

## COURSE DETAIL

### ORGANIC CHEMISTRY I

**Country**

Ireland

**Host Institution**

University College Dublin

**Program(s)**

Dublin Summer Physics, Dublin Summer Chemistry

**UCEAP Course Level**

Lower Division

**UCEAP Subject Area(s)**

Chemistry

**UCEAP Course Number**

11

**UCEAP Course Suffix**

S

**UCEAP Official Title**

ORGANIC CHEMISTRY I

**UCEAP Transcript Title**

ORGANIC CHEMISTRY I

**UCEAP Quarter Units**

6.00

**UCEAP Semester Units**

4.00

### **Course Description**

The course teaches key concepts prevalent in organic chemistry and the resulting properties of organic molecules. These are presented based on standard U.S. text books and are complemented by specific examples of compounds present in important drug molecules and natural products. Introductory topics include molecular structure, chemical bonding, and orbital interactions. The resulting properties of molecules are then introduced on key compound classes such as alkanes, alkenes, and alkynes that later are complemented by aromatic rings and functional groups such as alcohols, carbonyls, and amines. Furthermore, the crucial properties that explain the reactivity of organic molecules and enable a detailed understanding through distinct reaction mechanisms are highlighted throughout the course. Finally, these concepts are applied towards the planned synthesis of target molecules in combination with suitable structure determination methods.

### **Language(s) of Instruction**

English

### **Host Institution Course Number**

### **Host Institution Course Title**

ORGANIC CHEMISTRY I

### **Host Institution Campus**

University College Dublin

### **Host Institution Faculty**

### **Host Institution Degree**

### **Host Institution Department**

School of Chemistry

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