Darwin's Origin of Species

Instructor: Robert J. Richards

Tuesdays, 3:00 p.m.-5:15 p.m. in Stuart 104

Course Assistants: Paul-Jon Benson and John Tsou

Hist. 25300/35303 Philos. 28500/38500 CHSS 38400 HiPSS 28400 Fundmtl. 23500

I. Texts

A. The following texts are in the Seminary Co-operative Bookstore (5757 University Ave.):

Charles Darwin, On the Origin of Species (Harvard University Press)
Charles Darwin, The Descent of Man and Selection in Relation to Sex (Princeton)
Charles Lyell, Principles of Geology, vol. 2 (Univ. of Chicago)
Peter Bowler, Evolution: the History of an Idea, 3rd ed. (Univ. of California)
Jonathan Hodge and Gregory Radick (eds.), Cambridge Companion to Darwin (Cambridge University Press).

- B. Recommended Texts (also in the Seminary Co-Op):
 Paul Barrett et al (eds.) Charles Darwin's Notebooks (Cornell)
 Charles Darwin, The Autobiography of Charles Darwin (Norton)
 Robert J. Richards, Darwin and the Emergence of Evolutionary Theories of Mind and Behavior (Chicago)
- C. Packets of Photocopies:

Selected Readings in Evolutionary Theory, Part I Selected Readings, Part II (both sold in Social Science Building, room 205)

- II. Requirements:
 - A. You will be responsible for preparing texts assigned for discussion, and it is imperative that you do so. You will also be responsible for the recommended readings marked with an asterisk. The graduate students should do all of the

recommended readings.

B. The written requirements for the course.

1. There will be two possible arrangements for meeting the written requirement of the course, the first for undergraduates and the second for graduate students.

a. Several shorter papers:

1) A 5-8 page paper on sections II to IV—due on Monday, Oct. 17.

2) Then a series of two page papers on each of the sections of Darwin's *Origin of Species*—due on Oct. 24, Oct. 31, Nov. 7, Nov. 14.

3) A 5-8 page paper on sections IX and X—due on Dec. 1.

b. Papers on each of the *Origin* sections and one longer paper at the end of term.

 Thus, a series of two page papers on each of the sections of Darwin's *Origin of Species*—due on Oct. 24, Oct. 31, Nov. 7, Nov.
 14

2) One longer paper (about 20 pages or so)—due on Dec. 1.

2. Character of the papers

a. The 5-8 page papers can be on any topic found in the relevant sections.
It should be some problem or concept that you isolate, explain, and provide a resolution for. These should deal with the primary literature (texts for discussion), though may be generated by something in the secondary literature (recommended reading).

b. In the two-page papers, you should select one of the chapters of the *Origin* found in that section and then:

1) Indicate the argument or arguments Darwin is making.

2) Indicate the logical features of the argument and the evidence for the conclusion.

3) Mention the kinds of rhetorical devices he uses.

- 4) Evaluate the persuasiveness of the argument found in the text.
- c. The longer paper can be on any topic derived from the course. It

should focus on the primary material for the course, but the argument carried on can and should also deal with the secondary material.

d. The 5-8 page papers and the longer paper should be in hard copy, typed, stapled, and *handed in on the date due*. Turn them into the secretary in the Fishbein Center (Social Sciences 205). You must also retain a copy of your paper.

e. The two-page papers should be sent to the Chalk site (in the drop box). The should be sent by noon of the Monday prior to class.

f. All of your papers must have your name on the paper and whether you are a grad student or undergrad.

- III. General Information:
- A. Richards: Office: Social Sciences Research 205. Hours: TT: 1:45 p.m.-3:00 p.m. Phone: 702-8348; fax: 743-8949; email: r-richards@uchicago.edu
- B. Benson: email, pbenson@uchicago.edu
- C. Tsou: email, jtsou@midway.uchicago.edu

I. Introduction: Darwin's Biology: From the *Origin* to the Religious Wars of the late 19th through the 21st centuries

- II. Early Evolutionists: Erasmus Darwin and Lamarck
 - A. Texts for discussion:

Erasmus Darwin, "Generation," *Zoonomia* (2nd ed., 1796), sect. 39, iv,
 vol. 1, pp. 496-513. In *Selected Readings in Evolutionary Theory I.* Jean-Baptiste de Lamarck, "Selections from the 'Discours d'overture' of
 1800 and from *Systeme des animaux san vertebres* (1801), trans. in
 Selected Readings in Evolutionary Theory I.

3. Lamarck, "Of the Influence of the Environment on the Activities and Habits of Animals," *Zoological Philosophy* (1809; trans., 1914), trans. H. Elliot, pp. 106-127. In *Selected Readings in Evolutionary Theory I.*

- 4. Charles Lyell, "Lamarck's Theory," Principles of Geology (1830-33), vol.
- 2: pp. 1-65, 123-40, 158-84.

B. Recommended reading:

1. *Bowler, *Evolution,* chap. 4 (pp. 96-140).

2. R. Richards, "Emergence of Evolutionary Biology of Behavior," *Darwin* and the Emergence of Evolutionary Theories, pp. 20-70. In Selected Readings in Evolutionary Theory II.

- III. Darwin's Voyage of Romantic Adventure
 - A. Texts for discussion:

1. Charles Darwin, *The Voyage of the Beagle*, preface, chap 1 (pp. 1-6); chap. 2 (pp. 22-29); chap. 3 (pp.44-66); chap 4 (pp.73-94); chap. 8 (200-212: 2nd ed. pp. 71-77 [which begin on p. 200 of 1st ed.]); chap. 11 (pp. 227-44); chap. 19--Galapagos Islands (pp. 453-478: 2nd ed., pp. 390-401 [which begin about p. 471 of 1st ed.]); conclusion (pp. 453-478: 2nd ed., pp. 498-503]). In *Selected Readings I.* Comparison of the Galapagos chapter with: Darwin's *Beagle Diary* pp.
 351-64. In *Selected Readings I.*

B. Recommend reading:

1. *Phillip Sloan, "The Making of a Philosophical Naturalist," in *Cambridge Companion*, pp. 17-39.

- 2. Bowler, *Evolution*, chap. 5 (141-155).
- IV. The Development of Darwin's Early Views
 - A. Texts for discussion:
 - 1. Charles Darwin, Extracts from Notebooks B, C, D, and E (1837-1839).
 - In Selected Readings I.

2. Charles Darwin, "Essay" of 1842, in Francis Darwin (ed.), *Foundations* of the Origin of Species (1909), pp. 1-52. In Selected Readings I.

B. Recommended Reading:

1. *Jonathan Hodge, "The Notebook Programmes and Projects of Darwin's London Years," in *Cambridge Companion*, pp. 40-68.

- 2. Bowler, *Evolution*, chaps. 5 (155-176).
- 3. Charles Darwin, Autobiography of Charles Darwin.

4. R. Richards, "Darwin's Early Theories," *Darwin and the Emergence of Evolutionary Theories*, pp. 71-126.

- V. Darwin's Origin of Species, 1
 - A. Text for discussion:

1. Charles Darwin, *On the Origin of Species*, "Introduction" (Darwin's), chaps. 1-2.

2. Charles Darwin, "Variation under Nature," *Charles Darwin's Natural Selection (1856-1858)*, ed. Staufer, pp. 138-167. In *Selected Readings*.

B. Recommend Reading: *Ernst Mayr, "Species Concepts and their
Application," *Evolution and the Diversity of Life*, chap. 33. In *Selected Readings*II.

- VI. Darwin's Origin of Species, 2
 - A. Text for discussion: Darwin, Origin of Species, chaps. 3-5.
 - B. Recommended reading:

1. *C. K. Waters, "The Arguments in the Origin of Species," in Cambridge Companion, pp. 116-42.

2. Elliott Sober, "Metaphysical and Epistemological Issues in Modern Darwinian Theory," in *Cambridge Companion*, pp. 267-87.

- VII. Darwin's Origin of Species, 3
 - A. Text for discussion:
 - 1. Darwin, Origin of Species, chaps. 6-7, 9-10
 - 2. The argument from design (19th century version):
 - a) William Paley, "The Argument Cumulative," from his *Natural Theology* (1802). In *Selected Readings*, *I*.
 - b) David Hume, Dialogues Concerning Natural Religion, part 2. In Selected Readings, I.
 - B. Recommended reading: Bowler, *Evolution*, chap. 6 (pp. 177-223).
- VIII. Darwin's Origin of Species, 4
 - A. Text for discussion: Darwin, Origin of Species, chaps. 13-14.
 - B. Recommended reading:

*R. Richards, "Darwin's Romantic Biology," *The Romantic Conception of Life,* pp. 511-54. In Selected Readings in Evolutionary Theory, II.
 J. B. Brooke, "Darwin and Victorian Christianity," in *Cambridge Companion*, pp. 192-213.

IX. Darwin's Descent of Man

- A. Text for discussion: Darwin's Descent of Man, chaps 2-3, 5.
- B. Recommended reading:

1. *R. Richards, "Darwin on Mind, Morals, and Emotions," in *Cambridge Companion*, pp. 92-115.

2. Kim Sterelny, "Darwinian Concepts in the Philosophy of Mind," in *Cambridge Companion*, pp. 288-319.

- X. The Culture Wars: Religion and the Argument from Design
 - A. Texts for discussion:
 - 1. Evolution Militant and the Reaction (early 20th century):

a) Ernst Haeckel: "The Battle over Evolutionary Thought," in Selected Readings in Evolutionary Theory I.

- b) The Scopes Trial (Mencken's account and trial transcripts), in Selected Readings in Evolutionary Theory I.
- 2. Intelligent Design: Michael Behe, "Irreducible Complexity," in *Selected Readings in Evolutionary Theory I.*

3. The Neo-Darwinian Response to Intelligent Design: Jerry Coyne, "The Faith that Dare Not Speak Its Name," in *Selected Readings in Evolutionary Theory I.*

C. Recommended Reading: Bowler, *Evolution*, chap 8 (pp. 274-324).