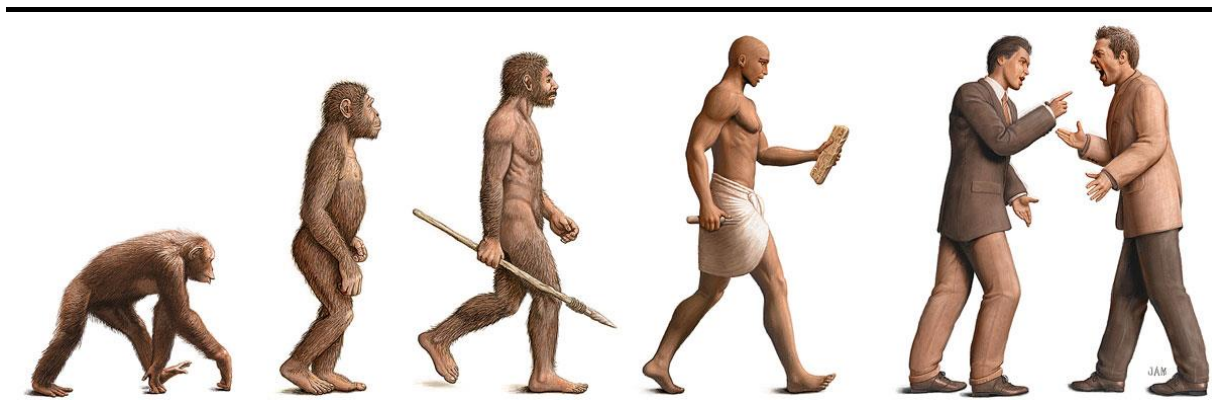


AN INTRODUCTION TO SCIENTIFIC CONTROVERSIES

"Science proceeds one funeral at a time"

— Attributed to Max Planck



Course Description

Through a combination of history and epistemology, this course examines the importance of controversy to the advance of scientific knowledge. The historical classes take a look at controversies within the scientific community and between the scientific community and the wider society. More specifically, the interest is in those controversies bearing upon the way we view the world and perceive our place in it. The epistemological classes question the very nature (1) of scientific knowledge, by focusing on objectivist and relativist philosophies of science, and (2) of the scientific process, by considering the social obstacles – some originating from within the scientific community itself – to the breaking through of new ideas and to the ultimate recognition of their validity.

Course Requirements

A strong interest in the history and philosophy of science is expected as well as the ability to handle ideas and debate them. Students will be asked to undertake readings at home, to deliver presentations in class and to write essays – a few short ones during the semester and a longer one as the final exam. All of the four CAE skills – written comprehension, written expression, aural comprehension and oral interaction – will be heavily mobilized. Students signing up for this module should therefore already (or almost) have reached the B2 level.

Course Outline

- 1: *Epistemology*: The Big Issues
- 2: *History*: The Big Themes
- 3: *History*: The Universe
- 4: *History*: The Atom
- 5: *Epistemology*: Popper & Kuhn

- 6: Student Presentations
- 7: *History*: The Earth
- 8: *History*: Evolution & Extinction
- 9: *History*: Mind
- 10: *Epistemology*: Feyerabend & Latour