HSTR 282CS: Darwinian Revolution

Contemporary Issues in Science Paper

Assignment Due: Multiple Dates, This Is a Process

Overview of assignment - The goal of this assignment is to communicate your analysis of a current subject that pertains to evolutionary theory. You will need to spend time with articles on your subject, considering what they reveal about a conversation, negotiation, power dynamic, or the like within the science. Your analysis should start by identifying a question that stems from the social/political/professional aspects of your subject. Words like *worldview*, *analogy*, *controversy*, and *opportunity* might be helpful to have in mind when forming your question. Your analysis should result in being able to explain the question while framing it within the underlying social context *and* within the historical context of theories about natural evolution. That contextualized explanation of, and your provisional answer to, a question worth exploring is what your paper should communicate.

Overall, your paper should answer: How does history shed light on this current issue?

Consider answering that question with a thesis statement that takes one of these forms:

- 1. [Historical aspect X] directly connects to, and therefore helps explain, [current aspect Y] in the current discussions about [your chosen subject].
- 2. [Historical aspect X] should be seen as distinct from [current aspect Y] in current discussions about [your chosen subject].
- 3. There are interesting parallels between [historical situation X] and [present situation Y] that put into perspective the current discussion about [your chosen subject].
- 4. There are interesting distinctions between [historical situation X] and [present situation Y] that put into perspective the current discussion about [your chosen subject].

Wrinkle: A thesis might begin "Despite superficial similarities" or "Despite superficial differences"

This course will introduce you to a set of thinking tools and a type of knowledge about science. You should use those tools and that type of knowledge to frame your analysis. Relevant themes to consider include reductionism, the influence of social forces on science, and the consequences of science concepts on broader culture. Your analysis should reveal and explain multiple perspectives on the problem, including how those who hold strong opinions on this issue use science to support their arguments.

How to do the assignment -

1. **By Sept. 22, pick a subject related to evolution from the list below.** Start actively looking at current science news now. Find common themes between articles that interest you.

Develop a "hawks-eye view" of these articles (i.e. see the big picture subject to which they belong but also be able to spot details, the problem "aspects" or "situations" from which you can develop your thesis). "Aspects" or "situations" might be centered on specific ideas (e.g. linear progress, divine creation), but they may also be social institutions (e.g. organized religion, academia, communication networks), processes (e.g. personal disagreement, professional collaboration), or even demographics (e.g. factory laborers, pious housewives).

Once you identify a subject and a question within the subject, consider that whole thing your *topic*. Then determine what else you can learn/read/review to explore this topic further.

Note: If you would like a subject not on this list, you will need to seek approval from Kirke via email by Friday, Sept. 20. Your

email should explain your subject and how it pertains to evolutionary biology.

Subjects with connections to evolutionary biology – GMOs, stem cell research, antibiotic resistance, pandemics, pharmaceuticals, teaching evolution in schools, cloning, vaccinations and public health, food safety (pesticides, hormones, and antibiotics), gene therapy, intelligent design, race, gender, immigration, genetic foundation of traits, vivisection, genetic testing, government funding of research, disease, astrobiology, human origins, epigenetics, CRISPR technology, eugenics, primatology

- 2. **Draft a proposal (after picking subject & before your first Writing Center visit, in Step 3).** Your proposal should begin with an articulation, as clear as you can be, of what your topic is. From there it should lay out the type of evidence you plan to compile or, in other words, a sense of how you will explain this topic in your paper. Remember that this is a process of discovery; your proposal is not set in stone and almost every historian changes or at least refines their ideas as they go. In that vein, this proposal should *not* make an attempt at a thesis.
- **3. Make a Writing Center appointment with your writing group for the week of 9/23.** You have been placed with four classmates. You will need to coordinate to meet as a group with a Writing Center tutor. We will not meet for class on 9/26 (Th) and a number of tutors will be available at that time. Your attendance at this tutor session will count for 2% of your overall assignment grade. The focus of your meeting will be feedback on 1) how you have articulated your topic and 2) avenues you plan to explore. Though you do not need to turn anything in *before* the session, it will be much more useful if you bring your draft proposal.
- 4. Upload your one-paragraph proposal to D2L by 10 p.m. Sunday, 9/29.
- 5. **Gather sources and start considering what they say** *together.* You will need to use at minimum four sources that address the problem in your subject. At least two of your sources must come from the reputable news sources listed below. Since this paper is on a contemporary issue, these sources must be from the last five years. <u>Additionally</u>, you will need to specifically refer to 2-4 of the texts assigned in this course (aiming for quality over quantity).

Pay attention to how articles *talk* to one another—how they confirm, reinforce, adjust, undermine, or contradict each other. Doing so will help with your structure, once you receive some specific guidance on how to put your sources into an outline. That specific guidance will also state that your outline should include a strong thesis.

Reputable news sources (being cautious with opinion pieces) — Science, US News and World Report, Time, Newsweek, New York Times, BBC, Los Angeles Times, Washington Post, Wall Street Journal, Scientific American, Associated Press, Reuters, The Economist, Wired, Discover, The Christian Science Monitor, The Journal of Evolutionary Biology, Nature, Trends in Ecology and Evolution, American Journal of Preventive Medicine, Evolutionary Biology, Evolution and Human Behavior, American Journal of Bioethics, Bioethics, Journal of the American Medical Association

- 6. Upload your outline to D2L by 10 p.m. Sunday, 10/20.
- 7. Make a Writing Center appointment with your writing group for the week of 10/21. Groups may change for this round. If so, you will know at least by 10/14. We will not meet for class on 10/22 (Tu) and a number of tutors will be available at that time. Attendance will count for another 2% of your overall assignment grade. The focus will be on helping the structure of your evidence and interpretations align with a strong, comprehensive thesis.

8. **Upload your first draft to D2L by 10 p.m. Sunday, 11/10.** This draft should be 1,300-1,500 words. It should be typed and double-spaced, with standard margins and 12-point font.

Note: By this point all references must be properly cited. You can use either footnotes or in-text citations. You must include a bibliography of all your citations. Historians use Chicago style. A good resource for Chicago style footnotes is citationmachine.net. By this time we will also include a style sheet for Chicago on the D2L & the Mountains and Minds site.

9. Make a Writing Center appointment with your writing group for the week of 11/11. Note that 11/11 itself is Veterans' Day and campus will be closed. Groups may change for this round. If so, you will know at least by 11/4. We will not meet for class on 11/12 (Tu) and a number of tutors will be available at that time. Attendance will count for another 2% of your overall assignment grade. The focus will be evaluating the overall effectiveness of your draft (in other words, how well you have communicated and supported your thesis). The feedback you get will be your springboard off which to make revisions to your work.

Note: Look at that word *revision* carefully and think about the process it requires, coming up with a mental picture of how your paper can get thoroughly better and then making substantial changes. This meeting should provide the direction you need in order to be successful, honing your draft down to the concise version you will submit ~two weeks later.

10. **Upload your final submission to D2L by 9:25 a.m. Tuesday, Nov. 26.** This version has a maximum of 1,200 words (yes, shorter than the draft for Step 8). Late papers will lose 10% if submitted within the next 24 hours and additional letter grade for every day thereafter. Papers will be evaluated according to the rubric on the following page.

This paper represents 25% of your grade for the course, so ask questions, trust the process, and have fun. **Contact** kirke.david@gmail.com with questions as they arise.

Rubric on following page.

Unacceptable	Fair	Excellent

References Suitability and incorporation of evidence cited from texts	An inadequate amount of evidence cited, or too many passages cited do not support the points. Cited passages are not fit into the writing.	Some passages cited are taken out of context and/or evidence contradicting the thesis is suppressed. Attempts to buffer citations, but the links are vague or misalign with the writing.	Ample citations that demonstrate thoughtful and accurate use of evidence. Citations always make the writing stronger because they are effectively integrated.
Historical Context Command of course material	Evidence does not link to broader course themes and arguments and/or little explanation of the topic in relation to historical context is attempted.	Demonstrates partial understanding of course themes and historical context, but the link to thesis and evidence is vague or patchy.	Thesis and evidence demonstrate clear understanding of course themes. Analysis is placed within broader historical context presented in the course.
Organization Within paragraphs & transitions between	Introduction and thesis statement are very confusing or not identifiable. Many body paragraphs do not have an identifiable waypoint. Conclusion is missing and/or in no way represents an arrival for the thesis.	Introduction states a thesis, but the thesis is vague or unclear. Some exploration paragraphs begin with clear waypoints, but others are much less identifiable. Conclusion gets somewhere but leaves the reader with an unhelpful lack of resolution.	Introduction is focused, and thesis is clear. Each point in the exploration is distinct and flows clearly into the next. Conclusion is a solid arrival after the paper's thorough exploration of the thesis.
Argument Original Argument & Logical Development	Reasons are pure speculation or ahistorical. No clear argument. Readers cannot identify logical points in the intro or body of essay.	Argument is underdeveloped; it is vague and/or not grounded in historical context. Some logical points are identifiable, but wording is sometimes unclear.	Thesis is clear and based on sound historical reasoning. Points presented clearly and logically within paragraphs (usually = start/end).
Presentation Correct tone & Chicago style	Grammatical and spelling errors make some sentences unreadable. Language is frequently informal or inappropriate. Disregarded Chicago rules. Citations for quoted passages are significantly incorrect or absent.	Incorrect punctuation, spelling, or grammar occasionally interferes with clarity. Some language is informal or inappropriate. Some incorrect uses of Chicago format.	Language is always clear and appropriate for a history essay. Footnotes (or in-text citations) and references page completely adhere to Chicago style.

Note: This is a guide for you as you write and for me as I grade. There are no specific point values attached to rows or columns. The total value will account for 94% of the assignment grade (all but the 6% of your grade attached to writing sessions).