## **COURSE DETAIL**

## **ORDINARY DIFFERENTIAL EQUATIONS**

**Country** Ireland

**Host Institution** Trinity College Dublin

**Program(s)** Trinity College Dublin

UCEAP Course Level Upper Division

UCEAP Subject Area(s) Mathematics

UCEAP Course Number 178

**UCEAP Course Suffix** 

UCEAP Official Title ORDINARY DIFFERENTIAL EQUATIONS

UCEAP Transcript Title ORDINARY DIFF EQUAT

**UCEAP Quarter Units** 4.00

**UCEAP Semester Units** 2.70

## **Course Description**

Students learn how to apply various standard methods (separation of variables, integrating factors, reduction of order, undetermined coefficients) to solve certain types of differential equations (separable, first-order linear, linear with constant coefficients); give examples of differential equations for which either existence or uniqueness of solutions fails; compute the exponential of a square matrix; and use either linearization or the Lyapunov theorems to check the stability of critical points for a given autonomous system.

Language(s) of Instruction English

Host Institution Course Number MAU23205

Host Institution Course Title ORDINARY DIFFERENTIAL EQUATIONS

Host Institution Campus Trinity College Dublin

**Host Institution Faculty** 

**Host Institution Degree** 

Host Institution Department Mathematics

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