

COURSE DETAIL

NONLINEAR ODES WITH APPLICATIONS

Country

Australia

Host Institution

University of Sydney

Program(s)

University of Sydney

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mathematics

UCEAP Course Number

129

UCEAP Course Suffix**UCEAP Official Title**

NONLINEAR ODES WITH APPLICATIONS

UCEAP Transcript Title

NONLINEAR ODES

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course examines the theory of systems of ordinary differential equations. The emphasis will not be on finding explicit solutions, but instead on the qualitative features of these systems, such as stability, instability and oscillatory behavior. The applications are from biology, physics, chemistry, and engineering, including population dynamics, epidemics, chemical reactions, and simple mechanical systems.

Language(s) of Instruction

English

Host Institution Course Number

MATH3063

Host Institution Course Title

NONLINEAR ODES WITH APPLICATIONS

Host Institution Course Details

<https://www.sydney.edu.au/units/MATH3063>

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Mathematics and Statistics Academic Operations

Course Last Reviewed

2024-2025

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