# **COURSE DETAIL**

### **INTRODUCTION TO DIFFERENTIAL GEOMETRY**

## **Country**

Ireland

#### **Host Institution**

**University College Cork** 

## Program(s)

University College Cork

## **UCEAP Course Level**

**Upper Division** 

## **UCEAP Subject Area(s)**

Mathematics

#### **UCEAP Course Number**

105

#### **UCEAP Course Suffix**

#### **UCEAP Official Title**

INTRODUCTION TO DIFFERENTIAL GEOMETRY

## **UCEAP Transcript Title**

**DIFFERENTL GEOMETRY** 

# **UCEAP Quarter Units**

4.00

#### **UCEAP Semester Units**

2.70

## **Course Description**

This course introduces students to concepts of differential geometry. Topics include basic differential geometry concepts and techniques such as differential manifolds and submanifolds; tangent and normal bundles; Riemannian metric, curvatures, and geodesics, with emphasis on the cases of curves and surfaces; differentiable maps; geometric aspects of the theory of differential equations; symplectic geometry; and homogeneous spaces.

# Language(s) of Instruction

English

### **Host Institution Course Number**

MA3063

#### **Host Institution Course Title**

INTRODUCTION TO DIFFERENTIAL GEOMETRY

#### **Host Institution Campus**

University College Cork

# **Host Institution Faculty**

**Host Institution Degree** 

# **Host Institution Department**

Mathematics

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