

## Module Specification

Module Title  Module Code   
Credit Value  Level  Mode of Delivery  Semester

Pre-requisite modules	Co-requisite modules	Overlapping modules
		CHE121/CHE102

### 1) Content Description

Provide a description of the module, as it will appear in the Module Directory and on the Student Information System (approx. 70-80 words).

This module is designed to introduce first year students to the fundamental principles underpinning organic chemistry. A substantial introduction, covering topics such as structure, bonding, stereochemistry, acidity and curved arrow formalism will provide students with the basic tools required to explain and predict the structure and reactivity of organic molecules. Focus is then given to reactivity, using a mechanistic approach to discuss topics such as nucleophilic substitution, elimination reactions, electrophilic addition, aromatic chemistry and carbonyl chemistry.

### 2) Module Aims

Specify the aims of the module, i.e. the broad educational purposes for offering this module.

The module aims to provide students with the fundamental concepts required to understand the relationship between structure and reactivity in organic molecules.

### 3) Learning Outcomes

Identify the learning outcomes for this module, i.e. knowledge, skills and attributes to be developed through completion of this module. Outcomes should be referenced to the relevant [QAA benchmark statements](#) and the [Framework for Higher Education Qualifications in England, Wales and Northern Ireland \(2008\)](#). The [SEEC Credit Level Descriptors for Further and Higher Education 2003](#) and [Queen Mary Statement of Graduate Attributes](#) should also be used as a guiding framework for curriculum design.

Academic Content:	
A1	Understanding of the principles relating to structure/reactivity relationship in organic compounds.
A2	Knowledge of the reactions of specific classes of organic compounds.

Disciplinary skills - able to:	
B1	Identify and draw realistic representations of the main classes of organic molecules, including their 3D-structures.
B2	Identify E/Z isomerism, locate chiral centers, assign the configuration of asymmetric carbon atoms and determine the stereoisomeric relationship between two compounds.
B3	Rationalize the acidity and basicity of organic compounds.

Attributes:	
C1	Acquire and apply knowledge relating to the principles of organic chemistry.
C2	Produce analyses which are grounded in experimental evidence.
C3	Apply analytical skills to investigate unfamiliar problems.

#### 4) Reading List

Provide an indicative reading list for the module. This should include key texts and/or journals but **should not** be an exhaustive list of materials.

Organic Chemistry, by J. Clayden et al. (Oxford University Press)  
 Chemistry<sup>3</sup>: Introducing inorganic, organic and physical chemistry, by A. Burrows et al. (Oxford University Press)

#### 5) Teaching and Learning Profile

Provide details of the method of delivery (lectures, seminars, fieldwork, practical classes, etc.) used to enable the achievement of learning outcomes and an indicative number of hours for each activity to give an overall picture of the workload a student taking the module would be expected to undertake. This information will form the Key Information Set for each undergraduate programme and will be used to populate the KIS widget found on the QMUL programme information pages. More information can be found [online](#) about KIS. You may also wish to refer to the [QAA guidance on contact hours](#) when completing this section.

Activity Type	KIS Category	Time Spent (in hours)
Lectures	Scheduled	22
Workshops	Scheduled	8
Total		30

Specify the total module notional study hours. This should be a total of the hours given for each activity. The notional study hours for each academic credit point is 10. A 15 credit point module therefore represents 150 notional study hours.

Activity Type	Total Time Spent (in hours)	Percentage of Time Spent
Scheduled learning and teaching	30	20
Placement	0	0
Independent Study	120	80
Total	150	100

Use the information provided in the box above to specify the total time spent and the percentage time spent in each category of teaching and learning activity.

#### 6) Assessment Profile

Provide details of the assessment methods used to assess the achievement of learning outcomes.

Description of Assessment	Assessment Type	KIS Category	Duration/Length	Percentage Weighting	Final element of assessment	Qualifying Mark
Examination	Exam	Exam	2 Hours	80%	Yes	
Coursework	Written assignment	Coursework		20%	No	

**Final element of assessment:** The assessment that takes place last. There should normally be only one element of assessment marked as final unless two assessment or submission dates occur on the same day.

**Qualifying mark:** A specified minimum mark that must be obtained in one or more elements of assessment in order to pass a module. This is in addition to, and distinct from, the requirement to achieve a pass in the module mark to pass the module.

### Reassessment

Provide details of the reassessment methods used, specifying whether reassessment is either standard reassessment or synoptic reassessment.

- Standard Reassessment       Synoptic Reassessment

Synoptic reassessment details (if you have indicated synoptic reassessment above, please give details)		
Brief Description of Assessment	Assessment Type	Duration/Length of Examination/ Coursework
Resit Examination	Examination	2 Hours