

# 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 Course Details**

<https://www.ucl.ac.uk/prospective-students/study-abroad-ucl/study-abroad-guide/...>

### **Host Institution Campus**

University College London

### **Host Institution Faculty**

### **Host Institution Degree**

### **Host Institution Department**

Biological Sciences

**Course Last Reviewed**

2018-2019

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