## **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 Campus** 

**Host Institution Faculty** 

**Host Institution Degree** 

**Host Institution Department** 

Mathematics and Statistics Academic Operations

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