Darwin Interterm 2023

General Information

Class Days/Times: Asynchronous (Dec. 28 - Jan. 13) with the exception of 3

mandatory Synchronous class meetings on Thursdays from

3-5 pm Central Time (Dec. 29; Jan. 5; Jan. 12).

Instructor: Dr. Deanna Soper

Office, Phone, and e-mail: Science Building 145, 972-721-5245, dsoper@udallas.edu

Dr. Soper's Office Hours: By appointment only. E-mail for an appointment.

Text: Darwin, C. Autobiography of Charles Darwin, ISBN:

9781453806616 OR obtain free online access here.

Shubin, Neil. 2020. Some Assembly Required, ISBN:

9781101972687; Available via Amazon in Kindle, Audiobook,

and paperback

Darwin, C. On the Origin of Species (Facsimile Ed), ISBN: 9780674637528; Available via Amazon OR available online

here.

Required: You will be taking quizzes and exams online. Exams will be

taken with Proctario - the monitoring software and it is 5\$

per test (two tests - 1 midterm, 1 final).

Cell Phone Policy

Cells phones, tablets, and any other USE OF ANY TECHNOLOGY (i.e. cell phone, tablet, smartwatch, etc.) ARE STRICTLY PROHIBITED DURING THE QUIZZES AND EXAMS. Exams will be monitored via Proctario, quizzes will not require the use of the monitoring software, but it is expected that you will not be looking answers up with the use of technology.

Introduction

In this course, students will examine the life, history, and writings of Charles Darwin. The course will be divided into three sections: (i) examination of the person that Darwin is through use of reading his autobiography and other assigned texts and (ii) the four evolutionary processes (iii) the major scientific writing *The Origin of Species* and the scientific ideas presented in this text. The aims of the course are to examine the life of Charles Darwin, evaluate the influences leading to the development of his scientific ideas, and examination of the scientific ideas themselves with updated biological research. This course will be primarily a book

discussion course that will incorporate approximately 30% class discussion of the readings and 50% short lectures and 20% quizzes and tests.

Course Objectives

- Introduce non-scientists to one of the mechanisms of natural selection through examining the life and work of Charles Darwin, one of two major scientists that founded the process of natural selection.
- Students will examine the life and person that Charles Darwin was by reading his autobiography and learning about the culture in which he was living.
- Students will then read Why Evolution Is True and On the Origin of Species to examine the scientific ideas that Darwin put forth in the middle of the 19th century and pair that with current-day understanding and data that has been collected that supports or refutes his ideas.
- Through all of these objectives, students will gain a deeper understanding of the foundations of natural selection, which is arguably the strongest of the four evolutionary forces.
- Students will also gain critical analysis skills by taking a critical review of Darwin's primary work.
- Students will understand the historical and cultural contexts for the development of the ideas that laid the foundation for modern evolutionary biology.

<u>Please note: I do not give extra credit because you have performed poorly on the assignments that are put forth in this document. I generally do not give extra credit at all, but when I do it is because a unique opportunity has arisen (i.e. guest speaker) that students would benefit from. However, I NEVER give extra credit because students have performed poorly on an assignment/quiz/test.</u>

Assessment and Requirements

Item	Quantity	Points	Total Points
Day 1 Check In (Log in to Brightspace on December 28th, 2	1 (2022)	10	10
Participation	20	3	60
Content Summaries	4	25	100
Quizzes	6	5	30
MidTerm	1	100	100
Final Exam	1	100	100
Total Points:			400

Attendance Policy

Due to the fact this course will integrate book discussions, attendance for synchronous course meetings is *mandatory*. You must be present with your webcam ON and have the ability to unmute to discuss the course content. <u>Dr. Soper will adhere to the University attendance policy.</u> <u>Please refer to the student handbook to read this policy.</u> <u>During the Interterm period, it should</u>

<u>be noted that EACH DAY is equivalent to ONE WEEK.</u> As a result, missing even 1 synchronous class meeting, Quiz, or Content Summary will be grounds for removal from the course.

General Rules and Expectations for the Course

- 1. Students are required to read the assigned readings.
- 2. Assignments will be completed by the specified deadlines. Any quizzes or tests not taken will be assigned a value of zero.
- 3. Students will conduct themselves in a courteous and responsible manner in class and keep scholastic integrity (see Academic Honesty).
- 4. Students have two days to challenge the grade earned on an assignment, presentation, exam, or quiz. After two days, the grade is final.
- 5. Students are expected to check their University E-mail accounts and Brightspace on a regular basis for additional messages related to the course. Please use University E-mail accounts when communicating with the instructor electronically.
- 6. Students who are performing unsatisfactorily in the course are expected to discuss their performance with the instructor. The instructor is available by appointment outside of class to review course material and discuss strategies to improve performance.
- 7. The course schedule is subject to change. Deletions and substitutions in the syllabus schedule may occur in the event of any unforeseen circumstances.

Academic Honesty

Students are expected to maintain academic honesty by avoiding plagiarism and cheating. See the University of Dallas' policy on Academic Honesty at:

http://www.udallas.edu/about/university-policies/academic_policies/academic-honesty.php

Change of Final Grade

The only reason for which a change of final grade may be requested <u>is an error</u> in the original recording of the grade. (THIS MEANS DO NOT E-MAIL ME AFTER FINAL GRADES HAVE BEEN GIVEN REQUESTING EXTRA CREDIT OR A GRADE BUMP.) Students should check their transcripts and consult with the instructor if there is a question of error. The appeal for a change of grade must be made in the first three weeks of the semester following that in which the course was taken.

Course Schedule

December 28th - Course Check-in - LOG IN to Brightspace (worth 10 points); <u>Watch</u> Syllabus Review Video - Take Syllabus <u>Quiz #1</u> by 11:59pm Central Time; <u>Read</u> Darwin's Autobiography pages 1 - 47 (online it is from the beginning through "...Settling at Down September 14, 1842)

December 29th - <u>Read</u> Darwin's Autobiography pages 48 - 89 BEFORE the class meeting (rest of autobiography); Take <u>Quiz #2</u> over Darwin's Autobiography by 2:45pm Central Time. <u>Attend</u> synchronous class meeting - 3-5pm Central Time via Zoom: Join Zoom Meeting https://us06web.zoom.us/j/6479049786 Meeting ID: 647 904 9786

December 30th <u>Watch:</u> Lecture #1 "Evolutionary History" (35 min; 35 sec), <u>Read</u> Fossil References (see below) and <u>Listen</u> to Fossil podcast (Listen to podcast embedded in that article,

direct link is <u>here</u>). <u>Summarize</u> the content of the lecture, podcast, and fossil references in a 1,000-1,200 word document and turn into Brightspace by 11:59pm Central Time.

December 31st - <u>Read</u> "Some Assembly Required" Chapters 1 & 2; <u>Watch</u> Lecture #2 "Darwin Personal History & Highlights" (45 mins; 49 sec); Listen to "Instant Genius" podcast <u>here</u>; <u>Quiz</u> #3 by 11:59 pm Central Time

January 1st - <u>Watch</u> Lecture #3 "Definition of Science and Evolution" (1 hr, 27 mins, 57 secs) and Lecture #4 "Evidence in the Rocks" (1 hr, 16 mins, 24 secs); <u>Read</u> "Some Assembly Required" Chapter 3

January 2nd - <u>Read</u> "Some Assembly Required" Chapter 4; <u>Summarize</u> the content of Lectures 2, 3, and 4, and Chapters 1 - 4 from "Some Assembly Required" in a 1,000-1,200 Word document and submit to Brightspace by 11:59pm Central Time

January 3rd - Read "Some Assembly Required" Chapters 5 & 6

January 4th - <u>Read</u> "Some Assembly Required" Chapters 7 & 8; <u>Watch</u> Lecture #5 (a & b) "Anatomical Structures & Continental Drift" (46 mins (a) & 13 mins 37 secs (b)); <u>Quiz #4</u> by 11:59 pm Central Time

January 5th - Read "On the Origin of Species" Introduction & Chapter 1; Attend synchronous class meeting 3 - 5 pm Central Time Via Zoom: Join Zoom Meeting https://us06web.zoom.us/j/6479049786 Meeting ID: 647 904 9786

January 6th - MIDTERM - Allow an hour (60 mins) - to be <u>taken between 12:30 pm - 2pm</u> <u>Central Time - use of Procorio is REQUIRED - you will need to pay 5\$ to gain access to the program.</u>

January 7th - <u>Read</u> "On the Origin of Species" Chapters 2 & 3; <u>Watch</u> Lecture #6 "The Engine of Evolution" (44 mins; 48 secs); <u>Quiz #5</u> by 11:59 pm Central Time

January 8th - <u>Read</u> "On the Origin of Species" Chapters 4 & 5; <u>Watch</u> Lecture #7 - Gene Regulation: epigenetics, transposons, and more; <u>Summarize</u> lectures 5, 6, and 7 and Chapters 1-5 from "On the Origin of Species" in 1,000-1,200 words and submit Word document to Brightspace by 11:59pm Central Time

January 9th - <u>Watch</u> Lecture #8 "The Origin of Species" (48 mins, 58 secs); <u>Read</u> "On the Origin of Species" Chapters 6, 7, and 8

January 10th - <u>Watch</u> Lecture #9 "Our Evolving Understanding of Human Evolution"; <u>Read</u> "On the Origin of Species" Chapters 9 & 10; <u>Quiz #6</u> by 11:59 pm Central Time

January 11th - <u>Read</u> "On the Origin of Species" Chapter 11; <u>Summarize</u> lectures 8 & 9, Chapters 6-11 from "On the Origin of Species in 1,000-1,200 words and submit Word document to Brightspace by 11:59pm Central Time

January 12th - <u>Watch</u> Lecture #10 "Final Thoughts on Darwin & the Evolution of Reproduction", <u>Read</u> "On the Origin of Species" Chapter 12; <u>Attend</u> Class synchronously 3 -

5pm Central Time via Zoom: Join Zoom Meeting https://us06web.zoom.us/j/6479049786 Meeting ID: 647 904 9786; Review for Final!

January 13th - <u>FINAL EXAM</u> - Allow an hour (60 mins) - <u>taken between 12:30 pm - 2pm Central</u> <u>Time - use of Procorio is REQUIRED - you will need to pay 5\$ to gain access to the program.</u>

Fossil Readings:

Read in this order:

https://www.smithsonianmag.com/science-nature/dinosaur-shocker-115306469/

https://www.livescience.com/41537-t-rex-soft-tissue.html

and

https://www.sciencemag.org/news/2017/09/i-don-t-care-what-they-say-about-me-paleontologist-stares-down-critics-her-hunt

and

https://www.theguardian.com/science/2022/jun/21/life-will-find-a-way-could-scientists-make-jurassic-park-a-reality

and

https://www.sciencefocus.com/nature/the-secret-world-of-mammal-evolution/