

## Module Specification

Module Title	Advanced Practical Chemistry	Module Code	CHE301			
Credit Value	15	Level	6	Mode of Delivery	On Campus	Semester A

Pre-requisite modules	Co-requisite modules	Overlapping modules
CHE312, CHE322		

### 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 is a level 6 module aimed at students studying any degree programme in chemistry, and is compulsory for any final year BSc student, as well as any third year student on a four year MSci programme. The stated objectives of the module are to provide the development of practical skills in synthetic methodology, as well as gaining greater appreciation of some analytical techniques in physical, inorganic and organic chemistry.

### 2) Module Aims

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

The aim of the module is to provide students with a good working knowledge of a selection of synthetic tools common in inorganic and organic synthesis, and to provide further experience in collecting and interpreting analytical and spectroscopic data.

### 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:	
A 1	This module will enhance students' experience of advanced synthetic procedures commonly practised in organic and inorganic/physical chemistry.
A 2	Students will gain an experience in performing more challenging syntheses, including multistep synthesis to produce target molecules or compounds, purification of compounds, exploring the reactivity of classes of compounds, and the use of spectroscopic and other physical techniques to identify and characterise the compounds that have been synthesised.

A3	
A4	
A5	

Disciplinary skills - able to:	
B1	This module will enhance students' scientific and ICT skills through data handling and interpretation by reference to literature sources.
B2	Spectroscopic and analytical data assessment will improve their ability to deduce outcomes from data presented.
B3	The module will improve the students' ability to successfully synthesise and characterise molecules and also to search for and handle information from different sources.

Attributes:	
C1	Broaden their experience of more advanced synthetic skills

C2	Enable them to become more familiar with techniques used to help in characterisation of compounds.
C3	
C4	
C5	

#### 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.

The module is not tied to a single textbook. Students are given references to relevant books and primary literature in journals in the module manual and at the end of each experimental description.

#### 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)
Practical Classes and workshops	Scheduled	

Lecture	Scheduled	8
Fieldwork	Scheduled	88
Total		96

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	96	64%
Placement		
Independent Study	54	46%
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.

### 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
Coursework	Coursework	Coursework		100%		

**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 Exam	Written Exam	

