

## 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 Quarter Units**

6.00

**UCEAP Semester Units**

4.00

## 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

[Print](#)