



DISTANCE LEARNING SUBJECT KNOWLEDGE ENHANCEMENT COURSES FOR IN-SERVICE TEACHERS (SKEIT) IN MATHS, CHEMISTRY AND PHYSICS



These courses are designed for current practising teachers who wish to enhance their knowledge of Maths, Physics, Chemistry or Biology to a level where they will be considered to be capable of teaching to GCSE and/or Advanced Level (currently A2).

To enrol on these SKE courses, you must be a qualified teacher currently employed in a school. The courses are spread over two years to give teachers the chance to complete the specified number of hours of study to complete the course. However Teachers are invited to complete the course in a shorter period if work / life commitments allow. An increasing number of schools are finding that funding these courses is a very good investment as it produces a specialist teacher at a fraction of the price of recruitment.

The courses are delivered via a distance learning programme accessed through our bespoke learning platform known as **VID**LEARN[™]. Once enrolled on the **VID**LEARN[™] platform, you will be able to access each of the modules remotely and study the content via the interactive recorded presentations and associated learning materials.

Understanding The Full Time Equivalent

The NCTL define the Full Time Equivalent (FTE) of a course as 25 hours per week. All of our courses are based on the FTE in that if a course is specified as 8 weeks there will be approximately 200 hours of distance learning study. This is dependent on your current level of understanding of the subject. All University of Sussex SKEIT courses allow you to study at your own pace and complete the course as quickly as is convenient as long as you finish all of the modules in a maximum of two years.

Understanding The Costs

The following pages will summarise the courses, give broad details of the content and detail the costs associated with each course. To meet the constraints of CPD budgets, the University of Sussex allow payment over two years. This means that you pay half at the beginning of the course and the second half one year later or when you complete the course, whichever is the sooner. Your school will usually fund these courses but in certain circumstances we can arrange for you to part or fully fund the course.



These courses are designed for current practising teachers who wish to enhance their knowledge of Maths, Physics or Chemistry to a level where they will be considered to be capable of teaching to Advanced Level (currently A2).

The courses are structured into modules which are distance learning theory based. Chemistry and Physics also include a practical module, which you are expected to complete at your place of work.

Duration and Costs

400 hours (16 Week Full Time Equivalent) Cost: £2000 (option of 2 x payments of £1000)

Delivery

Distance Learning (supported practical module at place of work for chemistry and physics)

Modules (Interactive Videos, Documents, Links, Online Assessments, Assignments and Subject Knowledge Audits)

Chemistry	Physics	Maths
Chemistry Primer Atomic Structure Thermodynamics Periodicity Kinetics, Equilibria & EP Organic Chemistry Practical Chemistry Option: GCSE Chemistry Option: A Level +	Physics Primer Mechanics Electricity and Magnetism Materials and Energy Waves Radioactivity & Atomics Practical Physics Option: GCSE Physics Option: A Level +	Algebra, Quadratics and Co-ordinate Geometry Differentiation Curve Sketching and Trigonometric Functions Integration Vectors, Complex Numbers and Series Differential Equations and Further Integration Further Problems and Consolidation Option: GCSE Maths Option: A Level +
Apply Online from:	Last Application:	Further information and apply online link:
1st September 2014	ТВА	Physics: http://uos.vidlearn6.co.uk/course/1/summary Chemistry: http://uos.vidlearn6.co.uk/course/2/summary Maths: http://uos.vidlearn6.co.uk/course/24/summary



These courses are designed for current practising teachers who do not specialise in Physics or Chemistry but wish to enhance their knowledge of these subjects to a level where they will be considered to be capable of teaching at GCSE. The courses are structured into modules which are distance learning theory based. There is also a practical module, which you are expected to complete at your place of work. **Optional Biology resources are offered free.**

Duration and Costs

200 hours (8 Week Full Time Equivalent) Cost: £1000 (option of 2 x payments of £500)

Delivery

Distance Learning (supported practical module at place of work in your specialist subject)

Topics (Interactive Videos, Documents, Links, Online Assessments, Assignments and Subject Knowledge Audits)

Chemistry

Atoms: The building blocks of life; Bonding Ionic and Covalent; The Periodic Table; The Reactivity Series and Metal Extraction; Chemical Reactions; Acids, Bases and Neutralisation; Energy, Reversible Reactions and Equilibria; Rates of Reaction; Earth Science; Organic Chemistry; Practical Chemistry

Physics

Forces and Motion; Energy Transfers and Resources; Electrostatics and Electrodynamics; Magnetism and Electromagnetism; Waves and the Electromagnetic Spectrum; Light and Colour; Sound and Plate Techtonics; Radioactivity; Earth, The Universe and Everything; Practical Physics

Free with each course: Biology

Life and Cells; Classification, Variation and Evolution; Genetics; Adaptation, Energy Flow and Nutrient Transfer; Enzymes; Humans as Organisms; Homeostasis; Plants as Organisms Humans and the Environment

Apply Online from: L

Last Application:

Further information and apply online link:

1st September 2014 TBA

[to be completed when course setup complete]



These courses are designed for current practising teachers who do not specialise in Maths but wish to enhance their knowledge of these subjects to a level where they will be considered to be capable of teaching at GCSE. This course is 100% distance learning.

Duration and Costs

200 hours (8 Week Full Time Equivalent) Cost: £1000 (option of 2 x payments of £500)

Topics (Interactive Videos, Documents, Links, Online Assessments, Assignments and Subject Knowledge Audits)			
Title		Content	
Number		Structure and Calculation, Fractions, Decimals and Percentages, Measure and accuracy	
Algebra		Notation, vocabulary and manipulation, Graphs, Solving equations and inequalities (linear, quadratic, simultane- ous), Sequences	
Ratio, Proportion and Rates of Change		Notation, reduction to simplest form, Change freely between units, Direct and inverse proportion, Compound interest	
Geometry and Measures		Notation: points, lines, vertices, edges, planes, parallel lines, perpendicular lines, Properties and constructions, Mensuration and calculation, Finding angles, areas, lengths and arc lengths of various shapes, Vectors	
Probability		Tree diagrams, Exhaustive and exclusive events, Expected outcomes, Independent and dependent events, Conditional probabilities	
Statistics		Bar charts, pie charts, line graphs, Frequency tables, grouped data, Mean, mode, median, quartiles and inter-quartile range, Correlation, lines of best fit, interpolate and extrapolate	
Apply Online from:	Last Application:	Further information and apply online link:	
1st September 2014	ТВА	[to be completed when course setup complete]	



These courses are designed for current practising teachers who do not specialise in science but wish to enhance their knowledge of Physics, Chemistry **and** Biology to a level where they will be considered to be capable of teaching all three to GCSE. The courses are structured into modules which are distance learning theory based. Chemistry and Physics also include a practical module, which you are expected to complete at your place of work. **Biology is free with these courses**.

Duration and Costs

600 hours (24 Week Full Time Equivalent) Cost: £2000 (option of 2 x payments of £1000)

Delivery

Distance Learning (supported practical module at place of work for chemistry and physics)

Topics (Interactive Videos, Documents, Links, Online Assessments, Assignments and Subject Knowledge Audits)

Chemistry

Atoms: The building blocks of life; Bonding Ionic and Covalent; The Periodic Table; The Reactivity Series and Metal Extraction; Chemical Reactions; Acids, Bases and Neutralisation; Energy, Reversible Reactions and Equilibria; Rates of Reaction; Earth Science; Organic Chemistry; Practical Chemistry

Physics

Forces and Motion; Energy Transfers and Resources; Electrostatics and Electrodynamics; Magnetism and Electromagnetism; Waves and the Electromagnetic Spectrum; Light and Colour; Sound and Plate Techtonics; Radioactivity; Earth, The Universe and Everything; Practical Physics

Biology

Life and Cells; Classification, Variation and Evolution; Genetics; Adaptation, Energy Flow and Nutrient Transfer; Enzymes; Humans as Organisms; Homeostasis; Plants as Organisms Humans and the Environment

Apply Online from: Last Application: F

Further information and apply online link:

1st September 2014 TBA

[to be completed when course setup complete]



You will be encouraged to communicate with your fellow professionals during the course and our suite of communication tools offer the perfect environment to do so.

Communicate includes a very easy to use forum. The forum has been a part of **VID**LEARN[™] since its inception and has proven very successful. It allows you to share problems, solutions and materials of interest with peers.

Announce is a fantastic way to very quickly communicate with the cohort and/or the tutor team. It is available to trainees and tutors and supports messages up to 256 characters that are immediately emailed to your selected recipients. More detailed information can be added and documents uploaded that recipients can view once logged into **VID**LEARN[™].

You have access to a specialist tutor with whom you can arrange tutorials via email, Skype, telephone or face to face if it is geographically viable. Tutorials can be requested electronically by Teachers or, in certain circumstances, the Tutor. Teachers can log the reason for a tutorial in advance giving the Tutor time to prepare and optimising the available time.

Document Share does exactly what it says on the tin. It is an area where documents of interest can be uploaded and labelled for later download by the cohort and tutor team.

VIDLEARN[™] has a great support record for a very good reason - we strive to resolve all issues within 15 minutes. This is achieved via email listening; we do not use automated responses and your query is attended to by a **VID**LEARN[™] professional immediately.

We provide this support 24/7 to suit all busy schedules so you will never be without help.

The practical module for Chemistry and Physics courses is completed at your place of work and is supported by a suite of resources including interactive videos, manuals and assignments.





The Distance Learning Subject Knowledge Enhancement courses for In-Service Teachers (SKEIT) in Maths, Chemistry and Physics are designed to enhance your subject knowledge to GCSE and/or A Level in your specialist subject. The courses are designed to improve your Physics, Maths or Chemistry skills and knowledge and increase your confidence and effectiveness in the classroom.

Each teacher that completes a SKEIT course will receive an End of Course Statement that is signed by the course leader. This statement will evidence your activity throughout the course and the level of competence that you achieved in your specialist subject.

The End of Course Statement also details all of your assignment marks for each module. Additionally, it shows your progress throughout the course by publishing the variance between your first and second takes of all Subject Knowledge Audits and Online Assessments. This is very powerful data and invariably shows significant progress throughout the course. The statement will also detail each recording you have watched and for how long.

At the end of the course you will be able to demonstrate that your subject knowledge has been enhanced and you will know your current level of understanding of your specialist subject. For physics and chemistry, you will also have become familiar with a range of historical experiments within your subject and will be aware of other practicals associated with each topic area.

You will be able to reflect on your own learning and demonstrate how you have gone about improving your subject knowledge. You will also be able to independently improve your subject knowledge when confronted with a new area of your specialist subject. Finally, you get to learn at your own pace, share experiences with fellow professionals within a growing community and enjoy an established and professional delivery format.