COURSE DETAIL

BIOMATHEMATICS Country Sweden **Host Institution Lund University** Program(s) **Lund University UCEAP Course Level Upper Division UCEAP Subject Area(s)** Mathematics Biological Sciences **UCEAP Course Number** 157 **UCEAP Course Suffix UCEAP Official Title BIOMATHEMATICS UCEAP Transcript Title BIOMATHEMATICS**

UCEAP Semester Units

UCEAP Quarter Units

4.00

6.00

Course Description

This course provides a basic introduction to mathematical theory and methods in biology, with enough scope to enable the student to handle biologically phrased problems. Topics covered include population models with discrete or continuous time, pharmacokinetics and -dynamics, qualitative analysis of systems of differential equations, modelling of the spread of infectious diseases, bifurcations, limit cycles, and excitable media with applications to, e.g., predator-prey models, spatial methods with application to diffusion, and nerve conduction.

Language(s) of Instruction

English

Host Institution Course Number

FMAN01

Host Institution Course Title

BIOMATHEMATICS

Host Institution Campus

Lund

Host Institution Faculty

Engineering

Host Institution Degree

Host Institution Department

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