

COURSE DETAIL

GENETICS AND EVOLUTION

Country

Netherlands

Host Institution

Maastricht University - University College Maastricht

Program(s)

Biological and Life Sciences, Maastricht, University College Maastricht

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Health Sciences Biological Sciences

UCEAP Course Number

122

UCEAP Course Suffix**UCEAP Official Title**

GENETICS AND EVOLUTION

UCEAP Transcript Title

GENETICS&EVOLUTION

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course provides insight into the essentials of genetic and evolutionary models and their applications in biology, medicine, and psychology. It starts with the mechanisms that cause evolutionary change: natural selection, inheritance, and gene expression. In order to make these mechanisms understandable for students, the essentials of molecular, Mendel, and population genetics are discussed, followed by the evolution of life cycles, sex, and sexual selection. After discussing kin selection, this course uses genomic imprinting to explain genetic conflicts. Game theory is also used to explain the models that treat conflicts. The course finishes with the evolution of the human brain and the impact of evolutionary concepts in medicine. Introduction to Biology is a required prerequisite.

Language(s) of Instruction

English

Host Institution Course Number

SCI2022

Host Institution Course Title

GENETICS AND EVOLUTION

Host Institution Campus

Maastricht University

Host Institution Faculty

University College Maastricht

Host Institution Degree

Host Institution Department

Sciences

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