LITERATURE AND THE SCIENTIFIC IMAGINATION

Introduction

Themes of Order and Disorder in the Macrocosm, the Microcosm and the State

THE MACROCOSM

Week I. "In the beginning…"

1. Genesis and Ovid

2. Plato and Lucretius

Required reading: Genesis 1 & 2
Ovid, Metamorphoses I & II
Plato, Timaeus
Lucretius, On the Nature of Things Bk. I-II

Suggested further reading:
Steven Weinberg, The First Three Minutes

Week II. Ancient Astronomy: Center, Circumference, Sphere

1. Dante's Cosmos -- Hell

2. Dante's Cosmos -- Paradise

Required reading: Dante, Inferno, 3, 11,34
Paradiso, 1,2, 10, 23

Suggested further reading:
Liba Chaia Taub, Ptolemy's Universe

Week III. Mystic Geometry: Maximum, Minimum, Hypersphere

1. Dante's Cosmos -- The final vision

2. Nicholas of Cusa -- maximum and minimum

Required reading: Dante, Paradiso 29,33
Nicholas of Cusa, On Learned Ignorance
Suggested further reading:
E. Cassirer, *The Individual and the Cosmos in the Renaissance* (on Nicholas of Cusa)

Week IV. From the Closed World to the Infinite Universe

1. The Copernican Revolution

2. John Donne, *The Anniversaries* "All coherence gone…" and Giordano Bruno, Infinity of worlds

Required reading: Galileo, *The Starry Messenger*
John Donne, *The Anniversaries I and II*
Giordano Bruno, *Ash Wednesday Supper*

Suggested further reading:
Alexander Koyre', *From the Closed World To the Infinite Universe*
T. Kuhn, *The Copernican Revolution*

THE MICROCOSM

Week V. The Cycle of Time, The Arrow of Time

1. Augustine, *Confessions* The unquiet heart

2. Italo Svevo, *The Confessions of Zeno* The last cigarette

Italo Svevo, *The Confessions of Zeno*, first and last chapter

Suggested further reading

Week VI. The Great Chain and a Missing Link


2. Charles Darwin, *The Origin of Species*
Required reading: Pico Della Mirandola
Oration on the Dignity of Man
Alexander Pope, An Essay on Man
Charles Darwin, The Origin of Species,
Introduction and chap.I, III, IV

Suggested further reading
A.O. Lovejoy, The Great Chain of Being

Week VII. The Web of Affinities

1. Charles Darwin, con't

2. George Eliot, Middlemarch

Required reading: George Eliot,
Middlemarch
Charles Darwin, Origin of Species
Chap. VI, VII, XIII

Suggested further reading
Gillian Beer, Darwin's Plots
chapter on Middlemarch

Week VIII. The Possible and the Actual

1. George Eliot, con't

2. Charles Darwin, con't

Required reading: George Eliot, con't
Darwin, The Origin of Species XIV
Conclusion and Recapitulation

Suggested further reading
Francois Jacob, The Possible and the Actual

THE STATE

Week IX. Utopia

1. Plato's Republic
2. Thomas More, *Utopia*

Required reading: Plato, *Republic* selections
Thomas More, *Utopia*, selections

**Week X. Order out of Chaos**

1. Niccolo Machiavelli and the Prince
2. Machiavelli’s *Discourses* Bk. I and II

Required reading: Machiavelli's *The Prince*
*Discourses*, selections

**Week XI. Monster or Patriot?**

1. William Shakespeare, *Richard III*
2. Antonio Gramsci, *The Modern Prince*

Required reading: William Shakespeare, *Richard III*
Antonio Gramsci, *The Modern Prince*

Suggested further reading: John Pocock
*The Machiavellian Moment*

**Summary and Conclusions**

**Required Texts:**

- Lucretius, *On the Nature of Things*
- Augustine, *Confessions*
- Dante, *Inferno, Paradiso*
- Italo Svevo, *Confessions of Zeno*
- Galileo, *The Starry Messenger*
- Charles Darwin, *The Origin of Species*
- George Eliot, *Middlemarch*
- Niccolo Machiavelli, *The Prince*
- William Shakespeare, *Richard III*

**Contexts (short selections available in Course Reader or online):**

- Genesis 1 and 2
- Plato, *Timaeus* 38ff.
- Ovid, *Metamorphoses* I
- Nicholas of Cusa, *The Learned Ignorance*
- Pico della Mirandola, *The Dignity of Man*
- Alexander Pope, *Essay on Man*
- Giordano Bruno, *Ash Wednesday Supper*
- John Donne, *The Anniversaries*
- Antonio Gramsci, *The Modern Prince*