

EvoS-2



Teachers: Filipa Vala (Ce3C-FCUL)

Calendar: May 4-22, 2015

Duration: 36 hours

Schedule: May 4-20, 14h-16h 5 days per week; may 21, 22, 14h-17h (+ attendance of Symposium)

Objectives

Evolutionary theory provides a framework for understanding all living systems. Nevertheless, throughout the 20th century, with a few exceptions, evolutionary biologists have “avoided” using evolution to address problems related to our own species. EvoS is a program created by David Sloan Wilson, and aims at turning evolutionary theory into a common language to all areas that pertain to the natural world, including human affairs. This advanced course is part of the initiatives of EvoS at the University of Lisbon.

General Plan

- Quick review of basic concepts in Evolutionary Biology: patterns and processes in evolution, micro and macro-evolutionary processes, speciation.
- Evolutionary biology applied to humans in an historical perspective: eugenics, sociobiology’s “bad name”.
- A recap of the Nature versus Nurture debate viewed in its socio-political context: the ideological debate of the 70’s-80’s (Darwin versus Marx)
- The Nature versus Nurture debate revisited: different theories of the mind; language as an example that “solves” the debate.
- Sociobiology is dead, long live evolutionary psychology
- Multilevel selection theory
- The history of human societies viewed as an environmental adaptation process: biological evolution, cultural evolution, and gene-culture co-evolution.
- Evolutionary biology as a means to solve problems in our societies – two classical examples: Darwinian medicine, conservation biology.
- “Darwinian behavior” in humans – where’s Darwin? the classic example: incest avoidance; a new example: religion.
- Problems of the Darwinian paradigm applied to human behavior – nepotism. Examples from Behavioral Economics (*Homo sapiens versus Homo economicus*).
- Short International Symposium (4 Seminars)
- Development of short individual dissertations on topics of student choice

- Presentations of case studies by the students (last 6 hours)

This course is 6 ECTs for FCUL PhD students enrolling as part of their first doctoral year. For students only requiring 5 ECTs recognized in their specific PhD programs the last 6 hours of the course are not mandatory and the certificate will be on 'Topics in EvoS-2'.

Location: Departamento de Biologia Animal, FCUL

N° (min, max) students: 5 - 15

Minimum formation: 'Licenciatura' (bachelor) in Biology or related areas

Fee: free for 1st year PhD students in the Doctoral programme in Biology (FCUL), Biodiversity, Genetics and Evolution (UL; UP) and Biology and Ecology of Global Changes (UL, UA); 20 € for PhD students from institutions of the PEERS network (Ce3C, CFE); 100 € for FCUL Master students and unemployed; 150 € for BTI, BI and other PhD students; 200 € for Professionals and postdocs.

Deadline for applications: April 17, 2015

Candidates should send a short CV and a motivation letter to Filipa Vala at the following email address:

fdvala@fc.ul.pt