

COURSE DETAIL

BIOLOGICAL MODELLING

Country

Sweden

Host Institution

Lund University

Program(s)

Lund University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Biological Sciences

UCEAP Course Number

124

UCEAP Course Suffix**UCEAP Official Title**

BIOLOGICAL MODELLING

UCEAP Transcript Title

BIOLOGICAL MODELLNG

UCEAP Quarter Units

3.00

UCEAP Semester Units

2.00

Course Description

The course introduces common modelling and computational methods in biology. Topics include but are not limited to: introduction to cell chemistry and structure, meiosis, inheritance, chromosomes, genetics calculations, genetic algorithms, cellular automata, regulation of genes, gene expression, bioinformatics, artificial neural networks, population ecology, and game theory. The course consists of various modelling projects and each one of these is introduced in one to two preparatory lectures. The introductory lectures are followed by a modelling exercise, in most cases a computer exercise. The programming language that is used is MATLAB, meaning that some knowledge of this software is useful.

Language(s) of Instruction

English

Host Institution Course Number

EXTG11

Host Institution Course Title

BIOLOGICAL MODELLING

Host Institution Course Details

https://kurser.lth.se/kursplaner/19_20%20eng/EXTG11.html

Host Institution Campus

Engineering

Host Institution Faculty

Host Institution Degree

Host Institution Department

Engineering- Biology

Course Last Reviewed

2020-2021

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