HIST 207/MDHS 200

DARWINIAN REVOLUTION: HISTORY OF BIOLOGY /INTRODUCTION TO THE MEDICAL HUMANITIES

FALL 2023 SEMESTER

AUGUSTANA UNIVERSITY

Dr. Will Wright, Instructor

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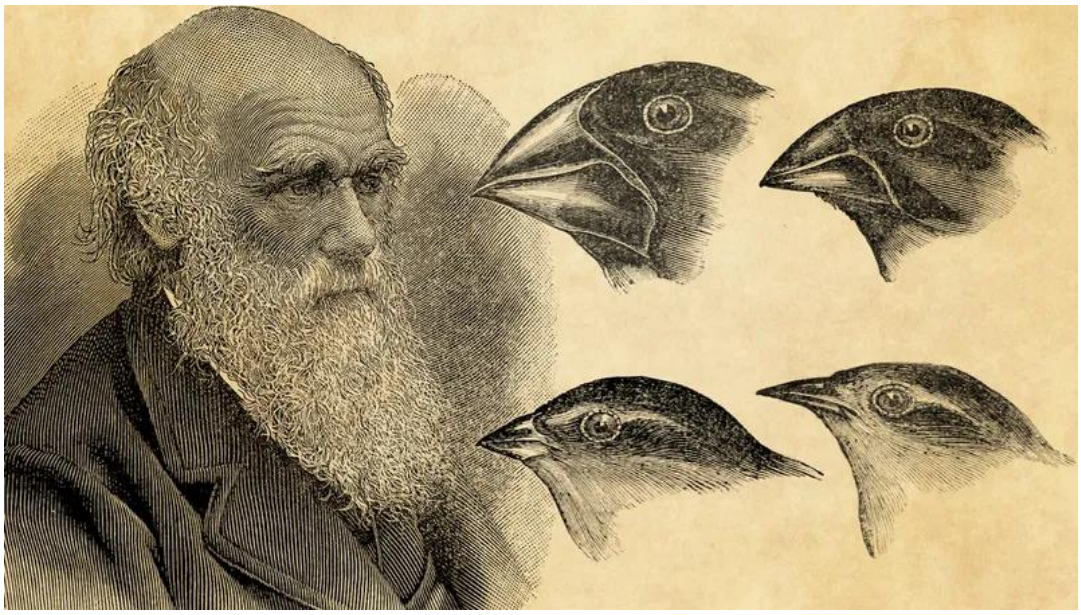
Office Location: Madsen Center 236

Course Location: Madsen 202

Office Hours: MWF, 2-4 p.m., or by appointment

Course Day/Time: MWF, 9:00-9:50 a.m.



Charles Darwin (left) and drawings of finches from the Galápagos Islands (right). During his voyage of the HMS Beagle in the 1830s, Darwin noticed slight differences in the form and function of the birds' beaks from island to island. This natural variation across space later informed his theory of evolution through natural selection, which catalyzed an intellectual revolution in biological thought.

Course Description

Charles Darwin's theory of evolution through natural selection is one of the greatest (*maybe the greatest*) intellectual and cultural turning points in the modern era. Since the *Origin of Species* was published in 1859, the way we have thought about science, philosophy, religion, and society has been profoundly altered. In this course, we will study Darwin, his theory, and its impact from both a scientific and humanistic perspective. That is, we are going to integrate a study of evolution (science) with a study of society (humanities) to better understand the reciprocal ways that Darwin's theory shaped—and was shaped by—society, from the middle of the nineteenth century to today. This course, then, is broadly

organized into two main units. The first part investigates in detail Darwin's theory, the way he came to it, the social and scientific context in which it emerged, and its reception among scientists. The second part will explore the broad ramifications of his theory, including debates about science and religion, eugenics, sociobiology, and other tricky contemporary issues.

Students will read selections of philosophical, literary, and theological writing which address major components of the fields contributing to medical humanities, which will include discussions of the following topics: medical humanities as a discipline, ethics, medical ethics, bioethics, clinical ethics, narrative, patient care, or religious care. Students explore crucial questions about health, well-being, medicine, and social inequality in the twenty-first century, with a particular focus on how narrative works in medical contexts.

While those majoring in biology, pre-med, and nursing will enjoy understanding the history of biological thought, this course does not require any scientific background. Rather, by studying Darwin's ideas in their broader social, cultural, and political contexts, you will begin to put together an intellectual toolbox that will allow you to critically analyze science and enter, with an informed judgement, into the fascinating, complex, and controversial debates taking place today concerning biology's increasing role in our society.

Learning Outcomes

Students who diligently complete this course in good faith will be able to:

- **Assess the quality of evidence and discern historical patterns.** People have different viewpoints on scientific issues, and the quality of evidence supporting these views can vary considerably. Thinking about science over time entails evaluating the caliber of empirical evidence and developing plausible conclusions based on that material.
- **Understand the value and role of the humanities in modern society.** Science, technology, and medicine do not occur in a bubble. They influence, and are influenced by, our cultural beliefs, political structures, and economic systems. This course will demonstrate the ways in which scientific and technological advance has influenced society, and how society has influenced science and technology.
- **Show a healthy skepticism toward scientific claims and technological advancements.** Unlike other ways of knowing the world, skepticism and the questioning of assumptions make up an essential part of the scientific process. You will develop a deeper understanding of what science can and can't do; what science is and what it isn't; which types of questions science can answer and which types it can't; and finally, what is valid science and what is not.
- **Discuss these topics in front of an engaged public community.** Knowing something is the easy part. Being able to explain that knowledge and communicate your viewpoint within a framework that others can understand—and trust—is often much more difficult.

This course also meets the "Scientific Intersections" requirements of SOPHIA. Students will be able to:

- Demonstrate an understanding of scientific content and principles of the natural world [*Origins* chapter summary]
- Articulate the ways in which scientific ideas evolve over time [tests; readings and class discussions]
- Use appropriate scientific information to understand societal issues [readings and class discussions, webinar project]
- Describe global issues related to science in terminology that is understandable to general audiences [webinar project]

As an Introduction to Medical Humanities course, students will be able to:

- Breakdown politics and narrative forms of health-related texts
- Articulate key aspects of the history of medical discourses
- Illustrate issues related to ethics, race, class, and gender in historic and contemporary medical practice
- Apply narrative thinking to medical setting scenarios
- Interpret cultural representations of health, illness, and well-being
- Explain how narrative thinking can help people (a) process their own thinking/feeling and (b) bridge cultural divides to include people of all backgrounds

Required Reading

Books (Available for purchase/rental at the Online Bookstore)

- Mary Shelley, *Frankenstein; Or the Modern Prometheus* (1818; any edition).
- Charles Darwin, *On the Origin of Species: The Illustrated Edition* (New York: Union Square & Company, 2008).
- David Quammen, *The Reluctant Mr. Darwin: An Intimate Portrait of Charles Darwin and the Making of His Theory of Evolution* (New York: W.W. Norton & Company, 2007).
- H. G. Wells, *The Island of Doctor Moreau* (1896; any edition)
- Richard C. Lewontin, *Biology as Ideology: The Doctrine of DNA* (New York: Harper Perennial, 1991).

Articles (Available on Canvas)

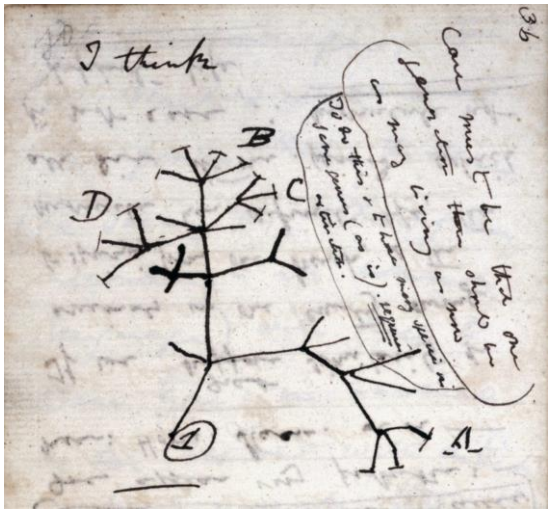
In addition to the above texts, articles will be assigned on the course website according to the week in which they are due. See the class schedule below for specific details.

Grading Components (Weighted by Category)

Book Tests (4)	40%
Origin Summary	10%
Webinar Project	30%
Participation	20%
Total	100%

Grading Scale

A	93-100	**C**	73-76
A-	90-92	**C-**	70-72
B+	87-89	**D+**	67-69
B	83-86	**D**	60-66
B-	80-82	**F**	0-59
C+	77-79		



In mid-July 1837, Darwin started his "B" notebook on Transmutation of Species, and on page 36 wrote "I think" above his first evolutionary tree. Unlike Lamarckian evolution, which viewed biological change in an organism as progressive and linear, Darwin saw evolution as up to random mutations (hence the tree with many branches leading to A, B, C, and D).

Grades will be maintained and updated on Canvas. If you have questions or concerns about grades, please contact me via email or talk to me in-person at office hours, before or after class.

Assignments

Book Tests

Each of the required texts will cover the history or cultural settings in which Darwin developed natural section theory and where those ideas flourished. The test will consist of 3-5 short answer questions to be administered at the beginning of class before we discuss the book in greater detail.

Webinar Project

This assignment will require you to put a contemporary issue in science, technology, or medicine, such as CRISPR gene editing, into an historical framework by creating a recorded video presentation to be uploaded online. Students will be broken into teams of three and asked to choose a current problem, such as sterilizing disease-carrying mosquitos, resurrecting extinct species like wooly mammoths, or creating “designer babies,” and discuss how studying past contexts helps to inform bioethical decision-making in future scenarios. I will provide a list of suggested topics, but you are welcome to propose a topic to study, with my approval. Your team will also be required to submit a bibliography, outline, and script over the semester to prepare for building the webinar. See rubric at the end of this syllabus.

Origin of Species Chapter Summary

When Darwin published *Origin of Species* in 1859, he could not definitively prove evolution through natural selection. (That wouldn’t be done until James Watson and Francis Crick effectively modeled the

DNA double helix in 1953). Instead, Darwin called his treatise "one long argument" drawing insights from disciplines such as animal breeding and biogeography. Written in five (5) double-spaced pages, this assignment asks you to consider how Darwin borrowed from other fields, chapter by chapter, to establish his theory as correct. See rubric below for more information.

Participation

This course is a heavy reading load and requires serious analytical thinking. Consequently, it is imperative that you attend class and actively engage in discussions, lectures, and group work. Each class, you are expected to complete all the reading and be prepared to discuss with your peers. See rubric below:

	Excellent "A"	Proficient "B"	Developing "C"	Unacceptable ">C"
Frequency	Student frequently initiates conversation more than once in class.	Student initiates contribution once in each class.	Student contributes only every few classes.	Student does not initiate contribute and requires professor to solicit input.
Quality	Comments are always insightful, constructive, and demonstrate clear engagement with class material. Always employs appropriate terminology.	Comments are mostly insightful, constructive, and demonstrate engagement with class material. Frequently employs appropriate terminology.	Comments are sometimes constructive with signs of engagement and insight. Terminology and comments not always relevant to discussion.	Comments are uninformative, lacking appropriate terminology, and demonstrate lack of engagement with class material.
Listening	Student listens attentively and builds upon remarks of others.	Student mostly attentive and usually builds upon remarks of others.	Student is often inattentive and requires reminders to stay focused. Student sometimes disruptive.	Student does not listen to others, does not pay, attention, and/or detracts from the discussion.

Learning Environment

Cell Phones and Other Technology

Please ensure that your cell phone is on silent or turned off during class. Texting during class is not acceptable. If you need to take an important phone call, please step out of the classroom. You may use a laptop or tablet to take notes, but please avoid using the devices for other activities (checking email, online shopping, etc.). Your compliance will help to maintain a positive environment for teaching and learning in our class period.

Late Work Policy

All late assignments are still eligible for partial credit (95% after 1 day late, 90% after 2 days late, etc.); please turn them in. In many cases, I am happy to give deadline extensions if you communicate with me about how much more time you need and why.

Recording Disclaimer

Please be advised that class sessions may be recorded for sharing with your classmates. This is the sole intention of this recording, and not intended for use in any broader sense. Should you have any questions or concerns about this, please discuss with the instructor directly.

Academic Integrity, Accommodations, and Well-Being Resources

Honor Code

As a community of scholars, the students and faculty at Augustana University commit to the highest standards of excellence by collectively embracing an Honor Code. As a University of the Evangelical Lutheran Church in America, we understand the individual and collective responsibility we have in fostering integrity. Augustana's ultimate purpose is to form an engaged body of academically excellent, highly articulate, and morally centered persons. To that end, we pledge that we will abide by the highest standards of academic integrity and that we will abide by the decisions of the joint student/faculty Honor Board.

The Honor Code requires that examinations and selected assignments contain the following pledge statement to which students are expected to sign:

"On my honor, I pledge that I have upheld the Honor Code, and that the work I have done on this assignment has been honest, and that the work of others in this class has, to the best of my knowledge, been honest as well."

Accessibility

Augustana welcomes students of all abilities to participate in all its courses, programs, services, and activities. If you have a documented disability and are requesting accommodations, please contact Jeff Merkle, Director of Accessibility. His office is located in room 223 of the Madsen Center, and he may be reached at 605-274-4631 or accessibility@augie.edu.

Student Well-Being

Augustana promotes student well-being and healthy self-care by offering a number of services on campus in the areas of counseling services, health services, and other wellness-related resources.

- The **Campus Clinic** is located in the lower level of Solberg Hall and is staffed by a Sanford Health Registered Nurse and Certified Nurse Practitioner. The clinic is available for all medical needs and can be reached at 605-274-5552. Services provided by the RN are covered under the student activity fee and Certified Nurse Practitioner visits will be billed toward insurance.
- Students may contact the **Dean of Students Office** for assistance with mental health and other health-related concerns or help setting up counseling appointments by calling 605-274-4124 or emailing Beth Elam at belam@augie.edu.
- The **Campus Pastor** is available to meet with students around topics of grief, anxiety, vocational discernment, or spiritual care. Contact Pastor Ann Rosendale in the Chapel (605-274-5403) to schedule an appointment).

- Concerns related to academics, career, and vocation may be directed to the **Student Success Center (**605-274-4124). Career and academic specialists are ready and eager to meet with students.
- The **International Programs Office** (605-274-5050) assists international and third culture students when issues of culture shock and adjustment arise, as well as with other cultural elements such as adjusting to U.S. academic and classroom expectations.

All Augustana students have access to confidential counseling services through our campus partners at **Sioux Falls Psychological Services**. Counseling services are available across the street from the Mikkelsen Library—located on Summit Avenue. The door to the counseling services will be on the east side of the building (facing Norton Avenue). Our counselors are licensed professional counselors and specialize in a number of mental health areas including anxiety, depression, transition to college, grief & loss, and many more. Students can call 605-334-2696 to set up a time that works best. All counseling sessions are covered under the student activity with no billing towards insurance or copays.

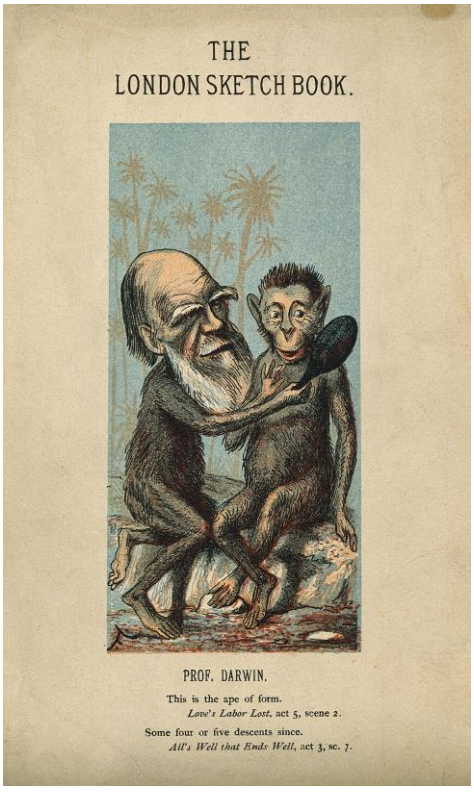
Commitment to Diversity

Augustana University is committed to creating and fostering a learning and working environment based on open communication and mutual respect. This is an integral part of the academic mission to enrich our students' educational experiences and prepare them to live in and contribute to a global society. If you encounter sexual harassment, sexual misconduct, sexual assault, or discrimination please contact the Title IX Coordinator at 605-274-4044 or belam@augie.edu. If you make a report of this nature to a faculty member, they must notify the Title IX Coordinator about the basic facts of the incident (you may choose whether you or anyone involved is identified by name). For more information about options at Augustana, please visit www.augie.edu/titleix.

COVID-19 Policies

Guided by the Centers for Disease Control and Prevention (CDC) and Augustana's own monitoring of the fluid situation in our region, the university has established protocols and guidelines for your own protection as well as for the health and safety of those who teach you, learn alongside you, live in community with you, and serve you. These protocols can be found on the Viking Flex page on the portal. Utilizing current local conditions, AU has thus established the following guidelines to be followed in academic buildings for the launch of the Fall 2023 semester:

- First and foremost, if you are ill, do not come to class.
- If you have COVID symptoms, administer a self-test for COVID-19. Tests are available at the Campus Safety desk in the Morrison Commons and at the Campus Clinic.
- If you test positive, do not come to class. Contact your instructor regarding options for making up missed work, following policies specified on the syllabus.
- If you have symptoms and test negative, wear a mask until symptoms resolve.
- If you have no symptoms, but you have had a known close contact with someone with COVID-19, wear a mask for 10 days and follow CDC guidelines based on your vaccine status.
- If you have no symptoms, but would be more comfortable wearing a mask and/or socially distancing as much as the space you are in allows, please do so.
- Students, faculty and staff who are unvaccinated are strongly encouraged to wear masks.
- Keep in mind that mask-wearing has become a normal occurrence. Consider wearing a mask anytime you feel that you may be coming down with an illness in order to protect those around you. Please be considerate of people who choose to wear a mask and social distance.



As members of Augustana's caring community of students, faculty, and staff, we each have a role to play in keeping one another healthy and safe during this difficult time. Be aware that pandemic-related conditions are dynamic and evolving and may thus require frequently updated protocols.

The image to the left is a caricature of Charles Darwin as a monkey holding up a mirror to another monkey, published by London Sketch Book *in 1874. Unlike* Origins of Species *(1859) in which Darwin avoided mentioning people in his treatise on evolution through natural selection because he thought it would rejected by religious elites,* The Descent of Man *(1871) applied evolutionary theory to humankind. Darwin argued that separate creations of distinct human races did not exist, but that all people descended from a common ancestor. Darwin's cousin, Francis Galton, interpreted racial difference as the result of parental inheritance, which was a catalyst for the eugenics movement.*

TENTATIVE CLASS SCHEDULE

Please note that the topics, readings, and deadlines below are subject to revision.

UNIT 1- SCIENCE AND THE HISTORY OF SCIENCE

Week One

WEDNESDAY, AUGUST 30

Course Introduction

FRIDAY, SEPTEMBER 1

Discussion: What is "Science" and How do We Study it?

Readings

- F: John Hatton and Paul B. Plouffe, "General Introduction" in *Science and its Ways of Knowing* (1996) (Canvas); Carl Sagan, "Can We Know the Universe?" *Broca's Brain* (1979) (Canvas); and Robert Pirsig, "On Scientific Method," *Zen and the Art of Motorcycle Maintenance* (1974), pp. vii-x, 1-10 (Canvas).

Week Two

MONDAY, SEPTEMBER 4

NO CLASS (Labor Day)

WEDNESDAY, SEPTEMBER 6

Discussion: Gender and the Science of Linnaean Taxonomy

FRIDAY, SEPTEMBER 8

Lecture: Isaac Newton, Religion, and Reductionism in Physics

Readings

- W: Londa Schiebinger, "Gender and Natural History," *Nature's Body: Gender and the Making of Modern Science* (1993) (Canvas).

Week Three

MONDAY, SEPTEMBER 11

Lecture: Reductionism in Biology

WEDNESDAY, SEPTEMBER 13

Discussion: Observation or Technology? Reductionism in Medicine

FRIDAY, SEPTEMBER 15

Introduction to Webinars

Readings

- MWF: Mary Shelley, *Frankenstein.*

Week Four

MONDAY, SEPTEMBER 18

Test and Discussion on Frankenstein

UNIT 2- DARWINIAN ROOTS

WEDNESDAY, SEPTEMBER 20

Discussion: Death and Dying in Medicine

FRIDAY, SEPTEMBER 22

Lecture: Alexander von Humboldt and Space; Charles Lyell and Time

Readings

- F: Th: Darwin, Origin, "Introduction" (pp. 1-13) and "Appendix: An Historical Sketch" (pp. 514-525).
- MWF: Quammen, *The Reluctant Mr. Darwin*, pp. 11-83.

Week Five

MONDAY, SEPTEMBER 25

Lecture: Adam Smith, Thomas Malthus, and the Social Construction of Evolution

WEDNESDAY, SEPTEMBER 27

Lecture: Voyage of the HMS *Beagle*

FRIDAY, SEPTEMBER 29

NO CLASS (Read and review for Test)*;* *Webinar topic selection*

Readings

- M: T.R. Mathus, *An Essay on the Principles of Population* (1798) (Canvas).
- MW: Quammen, *The Reluctant Mr. Darwin*, pp. 84-152.

Week Six

MONDAY, OCTOBER 2

Lecture: Darwin after the *Beagle*

WEDNESDAY, October 4

Test and Discussion of the Reluctant Mr. Darwin

FRIDAY, OCTOBER 6

Discussion: Religion and Medicine

Readings

- MW: Quammen, *The Reluctant Mr. Darwin*, pp. 153-304.

UNIT 3- DARWIN'S DANGEROUS IDEA

Week Seven

MONDAY, OCTOBER 9

NO CLASS (Native American Day)

WEDNESDAY, OCTOBER 11

Discussion: On the *Origin* I: Variation, Inheritability, Selection

FRIDAY, OCTOBER 13

Webinar workday in Computer Lab

Readings

- WF: Darwin, *Origin*, Chapters 1-4 (pp. 14-141).

Week Eight

MONDAY, OCTOBER 16

Discussion: Practicing "Narrative Medicine"

WEDNESDAY, OCTOBER 18

Discussion: On the *Origin* II: Up Mountains and Across Oceans; *Origin Chapter Summary Due*

FRIDAY, OCTOBER 20

NO CLASS (Fall Break)

Readings

- MW: Darwin, *Origin*, Chapters 11-13 (pp. 338-481).

Week Nine

MONDAY, OCTOBER 23

Natural Selection Lab

WEDNESDAY, OCTOBER 25

Discussion: Consilience of Induction and *Origin*'s Scientific Reception

FRIDAY, OCTOBER 27

Webinar workday in Computer Lab; Webinar Bibliography Due

Readings

- W: Darwin, *Origin*, "Chapter 14: Recapitulation and Conclusion" (pp. 482-513).
- W: Michael J. Sandel, "The Case Against Perfection," *The Atlantic*, April 2004

THURSDAY, OCTOBER 26

Critical Inquiry & Citizenship Colloquium with Dr. Michael Sandel, philosopher and bioethicist at Harvard University, at 7 p.m. in the Elmen Center

UNIT 4- REDUCTIONISM IN MODERN BIOLOGICAL THOUGHT

Week Ten

MONDAY, OCTOBER 30

Lecture: Vivisection

WEDNESDAY, NOVEMBER 1

Discussion: Bioethics and Medicine

FRIDAY, NOVEMBER 3

Webinar workday in computer lab

Readings

- W: Stephen Jay Gould, "Kropotkin was No Crackpot," *Natural History* (1988) (Canvas)
- MWF: Wells, *Island of Doctor Moreau*

Week Eleven

MONDAY, NOVEMBER 6

Test and Discussion of the Island of Doctor Moreau

WEDNESDAY, NOVEMBER 8

Lecture: Social Darwinism and Eugenics

FRIDAY, NOVEMBER 10

N0 CLASS (Armistice/Veteran's Day)

Readings

- W: Margaret Sanger, "No Healthy Race without Birth Control" (1921) (Canvas)

Week Twelve

MONDAY, NOVEMBER 13

Lecture: Scopes Trial, Creationism, and Intelligent Design

WEDNESDAY, NOVEMBER 15

Discussion: Gregor Mendel and the Modern Synthesis

FRIDAY, NOVEMBER 17

Webinar workday in computer lab; Webinar Script Due

Readings

- M: Butler Act (1925) (Canvas); H.L. Mencken, "Obituary for William Jennings Bryan," *Baltimore Evening Sun*, 27 July 1925 (Canvas); William Jennings Bryan, "Closing Speech to Scopes Trial" (1925) (Canvas)
- W: Robert E. Kohler, ""Moral economy, material culture, and community in *Drosophila* genetics." *The Science Studies Reader* (1999) (Canvas)

Week Thirteen

MONDAY, NOVEMBER 20

Lecture: E.O. Wilson and Sociobiology

TUESDAY, NOVEMBER 22

NO CLASS (Thanksgiving Break)

TUESDAY, NOVEMBER 24

NO CLASS (Thanksgiving Break)

Readings

- M: Stephen Jay Gould, "Male Nipples and Clitoral Ripples," *Columbia: A Journal of Literature and Art* (1993) (Canvas).
- M: Lewontin, *Biology as Ideology*, pp. 1-57.

Week Fourteen

MONDAY, NOVEMBER 27

Test and Discussion of the Biology as Ideology

WEDNESDAY, NOVEMBER 29

Film: Gattaca (1997)

FRIDAY, DECEMBER 1

Film: Gattaca (1997)

Readings

- M: Lewontin, *Biology as Ideology*, pp. 61-123.

Week Fifteen

MONDAY, DECEMBER 4

Discussion: Media and Medicine

WEDNESDAY, DECEMBER 6

Darwin in Context: Final Thoughts

FRIDAY, DECEMBER 8

Share Webinars

Readings

- W: David Quammen, "Was Darwin Wrong?" *National Geographic* (November 2004) (Canvas)

Week Sixteen

MONDAY, DECEMBER 11

Final Examination 9:00-11:00 a.m., Share Webinars and Reflections Due

Checklist Webinar Rubric
Will Wright

Below are the four (4) main criteria, worth twenty-five (25) points each, which your webinar will be evaluated on. You'll notice that a list of questions falls under each category and point scale. The more "yes" answers to the questions under each category, the higher score you'll receive on the sliding scale; alternatively, the more "no" answers to the questions, the lower score you'll receive.

Content Knowledge: Points Earned- 25----------20----------15----------10----------5----------0

- For each the section, does the listener/viewer come away with the following questions answered?
    - *Part I: Contemporary Problem*- Who are the major stakeholders at play? How has the problem been connected to culture, politics, economics, religion, warfare, and/or the environment? What are the potential risks or rewards? Why should people care about this issue?
    - *Part II: Historical Context*- How did this problem come about? Put another way, what are the various historical forces—political, economic, cultural, religious, military, and/or environmental—that have led up to our present situation? Did past scientists, medical providers, or institutions face similar challenges or opportunities? And if so, what were the courses of action and consequences?
    - *Part III: Future Scenarios*- Given our past trajectory, what are improbable solutions to the problem, and what are reasonable ones? Who or what will likely benefit from the scientific, medical, or technological advancement, and who or what won't? How might the two bioethical/moral framworks offer guidance to the present and future?

Critical Thinking: Points Earned- 25----------20----------15----------10----------5----------0

- Does the webinar section demonstrate the topic's depth and complexity?
- Does the webinar section make a complicated topic in science, technology, and/or medicine understandable to a broader audience?
- Does the webinar section evaluate the evidence and the assumptions of each argument? When discussing the pros and cons, for example, which arguments are backed up by empirical data and which aren't? Who produced the evidence? Is it reliable or not?
- Does the webinar show change and/or continuity over time—in scientific, medical, or technological innovations and/or paradigm shifts?
- Does the webinar section make connections with other sections that show the links between past, present, and future?
- Not including lectures, does the webinar section use at least three (3) research sources—books, articles, etc.?

Audio Narration: Points Earned- 25----------20----------15----------10----------5----------0

- Does the student narrate the script in an understandable manner?
- Is the student's delivery well-rehearsed, well-paced, and in a conversational style?
- Does the student express and organize their words so as to engage the listener's interest?
- Does the student communicate their words at an appropriate volume?
- Is the student's delivery about four (4) total minutes in length?
- Is the audio free from distracting background noises (people talking, mouse/keyboard clicks, etc.)?

Visual Presentation: Points Earned- 25----------20----------15----------10----------5----------0

- At the beginning of webinar, is there one (1) title slide that includes the theme topic, course, date, and student names?
- At the beginning of each section, is there one (1) slide with a short title and the student's name?
- Are there ten (10) content slides for each section?
    - Does each content slide contain at least one (1) visual—a picture, graph, chart, etc.—with a short explanation near it?
    - Does each content slide contain bulleted key points and/or significant quotes that complement the narrated script?
    - Does each content slide contain a citation (APA, MLA, Chicago) of the materials used to narrate the script?
- Are the slides visually appealing and easy to follow (i.e., good contrast between background, images, and text; organized and not too cluttered)?
- If used, are the special effects (bullet point animations, slide transitions, etc.) appropriate, plain, and simple?
- Is the bottom-right corner free of all visual components, except for the video feed?

Content Knowledge: _____

Critical Thinking: _____

Audio Narration: _____

Visual Presentation: _____

TOTAL SCORE: **_____/100**

Origin of Species Chapter Summary- Checklist Rubric

Summarization

- ❑ Main idea for each chapter is well developed and clearly focused (8-9)
- ❑ Main idea for each chapter is clear and adequate (5-7)
- ❑ Main idea for each chapter is confused, limited, or missing (2-4)
- ❑ No main idea identified, provides an inappropriate response (0-1)

Critical Thought

- ❑ Strong interpretation and analysis (8-9)
- ❑ Limited or superficial analysis, mostly descriptive (5-7)
- ❑ Limited or no understanding of the question (2-4)
- ❑ Shows a complete lack of understanding (0-1)

Evidence

- ❑ Abundant, appropriate details, quotations, and examples (8-9)
- ❑ Uses some factual information (5-7)
- ❑ Superficial or missing supporting information (2-4)
- ❑ Little or no evidence (0-1)

Writing Style

- ❑ Well organized and well written (8-9)
- ❑ Acceptable organization and writing (5-7)
- ❑ Weak organization and/or poorly written (2-4))
- ❑ May be incomprehensible (0-1)

Error Level

- ❑ No errors or errors are insignificant (8-9)
- ❑ May contain minor errors (5-7)
- ❑ May contain major errors (2-4)
- ❑ Has substantial factual errors (0-1)

Overall Score **1** **2** **3** **4** **5** **6** **7** **8** **9**

Grader: _____ Author: _____

Essay Conversion Score

9 = 99%
8 = 95
7 = 92
6 = 87
5 = 84
4 = 78
3 = 70
2 = 65
1 = 59