

IE3E3-30 Introduction to Secondary Teaching in Chemistry

20/21

Department

Centre for Teacher Education

Level

Undergraduate Level 3

Module leader

Will Haywood

Credit value

30

Module duration

10 weeks

Assessment

100% coursework

Study locations

University of Warwick main campus, Coventry Primary

A Warwick Partnership School

Description

Introductory description

This module takes place in term 2 and is specially designed to give you a great taster of life as a teacher

It's led by experienced staff in the Centre for Teacher Education (currently rated 'Outstanding' by OFSTED).

Module aims

1. To develop knowledge and understanding about the UK education system and what it is like to be a secondary chemistry teacher.
2. To develop knowledge and understanding about key themes in education.
3. To provide a professional experience supporting the teaching of chemistry.
4. To develop key transferable skills through a professional placement.
5. To develop skills in personal reflection on professional practice.
6. To relate educational theory to practice within school.
7. To raise aspirations of school students towards study in Higher Education.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

As part of the module students complete a ten day (or equivalent) placement in a school. Whilst on placement students, under the guidance/supervision of an in school mentor will develop their understanding of and support the teaching of chemistry. This will be achieved through a range of activities that may include such as: - lesson observations, supporting lessons, 1 to 1 teacher, small group teaching, and leading part of, or even entire lessons. Students will also plan and deliver an activity with the aim of raising the aspirations of a group of children within the school towards study in Higher Education.

Learning outcomes

By the end of the module, students should be able to:

- LO1 Critically analyse and reflect on key themes in education
- LO2 Critically analyse and reflect on current issues in teaching chemistry
- LO3 Demonstrate engagement with supporting the teaching of chemistry
- LO4 Demonstrate professional behaviour and conduct
- LO5 Critically reflect on practice in teaching physics
- LO6 Demonstrate engagement with raising the aspirations of school students towards study in Higher Education
- LO7 Compare practice with educational theory

Indicative reading list

Student Guide to Literacy in Science

ASE guide to secondary science education

Exploring young people's views on science education

Successful science: strengths and weaknesses of school science teaching

Starting science ... again?: making progress in science learning

What successful science teachers do: 75 research-based strategies

Science formative assessment: 75 practical strategies for linking assessment, instruction, and learning

Teaching science: developing as a reflective secondary teacher

Good practice in science teaching: what research has to say

Teaching secondary science using ICT

How science works: exploring effective pedagogy and practice

Science learning, science teaching

Interdisciplinary

Through exploring the teaching and pedagogy of your subject you will consider and build connections between your subject, educational theory, the psychology of learning and cognition

and also consider elements of policy, society and sociology.

Subject specific skills

You will develop skills relevant for teaching and the development of practice such as reflection. You will also develop skills relevant to the academic study of education such as analysis and critique. The module will also develop your skills in the pedagogy of your subject.

Transferable skills

Critical Thinking
Problem Solving
Active Lifelong Learning
Communication (verbal and written)
Teamwork and working effectively with others
Information literacy (research skills)
ICT Literacy
Citizenship (local and global)
Ethical Values
Inter-cultural learning and diversity awareness
Professionalism
Organisational awareness

Study

Study time

Type	Required
Seminars	7 sessions of 2 hours (5%)
Practical classes	8 sessions of 2 hours (5%)
Placement	75 hours (25%)
Assessment	195 hours (65%)
Total	300 hours

Private study description

No private study requirements defined for this module.

Costs

Category	Description	Funded by	Cost to student
Other	In the UK, anyone working with children is required to have a Disclosure & Barring Services (DBS) check. The Centre for Teacher Education will cover the costs of this, however, you will need to provide the relevant proof of identification and address prior to the start of the module.	Department	£0.00
Field trips, placements and study abroad	You will be responsible for your travel arrangements to the placement. Placements are assigned to align with bus routes and opportunities for car share where possible. If this would be prohibitive of you taking the module then contact CTE and we can discuss options for available support.	Student	

Assessment

You must pass all assessment components to pass the module.

Assessment group A1

Assessment component	Weighting	Study time	Eligible for self-certification
Reflective Essay	40%	60 hours	Yes (extension)
The reflective essay is an opportunity to reflect on your experience in school and use a model for academic reflection to consider how your practice in supporting the teaching of your subject has developed.			
Reassessment component is the same			
Portfolio of Short Tasks	40%	75 hours	Yes (extension)
A 2,500-word portfolio of short tasks.			
Reassessment component is the same			

	Weighting	Study time	Eligible for self-certification
Assessment component			
Academic Poster	20%	60 hours	Yes (extension)

Reassessment component is the same

Feedback on assessment

Formative: During the course of the module students will have the opportunity to submit up to two individual tasks towards the portfolio for formative assessment.

Summative: A written feedback sheet and in text comments will provided on the portfolio.

Availability

Courses

This module is Optional for:

- UCHA-F128 Undergraduate MChem Chemistry with Medicinal Chemistry with Industrial Training
 - Year 2 of F128 Chemistry with Medicinal Chemistry with Industrial Training
 - Year 3 of F128 Chemistry with Medicinal Chemistry with Industrial Training
- UCHA-F110 Undergraduate Master of Chemistry (with Industrial Placement)
 - Year 2 of F100 Chemistry
 - Year 2 of F110 MChem Chemistry (with Industrial Placement)
 - Year 2 of F112 MChem Chemistry with Medicinal Chemistry with Industrial Placement
 - Year 3 of F100 Chemistry
 - Year 3 of F110 MChem Chemistry (with Industrial Placement)
 - Year 3 of F112 MChem Chemistry with Medicinal Chemistry with Industrial Placement
- UCHA-F109 Undergraduate Master of Chemistry (with International Placement)
 - Year 2 of F109 MChem Chemistry (with International Placement)
 - Year 2 of F111 MChem Chemistry with Medicinal Chemistry (with International Placement)
 - Year 3 of F109 MChem Chemistry (with International Placement)
 - Year 3 of F111 MChem Chemistry with Medicinal Chemistry (with International Placement)
- UCHA-4M Undergraduate Master of Chemistry Variants
 - Year 2 of F100 Chemistry
 - Year 2 of F105 Chemistry
 - Year 2 of F110 MChem Chemistry (with Industrial Placement)

- Year 2 of F109 MChem Chemistry (with International Placement)
- Year 2 of F126 MChem Chemistry with Med Chem (with Prof Exp)
- Year 2 of F125 MChem Chemistry with Medicinal Chemistry
- Year 2 of F106 MChem Chemistry with Professional Experience
- Year 3 of F100 Chemistry
- Year 3 of F105 Chemistry
- Year 3 of F110 MChem Chemistry (with Industrial Placement)
- Year 3 of F109 MChem Chemistry (with International Placement)
- Year 3 of F126 MChem Chemistry with Med Chem (with Prof Exp)
- Year 3 of F125 MChem Chemistry with Medicinal Chemistry
- Year 3 of F106 MChem Chemistry with Professional Experience
- UCHA-F127 Undergraduate Master of Chemistry with Medicinal Chemistry (with Intercalated Year)
 - Year 2 of F127 MChem Chemistry with Medicinal Chemistry (with intercalated year)
 - Year 3 of F127 MChem Chemistry with Medicinal Chemistry (with intercalated year)