

# Mathematics Natural Science

## LOW-RESIDENCY MATH & NATURAL SCIENCE SEMINAR READING LIST – SANTA FE FALL /SPRING Monday 8:00-10:00 PM Mountain Time

The reading assignment for the first seminar should be completed before the first class meeting.

#### **WEEK ONE**

Lucretius: *On the Nature of Things*, Book I; II; III 1 – 580

#### **WEEK TWO**

On the Nature of Things, Book III 581 – end; IV; V 1 – 235, 771 – end; VI 1 – 95, 1090 – end

#### **WEEK THREE**

Plato: *Timaeus*, to 58c

Ptolemy: "The System of the World" (Photocopies are

available in the bookstore.)

#### **WEEK FOUR**

Aristotle: *Physics*, Book I 184a9 – 184b14, 189b30 – 192b7; II 192b8 – 195b30

#### **WEEK FIVE**

*Physics,* Book II 195b31 – 200b11; III 200b12 – 202b29

#### **WEEK SIX**

*Physics,* Book III 202b30 – 208a25; IV 208a28 – 213a10

#### **WEEK SEVEN**

Physics, Book IV 213a11 - 224a17

#### **WEEK EIGHT**

*Physics*, Book VIII 250b11 – 260a19, 265a13 – 267b27

### **WEEK NINE**

Ptolemy: *Almagest*, Book I 1 – 8; Book III 3 (up to and including two hypotheses figures)

#### **WEEK TEN**

Galileo: *Dialogue on the Two Chief World Systems,* "Author's Dedication," "To the Reader," & "The First Day" (through page 68 in the University of California edition, through page 78 in the Modern Library edition)

#### **WEEK ELEVEN**

Dialogue on the Two Chief World Systems, "The First Day" & "The Second Day" (University of California pages 68 – 131, Modern Library pages 78 – top of 153)

#### **WEEK TWELVE**

Dialogue on the Two Chief World Systems, "The Second Day" (University of California pages 131 – 188, Modern Library pages 153 – top of 219)

#### **WEEK THIRTEEN**

Darwin: *On the Origin of Species,* "An Historical Sketch", Introduction, and Chapters I – III (Make sure the edition you acquire uses the text of Darwin's First Edition, e.g. the Penguin.)

#### **WEEK FOURTEEN**

On the Origin of Species, Chapters IV & XIV

#### **WEEK FIFTEEN**

Freud: "Note on a Case of Obsessional Neurosis [the Rat Man]" in *Three Case Histories* 

#### **WEEK SIXTEEN**

Freud: "A Note on the Unconscious in Psychoanalysis," "On Narcissism: An Introduction" & "Mourning and Melancholia" in *General Psychological Theory* 



# Mathematics Natural Science

# LOW-RESIDENCY MATH & NATURAL SCIENCE TUTORIAL READING LIST – SANTA FE FALL / SPRING Monday and Thursday 5:45-7:00 PM Mountain Time

The reading assignment for the first tutorial should be completed before the first class meeting.

#### **FIRST ASSIGNMENT:**

Euclid's *Elements,* Book I: Definitions, Postulates, and Common Notions (Future daily assignments will be made by the tutor.)

## **WEEKS ONE-EIGHT (16 MEETINGS)**

Euclid: Elements, Book I

### **WEEKS NINE-SIXTEEN (16 MEETINGS)**

Lobachevski: *The Theory of Parallels*, selections (Photocopies are available in the bookstore; it is also included in final appendix of Bonola's Non-Euclidean Geometry, Dover.)