COURSE DETAIL

EVOLUTIONARY GENETICS

Country
United Kingdom - England

Host Institution
University College London

Program(s)
University College London

UCEAP Course Level
Upper Division

UCEAP Subject Area(s)
Biological Sciences

UCEAP Course Number
133

UCEAP Course Suffix
B

UCEAP Official Title
EVOLUTIONARY GENETICS

UCEAP Transcript Title
EVOLUTNARY GENETICS

UCEAP Quarter Units
6.00

UCEAP Semester Units

4.00

Course Description
This course offers a study of the forces which control evolution, covering the ecological and genetic core of evolutionary biology using prokaryote, animal, and plant examples. Topics include genetic polymorphism, natural selection, random changes in evolution, and the genetic basis of speciation, including the genetic processes involved in human evolution. Students discuss the maintenance of genetic variability, the role of chance in evolution, the origins of species, and theories of evolution beyond the species level. The utility of evolutionary biology in disease and pest control, and in conservation also plays a part. Lecture topics include the effects of mutation, drift and selection (including directional, stabilizing, disruptive, and kin selection), sexual selection, molecular evolution, mimicry, chromosomal evolution, coevolution, hybrid zones, speciation, macroevolution, the origin of the genome, and the origin of life.

Language(s) of Instruction
English

Host Institution Course Number
BIOL2007

Host Institution Course Title
EVOLUTIONARY GENETICS

Host Institution Campus
University College London

Host Institution Faculty

Host Institution Degree

Host Institution Department
Biological Sciences

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