Darwin’s theory of evolution challenged many beliefs when it appeared in 1859. For many of his contemporaries (as for many people since then), a particularly difficult implication of his theory was that nature had to be understood on its own terms, without recourse to godly intervention, and without hope of Christian spiritual redemption. How, then, was the meaning of nature, of life (and death), and of human existence, to be understood anew, if one accepted evolution? This FIG seminar considers this problem, especially in the contexts of Britain, the U.S., and Germany, in the century following the publication of the *Origin of Species*.

In the core seminar, we will examine historical efforts to draw meaning from nature when evolution was accepted as a fact. We begin in Unit I by considering Darwin’s own intellectual development, the role of morality in his theory, and the reactions by some prominent readers to his theory. Unit II examines the late nineteenth-century controversies surrounding idea of a human moral nature based in biology, with special attention to T. H. Huxley, Ernst Haeckel, and Friedrich Nietzsche. Unit III concentrates on the search for a naturalized aesthetics as well as artistic expressions of evolution (including the visual arts and poetry), focusing on Haeckel, Nietzsche, and Mathilde Blind. Unit IV considers eugenics movements in Germany, the U.S., and England as continuations of evolutionary thinking in relation to the molding of humanity’s future.

Required readings:

For purchase at University Book Store:


For purchase at History of Science Department, 7143 Social Science:

Course Reader (Course readers are NOT RETURNABLE. Once you buy one, it’s yours.)

A copy of each of the above is on reserve at College Library. Note that some readings (not otherwise available) are on reserve at Kohler Art Library.

**Grading:**

Darwin correspondence analysis (2 pages) (due 9/26): 10%

Two reflective papers (3-4 pages) (due 10/24, 12/12): 10% each

Analytical paper on evolutionary art and poetry (4-6 pages) (due 11/21): 20%

Final paper (4-6 pages) (due 9 a.m., 12/18): 20%

Class participation, including informal written responses to study questions: 30%
Schedule of Topics:
*Readings marked with * are in the reader. Italicized questions form the general basis for discussion and reading responses.

W 9/5: Course Introduction

I. Creating the Darwinian Context
M 9/10: Darwin’s evolution: background and early biography
   G&K, Introduction, xi-xvii

W 9/12: Discussion of the development of Darwin’s theory
   What issues was Darwin trying to work out in his early writings? What is the role of humans and of morality in his intellectual probing? How can we see his evolutionism developing? How does this connect with what you’ve been learning in Geol 110?
   All readings in G&K:
   Journal of Researches, 1-20;
   Lamarck Marginalia, 82-86;
   1844 Essay: intro, 87-89.

M 9/17: The Argument of the Origin
   What is the principle of divergence? Pay particular attention to the branching tree diagram and the discussion surrounding it. What part does it play in Darwin’s argument?
   G&K, 127-130, 150-155, 156-215

W 9/19: Discussion of Origin as an argument
   How did Darwin write the Origin to persuade his audience of the truth of his theory?
   What argumentative strategies and rhetorical devices can you find that might have made the theory plausible—and perhaps even palatable—to his audience?
   Further discussion of reading assigned for Monday
   Receive assignment on Re: Design and correspondence in class.

M 9/24: Darwin in his Social and Cultural Context
   How did Asa Gray’s and Adam Sedgwick’s religious and philosophical views affect their responses to the Origin?
   *Re: Design. Adaptation of the Correspondence of Charles Darwin, Asa Gray, and others, by Craig Baxter, as performed 25 March 2007. (Read all.)
W 9/26: Continue Discussion of Darwin’s Context and Reception
Exercise on Re-Design and correspondence due.
Play Reading and Dessert at 7:30 pm, Prof. Nyhart’s house, 16 N. Roby Rd.

II. The Natural (?)/Human(?) Basis of Morality

M 10/1: Human Evolution and Morality
   According to Darwin, what is the basis of morality?
   Darwin, Descent of Man excerpts, G&K, 240-260;

W 10/3: Against Evolutionary Ethics: T. H. Huxley
   According to Huxley and Wallace, what’s wrong with a naturalistic morality based in evolution?

FIELD TRIP to Field Museum, Chicago, Saturday 10/6, to see the Darwin traveling exhibit.

M 10/8: Ernst Haeckel’s Monistic “Darwinism”
   How was Haeckel’s evolutionism like Darwin’s? How was it different?
   *Mario di Gregorio, From Here to Eternity: Ernst Haeckel and Scientific Faith
   (Goettingen: Vandenhoeck & Ruprecht, 2005), 86-98.
   [view Proteus?]

W 10/10: Monism
   What are the basic elements of Haeckel’s monism? What sort of moral order might be derived from it?
   *Haeckel, Monism as Connecting Religion and Science: The Confession of Faith of a Man of Science (tr. J. Gilchrist), (London: Adam and Charles Black, 1894, digitized by Lee Dawei, Thomas Berger and Distributed Proofreaders).

M 10/15: Nietzsche and Darwin
   Friedrich Nietzsche seems to have hated Darwin’s work. Yet he is often considered, along with Darwin, to be one of those who brought about (or at least represented) a fundamental change in European ideas of morality in directions deeply compatible with Darwin’s work. What elements of Nietzsche’s writing might have reinforced “Darwinian” ideas? What took him in a different direction?
Jean Gayon, “Nietzsche and Darwin,” 154-197 in M&R

W 10/17: Nietzsche, the Overman (Superman), and Moral Relativism
What did Nietzsche advocate? Why might the idea of going “beyond good and evil” have been viewed as liberating by some and dangerous by others? What is Weikart’s take on this?

M 10/22: Does Nature Choose For Us? Freedom and Determinism
Compare how the issues about freedom and determinism with respect to moral action were understood among Germans and Americans.

W 10/24: Mid-term Discussion
Mid-semester reflective paper due: Compare some aspect of what you’ve been learning in Philosophy 101 and in this class, especially about the Moral Life. You might consider how the evolutionary context made the questions about morality and their answers different than earlier, and how not. Or you might analyze the different approaches to thinking about morality—historical and philosophical—taken in the two courses. Which appeals to you and why?

III. Naturalizing Aesthetics, Aestheticizing Nature
M 10/29: Physiological aesthetics
Where does the sense of beauty come from, according to Nietzsche? How does this compare to what you’re learning in Phil. 101 about the aesthetic life?
Grant Allen, Physiological Aesthetics [selections TBD]

W 10/31: Ernst Haeckel’s Visual Science and Fraud
How are we to understand Haeckel’s schematized nature? Was his work “fraudulent”? How has the fraud argument been used against evolution?
Olaf Breidbach, Visions of Nature: The Art and Science of Ernst Haeckel, [Kohler Art Library Reserves], pp.105-165
Browse some creationist websites; try Googling “Haeckel” and “fraud.” What makes these arguments powerful? Flawed?

M 11/5: Monism and Modern Art
What trends did Haeckel pick up on in modern art? What aspects of Haeckel’s thought did artists pick up on?
Breidbach (Art Library reserve), 229-243, 253-275

W 11/7: Chazen Art Gallery Tour? Possible art history guest lecture

M 11/12: Mathilde Blind’s Rapturous Evolutionism (possible guest lecture)
-read *Oxford Dictionary of National Biography* article on Blind (online—go to E-Resources, find *Oxford Dictionary of National Biography*, enter “Mathilde Blind” in person box.)
What makes Blind’s poem evolutionary? How should we understand her view of religion? How does she use poetry to bring meaning to her modern world?

What similarities and differences can you find in their views of nature? What are Blind’s contributions to the cultural interpretation and development of evolution? What difference might it make that she was a woman?

W 11/21: Discussion of common themes in evolutionary art and poetry
Paper due: Common themes in evolutionary art and poetry
[Thanksgiving 11/22]

**IV. Evolution, Ethics, and Aesthetics in Action: Eugenics**

M 11/26: German Eugenics
According to Weikart, how did Darwinism contribute to eugenics in Germany? According to Weingart, how did eugenicists adapt themselves to the changing political situation in 1930s Germany? What links might we draw between their two arguments?
* Richard Weikart, *From Darwin to Hitler*, pp. 1-17, 235-240
* Peter Weingart, “German Eugenics between Science and Politics,” *Osiris, 2nd ser.*, ,
W 11/28: International Eugenics

What were the problems to which eugenics provided the solutions in the early twentieth century? Do similar social, political, and moral issues exist now with regard to genetic engineering, therapy, and identification? (Think about G110.) What’s the same now, what’s different?


View Homo Sapiens 1900 (in class)

M 12/3: Julian Huxley and Reform Eugenics

How was reform eugenics different from earlier kinds of eugenics?


W 12/5: Julian Huxley, Progressive Evolution, and Evolutionary Humanism

How were Huxley’s progressive evolutionary ideas and evolutionary humanism intertwined? How were these in turned connected to his reform eugenics? What might be the appeals of “reform eugenics”? What are its down-sides?

*Michael Ruse, “Evolutionary Ethics in the Twentieth Century: Julian Sorrell Huxley and George Gaylord Simpson,” in M&R, 198-224

*Julian Huxley, “Man’s Place and Role in Nature,” in idem, New Bottles for New Wine (London: Chatto & Windus, 1959), 41-60

M 12/10: Wrap-up: Collective review of the different ways of making meaning in an evolutionary world.

W 12/12: Personal reflections paper due: Some options: What approach to “making meaning” in an evolutionary world do you find most appealing, and why? What things that you have learned from this and your other FIG courses would you want to wrap into your personal world-view?

Final essay, due at 9 a.m. Tuesday, 12/18 (may be handed in earlier). 3 choices:
1) Is “Darwin to Hitler” a defensible argument? Is it a persuasive one?
2) From Darwin/T. H. Huxley to Julian Huxley: What changed? What stayed the same? Why?
3) Write your own question. This must be cleared with me by Monday 12/10.