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 Campus
Engineering

Host Institution Faculty

Host Institution Degree

Host Institution Department
Engineering- Biology

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