings and Human Ends: Where Science and Religion Meet</u>. LaSalle: Open Court, 1995. A large set of articles, sampling numerous topics in sicence and religion, from the 1993 Parliament of World Religions at Chicago. Includes feminism, Taois, the gaia hypothesis, quantum mechanics, etc., etc. Comparing three articles on the same topic would make a decent paper, perhaps.

McMullin, Ernan, <u>Evolution and Creation</u>. University of Notre Dame Press, 1985. The author is the most knowledgeable of all the Catholic commentators on religion and science. This book rejects fundamentalist "creationism," and offers a larger set of possible religious interpretations of the evolution of life.

Mooney, Christopher F. <u>Theology and Scientific Knowledge: Changing Models of God's Presence in the World.</u> U of Notre Dame Pr, Notre Dame, Ind. This is a colection of his essays. A Catholic viewpoint.

Moore, James R., <u>The Darwin Legend</u>. Grand Rapids: Baker Books, 1994. This publishing house produces books that are quite traditionalist and sometimes fundamentalist, so I expect that this book will work to undercut the plausibility of Darwin's theory of evolution.

Novak, David and Norbert Samuelson, eds. <u>Creation and the End of Days: Judaism and Scientific Cosmology: Proceedings of the 1984 Meeting of the Academy for Jewish Philosophy</u>. Lanham: University Press of America, 1986.

Peel, Robert. Spiritual Healing in a Scientific Age. San Francisco: Harper & Row Publishers, 1987.

Peters, Ted. <u>The Cosmic Self: A Penetrating Look at Today's New Age Movements</u>. HarperSanFrancisco, 1991.

Sagan, Carl, <u>The Demon-Haunted World: Science as a Candle in the Dark</u>. NY: Random House, 1995. Politely criticizes much of religion as too gullible.

Schroeder, Gerald L. <u>Genesis and the Big Bang: The Discovery of Harmony Between Modern Science and the Bible</u>. New York: Bantam Books, 1990.

Tracy, Thomas F., ed., <u>The God Who Acts: Philosophical and Theological Explorations</u>. Univ.Park, Pa: Penn State UP, 1994. More on the question of miracles. A variety of articles.

Wertheim, Margaret. <u>Pythagoras' Trousers: God, Physics, and the Gender Wars</u>. New York: Times Books, 1995. A good walk through the history of science in the West, with an emphasis on the senmi-hidden role of women.

Worthing, Mark William, <u>God, Creation, and Contemporary Physics</u>. Minneapolis: Augsburg/Fortress Press, 1995. Three major topics: creation and the Big Bang, the ongoing history of the universe and God's role in it (including Providence and the problem of evil), and the end of creation. For a general but educated audience.

Wright, Richard T. <u>Biology Through the Eyes of Faith</u>. San Francisco: Harper & Row, Publishers, 1989.

Robert Wuthnow, <u>The Restructuring of American Religion</u>. Princeton UP, 1988. A sociological analysis of trends: diminishing numbers in liberal religions, stable numbers in conservative.

Young, Davis A. <u>The Biblical Flood: A Case Study of the Church's Response to Extrabiblical Evidence</u>. Grand Rapids: William B. Eerdmans Publishing Company, 1995.

ON FAITH AND REASON

Bonsor, Jack, <u>Athens and Jerusalem: The Role of Philosophy in Theology</u>. Mahweh, NJ: Paulist Press, 1993. For the general reader, by a Catholic seminary professor, who nonetheless favors a liberal kind of Catholicism.

Also check the bibliographies at the end of each chapter in the Green Book. If none of these titles appeals to you, talk with me. You may want to pull a few books from the library that look interesting, as a starting point. Look especially under:

BL 240 and 240.2 for general religion and science.

Q 175 also has a couple rel & sc, mainly on science.

QH is environment, some on ethics

GF 80 is best for environmental ethics.

BJ 59 is on technology and values or ethics

HC 110 may have some combinations of techology, environment, and ethics.

