

COURSE DETAIL

DIFFERENTIAL EQUATION

Country

China

Host Institution

Fudan University

Program(s)

Fudan University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mathematics

UCEAP Course Number

173

UCEAP Course Suffix**UCEAP Official Title**

DIFFERENTIAL EQUATION

UCEAP Transcript Title

DIFFERENTL EQUATION

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

Many phenomena in natural sciences and social sciences can be summarized as quantitative relationships expressed by differential equations. In particular, many laws in economics and finance can be described by differential equations. This course enables non-mathematics students to master the basic theories and methods of differential equations, and to cultivate their logical thinking ability and the ability to apply differential equations to solve practical problems. The course consists of two parts: ordinary differential equations and partial differential equations. The main topics include: first-order ordinary differential equations, high-order ordinary differential equations, linear ordinary differential equations, difference equations, basic partial differential equations (harmonic equation, heat conduction equation, wave equation), mathematical model of differential equations.

Language(s) of Instruction

Chinese

Host Institution Course Number

Econ130105

Host Institution Course Title

DIFFERENTIAL EQUATION

Host Institution Course Details

Host Institution Campus

Host Institution Faculty

Wu Hao

Host Institution Degree

Host Institution Department

Mathematical Science

Course Last Reviewed

2020-2021

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