# **COURSE DETAIL**

### **COMPLEX VARIABLES**

### **Country**

United Kingdom - England

#### **Host Institution**

University of London, Queen Mary

### Program(s)

English Universities, University of London, Queen Mary

#### **UCEAP Course Level**

**Upper Division** 

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

Mathematics

#### **UCEAP Course Number**

102

#### **UCEAP Course Suffix**

#### **UCEAP Official Title**

**COMPLEX VARIABLES** 

### **UCEAP Transcript Title**

**COMPLEX VARIABLES** 

## **UCEAP Quarter Units**

6.00

#### **UCEAP Semester Units**

4.00

#### **Course Description**

This course covers the integral and differential properties of a complex variable. Complex differentiation, Cauchy-Riemann equations, harmonic functions, sequences and series, Taylor's and Laurent's series, and singularities and residues are examined. The class also focuses on complex integration, Cauchy's theorem and consequences, and Cauchy's integral formula and related theorems. Students study residue theorem and the applications used to evaluate integrals and summation of series, along with conformal transformations.

## Language(s) of Instruction

English

#### **Host Institution Course Number**

MTH5103

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

**COMPLEX VARIABLES** 

### **Host Institution Campus**

Queen Mary

## **Host Institution Faculty**

**Host Institution Degree** 

# **Host Institution Department**

Mathematical Sciences

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