COURSE DETAIL

DYNAMICAL SYSTEMS
Country Norway
Host Institution University of Oslo
Program(s) University of Oslo
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Mathematics
UCEAP Course Number 124
UCEAP Course Suffix
UCEAP Official Title DYNAMICAL SYSTEMS
UCEAP Transcript Title DYNAMICAL SYSTEMS
UCEAP Quarter Units 8.00
UCEAP Semester Units 5.30

Course Description

This course gives an introduction to the theory of systems of ordinary differential equations. This includes topics such as existence and uniqueness of solutions, linearization and stability theory, phase space techniques, bifurcation theory and Hamiltonian systems. Emphasis is put on using dynamical systems as a modeling tool in different areas of science, technology, medicine, economy. Students perform numerical studies of complex systems.

Language(s) of Instruction
English

Host Institution Course Number
MAT3440

Host Institution Course Title
DYNAMICAL SYSTEMS

Host Institution Course Details
https://www.uio.no/studier/emner/matnat/math/MAT3440/index-eng.html

Host Institution Campus

Host Institution Faculty
Mathematics and Natural Sciences

Host Institution Degree
Bachelor

Host Institution Department
Mathematics

Course Last Reviewed
2025-2026

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