

History of Biology

Illinois Math and Science Academy, Spring 2019

Instructor: Dr Sheila Wille

Email: swille@imsa.edu

Office: History Department

Office hours: Most mods exclusive of 3,4,7,8 and 6 on A and C days. Email me for appointments as well!

Course Description

This course will trace the varied attempts to explain the living world from antiquity to the twentieth century. Students will examine various religious, philosophical, and scientific approaches to the study of animal, vegetable, and human life and the interrelationships between living things. We will focus heavily on the study of medicine, plants, and insects across the millennia, as well as mark the significant turning point of the development and influence of Darwinian evolution in the late nineteenth century. Since science does not “happen in a vacuum,” biology will often be discussed in relation to the culture, religion, economics, and politics of the period of study. Final projects will revolve around a topic in twentieth century biology and medicine.

Course Objectives

- To gain an understanding of the following topics:
 - o Disciplinary history
 - o The history of the relationship between humans and biological nature
 - o The relationship between politics and science
- To improve writing and research skills
- To improve presentation skills

Grades

Participation	25%
In-class writing on Ancient/Medieval World	10%
Virtual Reality Investigation, Presentation + Write up	10%
Paper on Darwin	15%
Outline, Final Paper	10%
Final Paper	15%
Final Presentation	15%

Rules and Expectations

Attendance

Attendance is mandatory, as per the Student Handbook. If you are not in class to answer when I call your name for attendance, I will mark you absent. Check in with me if you arrive late so we don't end up with an absent where there should be a tardy.

No Internet Sources in the Final Paper and Presentation Unless They Have Been Approved

Is she serious? Dead serious. Use interlibrary loan or library books for your paper. You will work with the others doing your topic to trade books. You can visit with Ms. James-Jenkin in the library, who can help you to find resources. **In History of Biology final projects, you may need access to cutting-edge information from the internet.** This is likely to be approved, but you have to bring them to me.

There is nothing more detrimental to learning the process of research at the moment than the internet itself. It's a wonderful resource to use **after** you have already learned how to research and can evaluate what you find there. To the degree that it is possible, we will use books instead. Some of you need current material from government websites and so on, so we will play that by ear, but check with me.

For each unapproved internet source that appears in your paper, you will lose five points on the final grade.

Peer reviewed books and articles are always pre-approved (JSTOR and other databases, PDFs of books which have been published in paper.)

No Technology

Nothing with a screen shall the instructor find in the hand of a student, except on Library Days. Clicking is the enemy of cogitation, and we'll have none of it.

Bring paper, pens, and printed readings. If this is burdensome, take excellent notes and bring those.

No earphones, no phones, no laptops. I will stand for a tablet with the readings on display, but I should be able to see the screen at all times (ie, keep it flat on your desk).

Note Taking

Take notes on lectures and anything your instructor writes on the board during discussions. You will use these notes again in your final paper, and in your in-class writings and quizzes, so these notes are incredibly important to you. Not taking notes can

break your grade. **BRING YOUR NOTES TO CLASS EVERY DAY. You never know when you will need them. Srsly. Do it.**

Make-up work and Extensions

No make ups, no rewrites, no extra credit, no extensions, unless you have an excused absence or are taking an exam. I do not make exceptions for this rule. Own your mistakes and do better next time.

Late papers will lose a half grade per day (1-24 hours) until they are turned in.

Turning in Assignments

Turn in papers through Turnitin. You **MUST** receive a receipt from turnitin.com and confirm that your assignment was turned in. If you are unsure, mail your paper before the deadline to my inbox. The instructor has no patience for claims that Turnitin didn't work, and the late papers will be subject to the late paper policy above.

In order to pass the class, you must turn in all assignments unless an exemption has been worked out with the instructor. This sort of exception only occurs in usual circumstances having to do with illness or excused absences.

Participation

Your grades have a large participation component. Your instructor expects you to come to class -

- 1- Having **done your reading**
- 2- Ready to **discuss** the readings
- 3- Ready to **participate** in class activities
- 4- Ready to actively **take notes** on lectures and discussion

Rounding

I will round cases of 89.9 and 89.8 into a 90. Anything beyond that is a hard no.

Academic Integrity

Like most social science and humanities teachers, I believe that plagiarism is a kind of blasphemy. It undermines all scholarly work and thumbs its nose at all I hold dear. If I

suspect you of plagiarism, I will always submit to Dana Ginnett in Student Life, and I will not give anyone a second chances where plagiarism is involved.

All of the work you turn in for this course should be your own. Do NOT plagiarize.

Plagiarism defined:

“You plagiarize when, intentionally or not, you use someone else’s words or ideas but fail to credit that person. . . . You plagiarize even when you do credit the source but use its exact words without using quotation marks or block indentation. . . . You [also] plagiarize when you paraphrase a source so closely that anyone putting your work next to it would see that you could not have written what you did without the source at your elbow.”¹

Claiming as your own the work of others, in whole or in part, will result in **referral for disciplinary action**, which can include **dismissal from IMSA**. See the IMSA Student Handbook for specific details and be sure to refer to the Chicago Style Guide for IMSA Students (<http://staff.imsa.edu/socsci/chicagostyle/>).

Course Schedule

Mini-units

Unit 1 – Ancient World and Medieval Era

Unit 2 – Early Modern and Enlightenment

Unit 3 – Darwin and his Precursors

Unit 4 – Sociobiology

Unit 5 – Metaphors in Science

Unit 6 – Insect Control in History

Unit 7 – Presentations in Medicine and Disease in the Twentieth and Twenty-first Century

¹ Wayne C. Booth, Gregory G. Colomb, and Joseph M. Williams in their book *The Craft of Research*, 2d ed. (Chicago: University of Chicago Press, 2003)

Basic Requirements for Assignments

For Presentations

- Speak clearly in full sentences
- Avoid filler words, like “um”
- Chin up (keep your head out of your notes)
- Attempt eye contact with audience, don’t look at your own powerpoint
- Vary your intonation
- Know that I grade on individual, not group performance. Divide the work so that you do not overlap. If there is trouble with one group member not being willing to commit to stay away from your material, come talk to me.

For Papers

Paragraphs:

Paragraphs should not be two sentences; neither should they carry on for two pages. Write a concise topic sentence and provide sufficient evidence in the body of the paragraph to prove the “mini-argument” that the topic sentence provides. If a paragraph is too long, then rest assured that your topic sentence is either too vague or trying to do too much. Rewrite it.

Margins:

These should be set at a consistent 1-inch for ALL four borders. Nothing more, nothing less. Use .doc or .docx format, and keep out of Google docs, which will reformat your paper into a mess. Add your name and the date. Font should be 12pt. Finally, the papers will be double-spaced, unless otherwise requested.

Editing:

The key to avoiding the above errors is to **PROOFREAD** your papers as closely as possible. This injunction implies that you must write the paper early and either reread it yourself or have someone else do it (both is best). Try reading the paper out-loud from finish to start, sentence by sentence, and the silly grammar issues or hazy word choices will jump out at you immediately. Editing and proofreading is critical to successful papers. **I have little tolerance for spelling and grammar errors, especially when they make a paper unreadable.**

Style Requirements:

- **Use appropriate topic sentences, as per class instruction.** Failure to write decent topic sentences will result in grade reductions.
- **Do not speculate. Use evidence.** And then cite it.
- **No cover page required.** Just name, date, title will be fine.
- **Always follow “this” with a noun,** or better yet, don’t use it at all. “This” is a way of making a sentence passive without technically writing in the passive voice. What “this” refers to is usually unclear, both in print and in the mind of the writer... and therefore the reader becomes confused. Commit to clarity!

- **Limit passive voice.**
 - o **Acceptable forms – the “long” passive where the agent is clear**
 - “I was hit by the ball”
 - “The town was destroyed by Mongols.”
 - “The Chinese people are portrayed as triumphant in literature.”
 - o **Unacceptable forms – the “short” passive, where the agent is not clear.**
 - “There was an idea that Communism was bad.”
 - “It is known that birds are real.”
 - “It was believed that the smoke caused cancer.”
 - “It was demonstrated the he was lying.”

- **Eliminate meaningless modifiers:** “very,” “extremely,” “important,” and “interesting” and “it’s worth noting” from your vocabulary. Don’t tell us stuff is “interesting.” Make us interested.

- **No declarations about “humanity doing x since the beginning of time” or “throughout history.”** History is about people in places doing things. Tell us specifically about those people, places, and things.

- Avoid block quotes

- Write out the century and numbers – “eighteenth” century, not 18th, “fifty” monks, not 50

- Never start a sentence with “and” or “so”

- Avoid sentence fragments

- Avoid contractions

Citation:

Use Chicago style. You must have page numbers for each citation. Citation should be single spaced and be in 10pt font. Use footnotes.

Use the style guide - https://www.chicagomanualofstyle.org/tools_citationguide/citation-guide-1.html

Example of appropriate repeated citation

First citation: Wille, Sheila, *The uses and abuses of acronyms: a journey into the intentionality of incomprehensibility* (Aurora: IMSA Press, 2017), 34-5

Subsequent citations: Wille, *Acronyms*, 78. OR Wille, 78. OR Ibid, 78.