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 Campus
Mathematics and Natural Sciences

Host Institution Faculty

Host Institution Degree

Host Institution Department
Biosciences

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