

Med320 Evolutionary Medicine	
Course Coordinator	Yekbun Adıgüzel
Goals	A fundamental understanding of evolutionary biology and medicine, and to be able to present a selected related concept *

* Each student will make (at least) one presentation. Presentations will be between 30-40 mins. Students will write short summaries of the presentations they listened, after the presentations. Presentations and summaries will be used for course evaluation. Summaries will replace midterm exam and presentations will replace final exam. Fulfilling the requirements, namely writing and submitting the summaries and making the presentations, will be the primary criteria in evaluation.

SOURCES	
Textbook 1 for student presentations	Peter Gluckman, Alan Beedle, Mark Hanson, 2009, Principles of Evolutionary Medicine, Oxford University Press.
Textbook 2 for student presentations	Wenda R. Trevathan, James J. McKenna, 1999, Evolutionary Medicine, Oxford University Press.
Other resources	HSTalks, Open Yale Courses

Date	Topics (listed content except presentations are recordings-can change where necessary)
02.02.2023	Student presentation: The molecular basis of variation and inheritance (Meeting room)
24.02.2023	Evolutionary Medicine (Prof. Stephen C. Stearns) (online)
02.03.2023	A brief history of evolutionary biology (Prof. Neil Blackstone) (online) and Evolution and medicine: from the perspective of an evolutionary biologist (Prof. Stephen Stearns) (online) and Student presentation: Evolution and development (online)
09.03.2023	Evolution: medicine's missing basic science and questions about evolution and medicine (Prof. Randolph Nesse) (online)
23.03.2023	Sex differences in mortality (Prof. Daniel Kruger) and Aging and evolutionary medicine (Prof. Linda Partridge) (online)
30.03.2023	Connecting aging and cancer through the lens of evolution (Prof. James DeGregori) and A darwinian eye view of cancer (Prof. Mel Greaves) (online)
06.04.2023	Evolutionary dynamics in cancer control and cure (Prof. Bob Gatenby) and The evolutionary ecology of immunity (Prof. Paul Schmid-Hempel) (online)
13.04.2023	Fever and related defenses (Prof. Matthew Kluger) and Evolution of virulence: malaria, a case study (Prof. Andrew Read) and Evolution, human-microbe interactions and the "epidemic" of inflammation-related disorders (alias: the hygiene hypothesis) (Prof. Graham Rook) (online)
20.04.2023	Evolutionary genetics: the detection of natural selection using molecular data (Prof. Mark Thomas) and Major gene families in humans and their evolutionary history (Prof. Yoshihito Niimura) (online)
27.04.2023	Ecogenetics, evolutionary biology and human disease (Prof. Gilbert Omenn) and Developmental plasticity, evolution and the origins of disease (Prof. Mary Jane West-Eberhard) (online)
04.05.2023	Diseases of civilization: an evolutionary legacy (Prof. Alan Weder) and Evolutionary behavioural genetics and mental disorders (Prof. Matthew Keller) (online)
11.05.2023	Evolutionary psychiatry (Prof. Randolph Nesse) and Evolutionary considerations and the endothelium (Prof. William Aird) (online)
18.05.2023	Evolutionary obstetrics (Prof. Wenda Trevathan) and Early nutrition, development and health: evolutionary perspectives on the metabolic syndrome (Prof. Christopher Kuzawa) (online)