Fall

LIBS 320
Tues-Thurs 10-11:40

Mario E. Savio

Science and Poetry

Course Description: Scientists have continually worked to develop and refine a rational description of nature. Poets, meanwhile, whether ignoring, embracing or challenging the current world view of science, have sought, instead, to express a direct and intuitive human response to the natural world. Beginning with the Greeks and continuing on to the modern era of relativity and quantum indeterminacy, this seminar will examine the perennial counterpoint of poetry and science. Through readings and demonstrations, discussion and writing, we will explore the discoveries of major scientists (including Galileo, Newton, Darwin, Freud and Einstein) as well as some of the most important poetic responses (including works by Donne, Milton, Whitman and Eliot). One central question with which we will struggle throughout the semester is whether and how human beings can learn to feel at home in the universe revealed by science.

Required texts:

1. Course reader

2. The Copernican Revolution by Thomas Kuhn. Harvard UP, 1985.

3. Discoveries and Opinions of Galileo. Doubleday Anchor, 1957.

4. Paradise Lost by John Milton. Mentor, 1981.

5. The Essential Darwin, ed. by Kenneth Korey. Little, Brown, 1984.

6. Introductory Lectures on Psycho-Analysis by Sigmund Freud. Norton, 1989.

7. Four Quartets by T.S. Eliot. Harcourt Brace Jovanovich, 1988.

Requirements: The most important requirement of the course is to do the reading thoroughly, intently, and on time, keeping in mind the questions for discussion which will be handed out each week, as well as your own questions, thoughts, etc. Mark up your reading material. Come prepared with notes, ideas, questions. Be ready to participate and to create an exciting, challenging class.

There will be one long paper (10-15 pp.) due on December 21st. This should be a study of a poem or poems in light of the issues raised in the course. We will discuss this in more detail in class.

There will also be a short paper (3-5 pp.), which is to be presented orally to the class (about 20 minutes in length). Some of these will be presented during regular class sessions. The balance will be presented at a special evening meeting of the seminar to be held on:

PLEASE NOTE THE LIST OF BOOKS ON RESERVE IN THE LIBRARY -- OPTIONAL BUT RECOMMENDED. THEY MAY BE HELPFUL BOTH FOR CLASS DISCUSSION AND FOR WRITING YOUR PAPERS. ALSO NOTE THE LIST OF RECOMMENDED READINGS NOT PLACED ON RESERVE AS WELL AS MAJORIE NICOLSON'S RESOURCE LETTER IN YOUR READER.

SCHEDULE

	READING DUE	DISC'N FOCUS
Aug. 31:	4 recent poems (handout)	Handouts
Sept. 2:	Kuhn to p. 51	Kuhn
Sept. 7:	Plato's Timaeus (Reader, 9-22) Kuhn, 50-55, 55-73 skim, 73-77, 78-84, 106-114, 123-134, 134-155, 165-18	Timaeus
Sept. 9:	Dante's Paradiso (Reader, 23-51) Shakespeare, Merchant of Venice (Reader, 51)	Dante
Sept. 14:	Donne's An Anatomie of the World (Reader, 115-120) Nicolson, BC, Intro. and Chap. 3 (Reader, 52-78) Kuhn, 185-200	Donne
Sept. 16:	Donne poems (Reader,120-122, omit Sonnets XIV & XVI) Nicolson, BC, Chap. 4 (Reader, 78-99)	Donne
Sept. 21:	Reading due: Kuhn, 201-228/ Review Nicolson 78-99 Metaphysical poets (Reader, 123-132) Galileo, The Starry Messenger (21-58)	Nicolson, Chap.4 Met.Poets
Sept. 23:	Galileo, Letters on Sunspots (87-144)	Galileo/demo
Sept. 28:	Nicolson, Milton...(Reader, 100-114) Milton, Paradise Lost (Bk.I, p.34-46 to l.330; l.587-end; Bk.II, p. 61 to l.42, l.290-505, l.629-end; Bk.III, all); Listen to tape of PL (Media Center Reserve)	Milton
Sept. 30:	Milton, Paradise Lost (Arguments to Bks. IV, V, VI, all of Bks. VII & VIII)	Milton
Oct. 5:	Kuhn, Chap. 7, 229-265 Milton, Paradise Lost (Bk.IX, all; Arguments to Bk. X and Bk. XI, also Bk. XI, l.226-369, Bk. XII, Argument and l. 629 to end.)	Milton
Oct. 7:	Newton (Reader, 133-146, 150-153)	Newton

Oct. 12:	Pope, Essay on Man (Reader, 185-198) Nicolson, Newton Demands... (Reader, 153-162)	Pope
Oct. 14:	Newton (Reader, 147-149) Nicolson, Newton Demands...Chap.2 (Reader,163-180) Thomson, Seasons (Reader, 180-185)	Opticks demo
	YOU SHOULD BE READING FOR YOUR ORAL REPORTS/SHORT PAPERS BY NOW	
Oct. 19:	Nicolson, Newton...Epilogue (Reader, 199-204) Blake (Reader, 204-206) Begin reading Darwin (See Nov. 2 assignment)	Blake Blake reports
Oct. 21:	Wordsworth (Reader, 212-213) Continue reading Darwin	Wordsworth demos
Oct. 26:	Vaughan, The Retreat (Reader, 131) Wordsworth, Tintern Abbey & Ode (Reader, 206-211) Continue reading Darwin	Vaughan Wordsworth
Oct. 28:	Other Romantic poets (Reader, 214-219 and 229) Continue reading Darwin	Pat.Fal.rep. 3 Rom. poets
Nov. 2:	Darwin, 1-25, 57-150, 164-178, 249-285	Darwin
Nov. 4:	Whitman (Reader, 220-228) Tennyson (Reader, 229-234) Begin reading Freud(last paragraph of Lecture XVIII, and Lectures II and III)	Whitman Tennyson
Nov. 9:	Arnold (Reader, 234-237) Freud (skim Lecture V, read VI, VII, VIII, IX)	Arnold Freud, II-III
Nov. 11:	Reading due: Freud, (Lectures X, XI, XII)	Freud, V-XII
Nov. 16:	Reading due: Freud, (Lectures XIII, XIV, XVII, XVIII, and XX)	Freud, all Freud report
Nov. 18:	Hopkins (Reader, 238) Donne, Sonnets XIV and XVI (Reader, 121) Rich (Reader, 276-278)	Hopkins/ Donne/ Rich
Nov. 23:	Margenau (Reader, 239-244) Eliot, Four Quartets, Burnt Norton 13-20 Preston (Reader, 245-254)	Hopkins et al continued
Nov. 30:	Eliot, complete Four Quartets, 23-59 Read appropriate section of Preston after each Quartet (Reader, 255-275)	Margenau Line spectra experiment

Dec. 2:	Reread Eliot, Burnt Norton and East Coker	Four Quartets
Dec. 7:	Reread Eliot, Dry Salvages and Little Gidding	Four Quartets
Dec. 9:	Aiken (Reader, 279) and Stevens (Reader, 280-281)	Sunday Morning & Senlin

TERM PAPERS ARE DUE ON DECEMBER 21st

TOPICS FOR SHORT PAPERS WITH ORAL PRESENTATION

1. The Church's case against Galileo
2. Report on Kepler, based on The Watershed by A. Koestler
3. Newton's Opticks experiment on the recomposition of light DUE OCT. 14
4. William Blake, his life and his art DUE OCT. 19
5. William Blake's prophetic books DUE OCT. 19
6. Report on the "pathetic fallacy" DUE OCT. 28
7. The Wilberforce-Huxley debate
8. The Arnold-Huxley debate
9. Current state of the "Two Cultures" debate
10. Freud on the sources of poetry and art DUE NOV. 18
11. Relativity: The twin paradox
12. Quantum mechanics: The uncertainty principle
13. Report on Lucretius' On the Nature of Things
14. Take a mathematical theorem or scientific principle and express it clearly in verse
15. The Futurist Movement in art and literature

UNLESS OTHERWISE NOTED ABOVE, ALL ORAL PRESENTATIONS WILL BE GIVEN ON . THE WRITTEN VERSIONS OF ALL OF THE PRESENTATIONS ARE ALSO DUE AT THAT TIME.