

COURSE DETAIL

MOLECULAR EVOLUTION

Country

Norway

Host Institution

University of Oslo

Program(s)

University of Oslo

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Biological Sciences

UCEAP Course Number

110

UCEAP Course Suffix**UCEAP Official Title**

MOLECULAR EVOLUTION

UCEAP Transcript Title

MOLECULAR EVOLUTION

UCEAP Quarter Units

8.00

UCEAP Semester Units

5.30

Course Description

This course covers the principles for evolution of DNA and gene products as well as the use of genetic data in evolutionary studies of organisms. It starts with a theoretical introduction to important evolutionary processes in the eukaryotic genome and genome components. Teachings also include molecular techniques, bioinformatics, and evolutionary bio-statistics. Students acquire knowledge of the different molecular processes that lead to changes in the genome as well as the evolutionary consequences the different processes have. Students become familiar with the various population genetic processes such as genetic drift, non-random mating, and different forms of selection, while understanding the connection between molecular processes in the genome and evolutionary processes in populations and species. Through this course, students become familiar with internet resources on bioinformatics, statistical analysis of molecular data, and interpretations of the results. They also learn important molecular laboratory methods and gain experience with relevant laboratory work.

Language(s) of Instruction

English

Host Institution Course Number

BIO4200

Host Institution Course Title

MOLECULAR EVOLUTION

Host Institution Course Details

Host Institution Campus

Mathematics and Natural Sciences

Host Institution Faculty

Host Institution Degree

Host Institution Department

Biosciences

Course Last Reviewed

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