Course Description:
The History of the Modern Life Sciences traces the study of living things from the seventeenth century to the present. We will examine how naturalists and biologists have searched for order in nature— from cabinets of curiosity to maps of biodiversity, and from the theory of cells to the structure of DNA. In this course, students will examine the development of changing practices and approaches to investigating life in the field, the museum, and the laboratory. Students will confront critical problems in the history of biology and society, including those related to exploration and empire; race, gender, and classification; theories of evolution; genetics and eugenics; ecology and conservation; molecular biology; and biotechnology. How has the meaning of “life” changed through history? How have ideas about social order and natural order mirrored or shaped each other? To explore these questions, we will analyze historians’ interpretations, historical actors’ own accounts of their work and ideas, as well as historical images and objects of scientific practice.

Readings:
Required textbooks are available for purchase at the Co-op:


Additional primary and secondary sources listed in the schedule below will be posted on our course’s Canvas site ([http://canvas.utexas.edu](http://canvas.utexas.edu)). In addition to accessing course materials, you will also use Canvas to communicate and collaborate online, check grades, submit assignments, and complete online quizzes and surveys. Canvas support is available at the ITS Help Desk at 475-9400, M-F 8:00-6:00.
Assignments and Evaluation:
Your course grade will be based on the following:

- Midterm Essay Exam (30%)
- Final Essay Exam (35%)
- Reflections (homework and in-class writing) (20%)
- Participation (15%)

Essays: Two take-home essays will function as the exams for this course. For each, you will have a choice of three possible essay prompts, which you will respond to by synthesizing course readings and lectures. You will submit your essays on Canvas. Except under extreme circumstances that you will negotiate with me at least one week in advance, one half-grade (5 percentage points) will be deducted for each day late. Please see the essay grading criteria attached to the back of this syllabus.

Reflections: Each week you will have a reflection assignment due either as a post on Canvas or as a piece of short in-class writing. These assignments will require you to reflect on something we have discussed, seen, or read for class; to brainstorm about a problem we will be examining over the coming week; or to bring relevant outside material to bear on the course. Reflections submitted on Canvas will be due by the start of class, at 1:00PM. Late reflections will earn half-credit.

Participation: Participation will be evaluated based on your contribution to discussion of course material. Since this is a large class and in-class discussion time is limited, discussion will be accomplished primarily through Canvas. Please see the participation guidelines and grading criteria attached to the back of this syllabus.

Grading System

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<th>Grade</th>
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Office Hours
My office hours are open to all students—visiting office hours is not a sign of weakness! I encourage you to meet with me to discuss course material, any concerns you may have about your progress in this class, or strategies for effective studying and writing. If problems arise, either academic or personal, that might jeopardize your performance in this course, you must try to inform me of the problem at the next available office hour. If you wish to dispute a grade, be aware that re-grading may result in a lower grade. If my office hours conflict with your schedule, please ask me about scheduling an appointment at another time.
**Documented Disability Accommodations**

I strive to make my classroom accessible to everyone. Any student with a documented disability who requires academic accommodations should contact Services for Students with Disabilities (SSD) at 512-471-6259 (voice) or 1-866-329-3986 (video phone). Faculty are not required to provide accommodations without an official accommodation letter from SSD.

**Attendance**

UT Austin policy requires you to notify me of your pending absence at least fourteen days prior to the date of observance of a religious holy day. If you must miss a class or assignment in order to observe a religious holy day, I will give you an opportunity to complete the missed work within a reasonable time after the absence. If you miss an in-class reflection for a University extracurricular activity, illness, or emergency, it may also be considered an excused absence, and you should discuss with me the possibility of making up the assignment at my office hours. If you miss a lecture, you may consider borrowing notes from a classmate. Although I am always happy to discuss course material with you at my office hours, there is no easy way to make up a lecture; regular class attendance is imperative to success in this course.

**Distractions**

In order to be fully attentive in class and avoid distracting your classmates, *refrain from using electronic devices during class for purposes other than accessing assigned course material*. If you are found to be doing so, you may lose your privilege to use such devices in our classroom. Using e-readers or a laptop to view assigned pdfs is permitted, but taking notes on paper is a much more effective strategy for retaining information. *Turn your phone off and disable wifi unless I explicitly state that accessing the internet is part of a class activity.* Looking material up or sharing ideas online is certainly encouraged after class. If a classmate’s use of electronic devices or other behavior becomes distracting to you, politely inform her or him of the problem or please bring it to my attention after class.

**Writing Center**

Writers are made, not born. Good writers are those who strive to write better. The Undergraduate Writing Center, located in the FAC 211, phone 471-6222, [http://uwc.utexas.edu](http://uwc.utexas.edu) offers individualized assistance to students who want to improve their writing skills. There is no charge, and students may come in on a drop-in or appointment basis.

**Academic Integrity**

Using the words and ideas of others without giving credit with an appropriate citation is plagiarism and a violation of the University of Texas Honor Code. Whether accidental or intentional, plagiarism will result in a failure of the assignment and could lead to further disciplinary action. *Before the first essay is due, complete the plagiarism tutorial and quiz available on our Canvas site* to be sure you understand what plagiarism is and to minimize your risk of committing it. Please feel free to come talk to me about strategies for effective citation.
Course Schedule

This syllabus represents my current plans. As we go through the semester, these plans may be adjusted to enhance class learning. I will communicate any such changes clearly in class and through Canvas. In addition, images, links and other resources not listed here may be posted on Canvas for your reference. Primary sources are marked (*).

Readings should be completed by the date where they are listed below. For longer Friday reading assignments, I recommend beginning early so that you can spread the reading load throughout the week.

**Week 1: Wonders of Nature**

*August 27*

*August 29*

Farber, “Introduction.”

Reflection: The Meaning of Life

How would you define “life”? What does “life” mean to you? Answer in 140 characters or less (pretend you are on Twitter). Post your answer in the Canvas Discussion for this week.

In addition to your 140 character “Meaning of Life,” please follow by introducing yourself to your classmates. You’ll be using Canvas to discuss course material together throughout the semester, so now is a good time to start to get to know each other. What brings you to this class? Are there any topics or questions you’re particularly interested in exploring?

**Week 2: The Search for Order**

*September 1 (Labor Day—No Class)*

Farber, “Chapter 1: Collecting, Classifying, and Interpreting Nature” and “Chapter 3: Comparing Structure.”

*September 3*

*Selection from Lamarck, Jean Baptiste. Zoological Philosophy (1809).*

*September 5*

Otis, “Introduction: The Lab That Never Was.”

Otis, “Chapter 1: Müller’s Net.”

**Week 3: Omni Cellula e Cellula**

*September 8*

Farber, First half of “Chapter 6: Studying Function.”

Read up to p.78 only.

*September 10*
September 12
Otis, “Chapter 3: Emil Du Bois-Reymond as a Scientific and Literary Creator.” (You may omit pp. 92-103.)

Week 4: Exploration and Empire

September 15
Farber, “Chapter 2: New Specimens.”

September 17

September 19
Otis, “Chapter 4: Physiological Bonds: The Training of Hermann von Helmholtz.”
(You may skim pp. 111-127.)
Otis, “Chapter 5: Rudolf Virchow’s Scientific Politics.”

Week 5: The Commonwealth of Science

September 22
*Selections from Paley, William Natural Theology (1800).

September 24

September 26
Otis, “Chapter 6: Banned from the Academy: the Mentoring of Robert Remak.”

Week 6: Building One Long Argument

September 29
Farber, “Chapter 5: Darwin’s Synthesis.”

October 1

October 3

Week 7: A Darwinian Revolution?

October 6
Farber, “Chapter 7: Victorian Fascination.”

October 8
October 10
Otis, “Chapter 7: Ernst Haeckel’s Evolving Narratives” and “Afterword: Remembering and Dismembering a Scientist.”

Week 8: Genetics and Eugenics

October 13
**MIDTERM ESSAY EXAM DUE**
(You may want to begin Watson’s *Double Helix* this week if you would like to spread out the reading load.)

October 15

October 17
*Selection from Holmes, Jr., Oliver Wendell. “Buck V. Bell” U. S. Supreme Court Decision, 1927.*

Week 9: Synthesis

October 20
Farber, “Chapter 8: New Synthesis.”

October 22

October 24
*Watson, pp. xi-95.*

Week 10: The Book of Life

October 27

October 29

October 31

Week 11: The Tangled Bank

November 3
(You may want to begin Skloot’s *The Immortal Life of Henrietta Lacks* this week if you would like to spread out the reading load.)
November 5
Farber, “Chapter 9: Naturalist as Generalist” and “Epilogue.”


November 7

**Week 12: Big Biology**

November 10

November 12

November 14

Skloot, pp. ix-9 and “Part 1: Life.”

**Week 13: Nature and Nurture**

November 17

November 19

November 21

Skloot, “Part 2: Death.”

**Week 14: Who Owns Life?**

November 24

November 26

Skloot, “Part 3: Immortality” and pp. 311-328.

November 28 (Thanksgiving Break—No Class)

**Week 15: The Future of Life**

December 1

*Reflection: Find a news item related to this class. Post it on the Canvas Discussion and explain how material from this course helped you contextualize it. (Commenting on someone else’s post can also count as participation.)*

December 3

December 5

**Exam Week:**

*Scheduled Exam Period: Wednesday, December 10, 2:00-5:00 pm*

**FINAL ESSAY EXAM DUE**