Course Outline ASCI 4020 Implications of Darwinism
(This schedule is tentative and subject to minor changes)

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Class Time & Location: Mondays 7:00PM-9:50PM, Rozanski 108
Office Hours: Thursdays 1:00-2:00 or by appointment

Course Description:
When it was proposed, Darwin’s theory of evolution by natural selection provoked a strong reaction from many corners and for many reasons, not the least of which was because it suggested that humans evolved from ape-like ancestors. Today, evolution is the bedrock of modern biology, and it has radically changed our view of our world, ourselves, and what it means to be human. By demonstrating a shared ancestry with other animals, this means that many principles that apply to non-humans will apply to humans also. For good or for ill, the theory of evolution by natural selection continues to have far-reaching implications that extend far beyond biology alone, including into such areas as psychology, economics, anthropology, sociology, and even the arts. In this course, we will examine some of these implications of Darwinism in a student-led discussion format on topics of the students’ choice.

Structure: The course will be a student-led discussion-based examination of how Darwinism applies to different areas. As such, the specific topics will be chosen in the first by students (see list of potential topics below). Students will pick a topic and a week, and as individuals or in small groups they will be responsible for leading the discussion on that topic. The order of topics will depend on which ones are selected and the schedules of the discussion leaders.

Required Texts:

Weekly Required Readings: In addition to readings from The Selfish Gene and The Agile Gene, there will also be required readings each week to correspond to each topic. I have made suggestions below, but the exact readings will depend upon which topics are chosen and may be subject to change by the leader of the discussion (in consultation with me). You will need to do the readings before class to be an active participant in the discussion.

Evaluation: Students will be graded on a combination of class participation (10%), group work on one topic (35% total), and three installments of logbooks of personal reflections about the topics (55% total, based on 5% week for best 11 out of 12 weeks).

Class Participation (10%): This is intended to be a student-led discussion course, so students are expected to contribute to class discussions in a positive manner. These points
are awarded based on whether your comments and questions advance the discussion; you need to do more than just be present in class or to make comments that monopolize the conversation or are distracting. You will likely disagree with each other and with me on some issues, and this is fine, but everyone is expected to treat each other with respect and to present (and take) such disagreements in a constructive manner.

**Group Presentation & Leading Discussion (35% total):** Students will get the chance to lead one week’s discussion as part of small group. You will choose one topic and do extra reading and research on this topic to become an “expert” on the topic. Your group will give a 40 minute presentation on the topic (50 minutes including questions) and will lead discussion for the rest of the seminar. This is worth a total of 35%, which includes:

- 5% for a mandatory group meeting in the week before you lead, where you will tell me about your research to date and your plans for the presentation/discussion.
- 15% for your 40-minute presentation and answering of questions. Grades are assigned based on the quality and depth of information, clarity of presentation, and ability to answer questions on the material. Group exercises can be used.
- 10% for leading the discussion afterwards. You are expected to generate questions and topics to discuss to keep the discussion going, and to moderate the discussion to keep it from getting sidetracked. This part is not a formal presentation – you will be “first among peers” Group exercises can be used here if relevant, or in the presentation itself.
- 5% for a one page handout to be given to other class members as a summary of the major points raised and arguments presented in class. This is due two days after your presentation so that others can use it as a reference.

You will be in charge of the topic & material for the week – it’s your show!

**Logbooks (55% total):** You will be asked to keep a journal of thoughts and reflections on the ideas and issues covered, with one entry per class. This is more than just a summary or description of the readings: this is your opportunity to explore the issues in greater depth. You have considerable rein as to what you wish to include. Some suggestions include your reflections and evaluations of the material, connections to other issues raised, and extensions, criticisms, or applications of the issues. This log should demonstrate not only that you have done the readings and attended class, but that you have been actively intellectually engaged. You are free to agree or disagree with any point that I or anyone else have raised, but make sure to argue your case. You may draw from any discipline, course, or perspective. It is recommended that you do this journal after each class while the topics are fresh in your mind. Do not worry if your thoughts or opinions change over the course of the semester – this is part of learning.

In order to allow for me to provide feedback, please limit each entry to three double-spaced pages per week’s entry, give or take half a page. Please focus on quality rather than quantity – a concise and well-presented short entry is better than a padded and verbose long entry. Aim for four pages, trim to three. You will hand in three installments of the logbook, due **Fri. Jan. 28th, Fri. March 2nd, and Mon. April 9th**, at 5:00PM in my office, with a back-up submitted on Courselink. A late penalty of 10% per day will apply. Each week is worth 5%, and I will take your best 11 out of 12 entries.
Course Schedule

The first three weeks are more instructional and will be led by me. After mastering basic concepts, we will branch out by applying this knowledge to topics of students’ choosing.

**Week 1: Misunderstandings of Darwinism.** What is it actually, and what do people think it is?

**Week 2: A Gene's-Eye Perspective:** Are we simply vehicles for the propagation of our DNA? How does this viewpoint change how we view ourselves?

**Week 3: Genes and Environments:** Is the “Nature vs. Nurture” debate productive or a false dichotomy? What should we focus on? How do genes & environments interact?

**Weeks 4-11: Student-led Topics**
Readings will depend on the particular topics chosen, and will be assigned by each group.

**Week 12: Final Topic (chosen by me) & Wrap-Up.**
Reading TBA (someone please e-mail me if I haven’t posted this by week 8)

**List of Topics**

There are many topics that we could cover in this course, and some will be of more interest to students than others. Ideally some students will cover “toolbox” topics (e.g. humans & non-humans, misuses of evolution), and other students will select from the various applications (e.g. art, Darwinian medicine). Students are welcome to propose additional topics, but these must be cleared with me as soon as possible – if you happen to read this before the semester starts then e-mail me your suggestion.

The readings with each topic are suggestions to give you an idea of where we might go with the discussions. They are not set in stone, and are subject to change. Each week’s group leaders are free to assign a different reading if they find something they think is more suitable, but this must be cleared with me well in advance (at least a week and preferably 2+) so that others have time to read the new assigned reading.
Potential topics include (feel free to e-mail with additional suggestions):
The readings given are suggestions and are subject to change by the leading group.

1. Human and Non-Humans: Are we different from other animals, and if so, how?
   What does it mean to be human?

2. Cooperation: Does natural selection mean that selfishness will always evolve?
   Note: this section may be combined with the section on morality

3. Morality: Should evolution guide our moral systems? Why or why not? Can evolution say anything about what we are likely to perceive as being moral?
   Note: This section may be combined with the section on cooperation

4. Rationality: Are humans rational? Why do we do what we do, & do we self-deceive?

5. Misuses of Evolution: Social Darwinism, Eugenics, and Scientific Racism
   READING TBA

6. Human Nature: Does human nature even exist? If so, does it resemble Noble Savages or Lord of the Flies?

7. Free Will and Determinism: Does evolution mean that free will is an illusion? What implications does this have? - READING TBA

8. Cultural Evolution: How does culture evolve and why?
   Note: this topic may be combined with memes.

9. Memes and “Mind Viruses”: Do our ideas belong to us or to themselves?
   Note: this topic may be combined with culture.
10. **Art and Aesthetics**: Can evolution tell us what we will prefer? Does this devalue art?
G. Miller (2000) *The Mating Mind*, Ch. 8 (Arts of Seduction);

11. **Evolution and Consumerism**: How does evolution affect market behaviour?

12. **Sustainability versus the “Tragedy of the Commons”**: Are we doomed?
M. Ridley (1996) *The Origins of Virtue* Ch. 11. (Ecology as Religion);
Note: This topic may be combined with population control.

13. **Population Control**: What would happen with unlimited reproduction?
Kurt Vonnegut 2BR02B, from *Bagombo Snuff Box*
Note: This topic may be combined with sustainability.

14. **Darwin and God**: What does evolution have to say about religion and vice versa?
Decision in *Kitzmiller vs. Dover Area School District* (Intelligent Design Debate)

15. **Male-Female Relations**: To what extent is the “Battle of the Sexes” really a battle?
Dawkins, R. (1976) Battle of the Sexes. Ch. 8 of *The Selfish Gene*

16. **Darwinian Medicine**: For all the future doctors (and patients!) out there…
Note: parasitism may be sufficiently “juicy” to warrant its own section if students desire

17. **Law**: What implications does evolution have for our legal systems?

18. **Politics & Political Systems**: What implications does evolution have for politics?
TBA

19. **Individuality**: What constitutes an individual? When can a group be an individual?
Review Dawkins (1976) Ch. 1-4 of *The Selfish Gene*