

A-LEVEL CHEMISTRY FOR NON-SPECIALISTS - YEAR 1 TEACHING

CODE 7490

ABOUT THIS COURSE

This course looks at the A level Chemistry curriculum and provides techniques and approaches that equip non-specialist teachers to deliver it well. Key topics from the first year of the course will be covered and participants will be given valuable teaching strategies and resources as well as being directed to other useful support. Although the course will tie in closely to the AQA specification, additional material will be shared that will strengthen teachers' chemical understanding.

However, although it is great to have the knowledge, that doesn't guarantee good teaching. We will also look at some active learning approaches that ensure lessons are vibrant and student centred.

PROGRAMME

	TIME
Getting started on Quantitative Chemistry	10.00 – 11.00am
<ul style="list-style-type: none"> ● Getting started at A level – the 'big picture' and planning for the key challenge areas ● Laying the foundations – the first term and beyond ● The mole concept. How do you teach it? ● Using the mole – give students patterns and procedures ● Titration calculations – not hard if you follow some simple steps ● Celebrate the mole! 	
Discussion: coffee break	11.00 – 11.15am
Atoms, Ions and Molecules	11.15 – 12.00pm
<ul style="list-style-type: none"> ● The A level model of the atom – electrons, energy levels and orbitals ● Ionic bonding. Misconceptions and dealing with them ● Covalent compounds and intermolecular forces 	
Energy Matters	12.00 – 1.00pm
<ul style="list-style-type: none"> ● Why do atoms join together and some chemical reactions take place? ● Enthalpy changes and the Hess Cycle: Burning down and forming up. ● Born Haber cycles. Why do certain compounds exist and some dissolve? 	
Lunch and informal discussion	1.00 – 1.45pm
Making Sense of Organic Chemistry	1.45 – 2.45pm
<ul style="list-style-type: none"> ● Nomenclature and functional groups ● What are the key drivers in organic chemistry? ● Modelling reaction mechanisms ● Mastering those curly arrows 	
Active Teaching Approaches	2.45 – 3.30pm
<ul style="list-style-type: none"> ● Active learning strategies that challenge the best and move on the weaker students ● Effective groupwork: techniques to establish this in the lab and the classroom ● The required Chemistry practicals – getting the most from them with the students ● New approaches for preparing students for the practical skills exam questions 	
Plenary and Depart	3.30 – 3.45pm
<ul style="list-style-type: none"> ● Where students succeed and struggle in A level Chemistry exams 	

LOCATION/DATE

London

Wednesday 13 November 2019

Thursday 23 January 2020

COURSE LEADER

John Coad is a highly experienced A level Chemistry teacher and has led Chemistry Departments and whole Science Departments. He is an author of Chemistry resources, presenter and science advisor in England's largest LEA.

WHO SHOULD ATTEND?

- Non-specialists who are being asked to teach A level chemistry
- Teachers who are new or relatively new to teaching Advanced Level chemistry
- Colleagues returning to teaching who want to refresh their knowledge of the A level course

BENEFITS OF ATTENDING

- Develop a clear understanding of some key concepts to be taught at A level
- Consider models used in chemistry teaching and evaluate their effectiveness
- Take away strategies and activities to use in lessons
- Increase your range of teaching activities to keep students engaged
- Identify sources of support and valuable resources for A level chemistry