

BIOL350 SYLLABUS — L.W. Aarssen, Department of Biology, Queen's University, Kingston, Canada

TITLE: EVOLUTION AND HUMAN AFFAIRS — An exploration of how evolutionary thinking can affect our understanding of our lives, our species, and our ability to share the planet with other species.

Fall term; Three 1-hr lectures each week.

PRE-REQUISITE: Third year standing or above.

DESCRIPTION:

The 'project' of civilization is failing. If we want to know where we are headed, we need to understand how the past brought us to where—and what—we are now. In BIOL350, we examine the evolutionary roots of human motivation, social life, culture, and civilization, the evolutionary roots of the current challenges that we face, and hence the evolutionary roots of our future. Students explore how biological and cultural evolution interact in affecting how we think and behave, and hence how this interaction affects our understanding of a wide range of human affairs, including why we have arrived at our present predicament – the 'human condition'. An appreciation of this historical human journey is essential for guiding a new and improved Project of Civilization to replace the old one. Students in BIOL350 have an opportunity to be among the architects of this new project.

Darwinian evolution by natural selection is a major underlying theme, but students do not require a background in biology; the level of knowledge needed concerning biological evolution is presented during the course. Students from Biology and other programs are all encouraged to take the course.

Learning outcomes:

After completing BIOL350, students will be better equipped to:

1. identify and define the urgent challenges facing human civilization today, and why many authorities warn that 'business as usual' cannot be sustained;
2. describe how and why the effects of Darwinian evolution have brought us to this critical stage in the history of humanity;
3. explain how an understanding of this 'human journey' helps to account for a wide range of contemporary human affairs and cultural norms;
4. evaluate why philosopher, Blaise Pascal considered that, "*All of humanity's problems stem from man's inability to sit quietly in a room alone*" (Pensées, 1670) — and why poet, T.S. Eliot mused, "*...humankind cannot bear very much reality*" (No. 1 of Four Quartets, 1943) — and why philosopher Albert Camus (1956) wrote: "*Man is the only creature who refuses to be what he is.*";
5. predict how the genetic legacies inherited from our ancestors, and how our continuing evolution as a species — informed by both natural selection and cultural selection — are likely to affect our human motivations, our social lives, and our cultures in future generations;
6. participate in prescribing a way forward for the design of a new, more sustainable, and more humanistic model of civilization for our descendants.

Textbook:

Aarssen LW (2015) *What Are We? Exploring the Evolutionary Roots of Our Future*. Queen's University.

http://www.campusbookstore.com/EBooks/Book.aspx?ID=9657344&bookseller_id=5. Other reference and required reading materials are provided in connection with lectures and available from online sources.

Evaluation:

10% Participation in on-line discussion.

15% Poster assignment.

75% Final exam — students can reduce the weight of the final exam to as much as 50% depending on the extent to which they choose to access (or are able to access) learning outcomes available from in-class attendance /participation, recorded by iClicker reef polling. In other words, the weight of the final exam is not increased by failing to attend/participate in class. Rather, the weight of the final exam is decreased by optional in-class attendance/participation. **Importantly then, students who enrol in this course and anticipate that they may need to miss some lectures, must be willing to accept that the more lectures that are missed (regardless of the reason), the greater will be the weight of the final exam.**