Outreach & Bespoke CPD

We are able to offer to run courses from our programme or tailor make a course to meet the needs of individual schools, departments or school clusters. By providing outreach or tailor making a CPD course for you offers a very flexible and cost effective way of providing CPD. Please email the Centre, slcem@le.ac.uk, for the attention of Sue Bull to discuss your requirements in detail and who will work with you to meet your specific CPD needs. A participant on a bespoke session organised for a Derbyshire school commented “The presenter had an excellent approach, was very supportive and knowledgeable. Brilliant session – very informative and enjoyable.”

Impact

Many of our courses come with Impact Awards which can be used to contribute to the cost of supply cover as well as the course fee. If you wish to find out more about Impact Awards in the East Midlands then please contact Elaine Hodkin on 0116 252 3695 who will be happy to discuss them with you. The Impact Award process provides an easy way to measure the impact our courses have on your practice. You can focus on your expectations of the course beforehand and develop an action plan during the course to implement back in school. Our aim is for our courses to have an impact on your teaching and for you to benefit from your CPD experience with us.

“...It was extremely useful and enjoyable to spend time carrying out practicals and demos with specialist support. Builds much greater confidence to return to the classroom and deliver lessons to a much higher standard.”

Course delegate 2009

Respond

We hope you like our new style of catalogue. This new style catalogue contains details of all the Secondary courses offered by the Science Learning Centres both in our region and elsewhere, together with the National Science Learning Centre programme. You will find, in the pocket at the back of the catalogue, details of the courses planned at the Science Learning Centre East Midlands for the forthcoming months. Updated information about courses will be sent to you each term but if you would like additional copies or further information about any of our activities please contact us. We will also be adding new courses to the programme as the year progresses. Look out for these in our termly mailers or on our website www.le.ac.uk/slcem.

Working together as a national network of Science Learning Centres enables us to offer an unparalleled range of courses to suit your needs and support your career progression. We provide inspiring, innovative and high quality CPD for all those involved in science education and whether you are looking for CPD in leadership, subject knowledge or teaching and learning we are able to provide it. Courses in the region complement the offering at the National Science Learning Centre and vice versa. You therefore have the opportunity to combine short and longer CPD episodes to provide you with a more in depth experience.

Our courses this year address a whole range of themes including ‘Contemporary Science’, ‘How Science Works’ as well as themes relating to STEM issues. In addition some courses will address cross-curricular learning in response to the new KS3 curriculum by involving colleagues from other departments. The programme is also designed to reflect the government’s national priorities for CPD as well as continuing to meet the specific needs of the region.

Welcome to the 2009/10 Secondary course catalogue for the Science Learning Centre East Midlands. Our new, exciting programme is more comprehensive than ever and covers science education from KS3 to Post 16 with a broad range of themes designed to offer the very best science CPD to colleagues across the region.

A truly inspirational experience
About Us

Our main Centre is based at the University of Leicester within the School of Education. The University is recognised as one of the UK’s leading institutions for teaching and research and is currently the Times Higher Education University of the Year. We are able to draw upon a large pool of expertise from a number of different departments in order to enrich and enhance our courses. Some of our courses are led by researchers at the forefront of cutting edge of science; enabling you to keep up to date with advances in a range of scientific disciplines.

In addition to our main Centre we have a number of satellite Centres across the region. Our two main satellites are at the University of Nottingham and Bishop Grosseteste University College, Lincoln. In addition we run courses at John Cleveland Specialist Science College in Hinckley and at Snibston Discovery Park in Coalville.

We work closely with a number of leading educationalists and academics to ensure that all our courses are led by the very best trainers available. In addition to excellent trainers, the team at the Centre will do their utmost to ensure that the courses you attend are well resourced and supported, and run smoothly. A member of our team attends every course, including those courses held at satellite Centres ensuring you receive a warm and friendly welcome at all times.

Impact Award

Claim your Bursary Now

Impact Awards are worth £200 per day, and as most courses cost only £130 per day you can use the additional money left over to contribute towards the cost of your supply cover.

We’re delighted to say that this year Impact Awards are available on a much larger range of courses – in fact almost every course has one – just look out for the logo!

For the first time Impact Awards of £100 per day are also available for technicians. Qualifying courses can be seen in the Science Learning Centre’s Technician catalogue or can be viewed online.

Technicians are also eligible for an Impact Award if they attend one of the courses in the Practical Work and ICT Focus theme, listed in this catalogue, with a teacher from the same school.

Applying for an Impact Award is incredibly simple. All you have to do is apply for your place on the course, by either completing the booking form on the back page of this brochure, or by going online to www.slcs.ac.uk/courses.

Once you have submitted a booking you will be emailed a form to identify your intended learning outcomes. By completing and returning this short form you will be applying for an Impact Award and you will also identify the ways in which you want the course to benefit you and your department. After attending the course, you will be asked to assess the impact that the CPD has had upon your practice.

Impact Awards for core courses are funded by the Department for Children, Schools and Families. In addition, Research Councils UK are funding Impact Awards for our Contemporary Science courses.

Contact us

Science Learning Centre East Midlands, University of Leicester, School of Education, 21 University Road, Leicester, LE1 7RF
Tel: 0116 252 3771
Fax: 0116 252 5772
Email: slcem@le.ac.uk

Making Professional Development Affordable

If you are a teacher or lecturer working in a state maintained secondary school or college in England you can claim an Impact Award for any course which is marked in this brochure with an Impact Award logo.

Course Fees

The standard fee for courses at a regional Science Learning Centre is:

- £130 per day for teachers and higher level teaching assistants
- £95 per day for teaching assistants and technicians
- £130 for technicians attending courses aimed at both teachers and technicians

Courses that run over two days at the regional Centres, have a reduction to the cost of the second day to a rate of £100 per day.
Secondary Themes

High-quality, hands-on, practical, up-to-date professional development experiences for science educators.

- **Contemporary Science and How Science Works**
  Helping you keep up-to-date with subject knowledge and practical expertise in new and emerging areas of science, these courses will build your confidence to teach modern science and scientific literacy. Contemporary contexts offer inspiring approaches to developing all aspects of How Science Works.

- **New Initiatives in the Science Curriculum**
  These courses will help you to keep pace with emerging developments in science education and their underpinning principles. Responding to national CPD priorities such as support for triple Science and the introduction of the new Diplomas, we provide effective strategies and approaches for incorporating new initiatives into the science curriculum.

- **Science for Non-Specialists**
  Non-specialist courses are intended for science subject teachers who need to develop their subject knowledge further in a range of subjects allied to science. Courses draw on topics that challenge students’ conceptual understanding and provide you with strategies to tackle them.

- **Practical Work and ICT Focus**
  Many consider practical work to be central to teaching and learning in science. Our courses allow you to undertake practical work and improve your skills, helping you to bring effective and safe experimental and investigative work into your classroom. Opportunities are also provided for engaging with ICT to promote exciting teaching and learning.

- **Teaching, Learning and Assessment**
  These courses draw on, and translate current research into practical and effective actions that can be taken into the classroom. They help you explore the breadth and diversity of strategies available, and keep you up to date with new developments in practice that underpin science teaching, learning and assessment.

- **Personalising Learning in Science**
  We acknowledge that some young people in the UK are not realising their full potential in science education, with some key groups at particular disadvantage. Courses in this theme will develop your knowledge and understanding of strategies and resources to enhance and empower the learning of such young people. We also provide support for you to personalise learning for all learners, across abilities and backgrounds.

- **STEM Curriculum Innovation and Implementation**
  As part of the government blueprint to bring about better co-ordination to the STEM world, these courses and events will explore strategies for teaching, learning and collaboration across science, technology, engineering and maths and provide opportunities to share effective practice with your colleagues from mathematics, science and design technology.

- **Leadership**
  Strong leadership is an essential component of successful science teaching and learning, not least because of the role that leaders have in modelling and disseminating good practice. Our courses will develop your leadership skills in science education with a particular focus on professional development for emergent, new and aspiring leaders. We also support experienced leaders to extend skills through effective coaching and professional development of their peers.

- **Supporting Science Teaching**
  Effective functioning of science teaching and learning depends not only on the teacher but also on the key roles played by other staff. In science this includes specific technical and teaching support. This theme provides a combination of skills, knowledge and career focused training for science technicians and teaching assistants.
In order to ensure that access to high quality professional
development is within easy reach there are ten Science
Learning Centres located across the country.

This catalogue includes the courses available throughout the network of
ten Centres plus a range of courses only available at your regional Centre.
Your regional Centre may not be running the course you are interested
in, or it might be easier for you to visit one of the other Centres.

There’s nothing to stop you attending a Centre outside your region
- in fact we’re very happy for you to do so - so please, have a good
look at what’s available online.

To book a place on a course
call 0845 155 1714 or book online
at www.slcs.ac.uk/courses

- North West
- North East
- Yorkshire & the Humber
- West Midlands
- East Midlands
- East of England
- South West
- South East
- London
- National

To book a place on a course
call 0845 155 1714 or book online at
www.slcs.ac.uk/courses
Secondary science is at the heart of the Science Learning Centres’ continuing professional development (CPD) programme. Our aim is to offer an inspiring and innovative range of professional development opportunities for secondary teachers, technicians and teaching assistants. Developed in collaboration with many partners, the secondary programme brings coherence to science continuing professional development matched to national priorities, school and individual teacher needs.

**Innovation**

The delivery of CPD across the network of Science Learning Centres takes on a variety of different forms; one day courses, flexible CPD modules, intensive longer periods and residential courses of varying lengths. This year we continue to introduce innovative uses of ICT both on courses and in classrooms as well as the wider introduction of eCPD elements and action research models.

**Collaboration**

Evidence from the research community suggests that in order to be effective, CPD should be classroom-focused, sustained and have expert input. By working in partnership from the outset, we involve experienced and dedicated professional development leaders, teachers, research scientists and many other professionals in the design, development and delivery of our courses providing a unique, high quality, relevant and stimulating experience.

**Partnerships**

We are involved in a number of exciting partnerships including:

- Association for Science Education
- British Ecological Society
- Building Schools for the Future (Faraday project)
- CLEAPSS
- Gatsby Foundation
- General Teaching Council
- Institute of Physics
- Learning and Skills Network
- National Centre for Excellence in Teaching Mathematics
- Nuffield Foundation
- Research Councils UK
- Royal Academy of Engineering
- Royal Society
- Royal Society of Chemistry
- Secondary National Strategy
- Smallpeice Trust
- Specialist Schools and Academies Trust
- STEMNET
- Training and Development Agency
- Association for Science Education
- Royal Society
- Royal Society of Chemistry
- Secondary National Strategy
- Smallpeice Trust
- Specialist Schools and Academies Trust
- STEMNET
- Training and Development Agency

**Relevance and Sustainability**

Our courses have been developed to support you at each stage of your career and create the potential to provide evidence for whole school agendas such as the Self Evaluation Form, Every Child Matters, Work Related Learning and the Specialist Schools criteria. The Science Learning Centres’ Impact Award and ENTHUSE Award bursaries encourage you to evaluate the impact of CPD on your own practice, the school and on students’ learning.
Courses at a Glance

Professional Development Pathways

Our courses provide a wide range of effective CPD opportunities that can be taken at various stages of your teaching career. We provide courses for NQTs seeking a smoother progression from ITT, for physics specialists wishing to update their subject knowledge and for heads of science aiming to improve their science leadership skills to name a few.

Variety and Flexibility

All the Science Learning Centres offer either an outreach or bespoke CPD service. This may take the form of running a course from our programme in your school for your department or cluster of schools, or ‘tailor making’ CPD which directly corresponds to your needs.

To help identify your needs, our courses are grouped into professional development themes.

COURSES AVAILABLE AT EAST MIDLANDS

Courses are available at each regional centre, and are indicated by using the above tint of the regional colour scheme.

COURSES AVAILABLE AT OTHER REGIONAL CENTRES

These courses are available at each regional centre, and are indicated by using the above tint of the regional colour scheme.
Darwin Inspired Approaches

In 2009, we continue to celebrate 200 years since Charles Darwin was born, and 150 years since he published his theory of evolution by providing inspiring professional development opportunities. This course will help secondary teachers get the most from this year’s Darwin 200 celebrations. The courses and special events will consider Darwin related activities, misconceptions and resources, including the Welcome Trust’s free survival rival kits.

You will:

✓ consider how to convey to your students the excitement of the greatest voyage of discovery a scientist has ever made
✓ explore what Darwin’s life and achievements offer us in teaching biology and How Science Works
✓ consider how contemporary science teaching and scientific research can build on Darwin’s ideas

Code: 09003
Ideal for: secondary teachers
Age group: 11 – 19 years
Length: 1 day
Course fee: £200
Impact Award: £200

For more information see enclosed supplement or visit: www.slcs.ac.uk/network/09003

DNA to Darwin

Charles Darwin realised that his vague ideas about inheritance were a potential flaw in his explanation of evolution. Without doubt, he would have been delighted and intrigued to learn how modern genetics supports and confirms many of his ideas, providing evidence not only for the evolutionary relationships between all life on earth, but also showing precisely how living things evolve at the molecular level. DNA presents utterly compelling ‘forensic’ evidence for evolution, yet until now this evidence has not featured in school biology courses. To teach it well and in a stimulating manner, you will need to become familiar with DNA data and computer-based methods of analysing it. This course is for teachers of AS and A-level biology or equivalent courses.

You will:

✓ be able to explain how DNA and protein sequence data are obtained and analysed
✓ recognise and explain the significance of such data in both pure and applied evolutionary biology
✓ select case studies and computer-based analytical tools from the range provided that are appropriate for your students to use
✓ understand the basic principles underlying DNA and protein sequence analysis in order to guide students in the use of bioinformatics tools and the analysis of data

Code: 09095
Ideal for: post-16 teachers, further education lecturers
Age group: 16 – 19 years
Length: 1 day
Course fee: £25

For more information see enclosed supplement or visit: www.slcs.ac.uk/network/09095

Bringing Cutting Edge Science into the Classroom

From spring 2010 we will be running a series of courses to help you bring the excitement of contemporary science into the classroom, including a series of newly developed courses. The courses will introduce recent advances in a range of contemporary science areas. Courses will explore how these advances relate to How Science Works, and how discussion of each topic and its implications could be included in 14-19 secondary science curricula. There will be opportunities for you to talk to scientists working at the cutting edge who will be involved in the development and delivery of the courses. Full details will be available in autumn 2009.

You will be able to:

✓ describe and explain the particular contemporary science topic in the context of GCSE and post-16 science
✓ evaluate related contemporary scientific issues and controversies
✓ identify stimulating contexts for the teaching of the skills, knowledge and understanding of How Science Works in a contemporary context
✓ apply appropriate, inspiring teaching resources and approaches in teaching about the topic
✓ demonstrate the value of mathematical skills where appropriate

Code: various
Ideal for: secondary teachers, post-16 teachers, further education lecturers
Age group: 14 – 19 years
Length: 1 day
Course fee: £130
Impact Award: £200

For more information see enclosed supplement or visit: www.slcs.ac.uk/network/09097

For upcoming dates and topics, please contact your local centre
New Initiatives in the Curriculum

Triple Science Biology
This course will help you to get to grips with the GCSE biology extension units. You will learn how to apply the National Strategies’ teaching and learning models to specific biology topics in the classroom and how to plan exciting, interactive teaching and learning experiences, using ICT where appropriate. The course will provide hints and tips on running practicals for the extension topics but will not include ‘hands-on’ practical sessions. You will:

- be confident in the subject knowledge for the biology extension units
- be conversant with the practical techniques in the listed extension units
- be innovative in applying How Science Works ideas to biology
- be skilled in using a wide range of teaching and learning models in your own classroom practice

**Code** 09080
**Ideal for** secondary teachers, heads of science
**Age group** 14 – 16 years
**Length** 1 day
**Course fee** no charge for teachers from maintained schools in England

For more information see enclosed supplement or visit: www.slcs.ac.uk/network/09080

You might also be interested in Bringing Cutting Edge Science into the Classroom at a Regional Centre.

Triple Science Physics
This course is designed to help you to get to grips with the GCSE physics extension units. You will learn how to apply the National Strategies’ teaching and learning models to specific physics topics in the classroom and how to plan exciting, interactive teaching and learning experiences, using ICT where appropriate. The course will provide hints and tips on running practicals for the extension topics but will not include ‘hands-on’ practical sessions. You will:

- be confident in the subject knowledge for the physics extension units
- be aware of common student misconceptions about physics and able to address them
- be able to identify opportunities for practical work and ICT in enlivening physics in the classroom
- be skilled in using a wide range of teaching and learning models in your own classroom practice

**Code** 09082
**Ideal for** secondary teachers, heads of science
**Age group** 14 – 16 years
**Length** 1 day
**Course fee** no charge for teachers from maintained schools in England

For more information see enclosed supplement or visit: www.slcs.ac.uk/network/09082

You might also be interested in Bringing Cutting Edge Science into the Classroom at a Regional Centre.

Triple Science Chemistry
This course will help you to get to grips with the GCSE chemistry extension units. You will learn how to apply the National Strategies’ teaching and learning models to specific chemistry topics in the classroom and how to plan exciting, interactive teaching and learning experiences, using ICT where appropriate. The course will provide hints and tips on running practicals for the extension topics but will not include ‘hands-on’ practical sessions. You will:

- be confident in the subject knowledge for the chemistry extension units
- be aware of the practical techniques covered in the listed extension units

**Code** 09081
**Ideal for** secondary teachers, heads of science
**Age group** 14 – 16 years
**Length** 1 day
**Course fee** no charge for teachers from maintained schools in England

For more information see enclosed supplement or visit: www.slcs.ac.uk/network/09081

You might also be interested in Bringing Cutting Edge Science into the Classroom at a Regional Centre.

NEW INITIATIVES IN THE CURRICULUM

Triple Science Raising Attainment
This course will examine a range of strategies for raising attainment within Triple Science. Group workshops and activities will help teachers explore the links between motivation and attainment, how school policies can support attainment and how effective revision and exam techniques can optimise students’ performance. You will:

- understand the links between motivation and attainment
- have considered how assessment progresses from KS3 to KS4
- have examined school policies and practices
- looked at a range of exam techniques to engage pupils and improve attainment

**Code** 09084
**Ideal for** secondary teachers, heads of science
**Age group** 14 – 16 years
**Length** 1 day
**Course fee** no charge for teachers from maintained schools in England

For more information see enclosed supplement or visit: www.slcs.ac.uk/network/09084

This course would lead well into Online Science: Web Tools and Technologies for Improving Teaching and Learning in Science at the National Centre. Visit www.slcs.ac.uk/national/tea09174

NEW INITIATIVES IN THE CURRICULUM

Triple Science E-learning
These e-learning modules can be used individually or brought together as a coherent course on delivering Triple Science. The focused, yet simple, approach effectively integrates technology into science teaching. The e-learning activities not only give teachers a different learning experience, they also make a real difference in the classroom. Activities have been developed to encourage collaborative working and knowledge transfer – an important way of working for all science departments – and enhance partnerships and networks developing creative ways to offer Triple Science GCSEs.

See course instances for the outcomes offered by each e-learning module.

**Code** 09096
**Ideal for** secondary teachers, heads of science
**Age group** 14 – 16 years
**Length** 1 day
**Course fee** no charge for teachers from maintained schools in England

For more information see enclosed supplement or visit: www.slcs.ac.uk/network/09096

This course would lead well into Online Science: Web Tools and Technologies for Improving Teaching and Learning in Science at the National Centre. Visit www.slcs.ac.uk/national/tea09174

NEW INITIATIVES IN THE CURRICULUM

For more information see enclosed supplement or visit: www.slcs.ac.uk/network/09084
NEW INITIATIVES IN THE CURRICULUM

Moving Forward with KS3 Science – Teaching, Learning and Assessment

This course aims to help teachers and science departments continue to develop and implement the new Programme of Study at KS3. You will be informed about the latest developments, initiatives and resources designed to support teachers, including those produced by the National Strategies. Workshops will explore ways to integrate How Science Works, creative methods of assessment and ideas for planning the school curriculum.

You will:
❯ provide opportunities to strengthen your understanding of the new science KS3 PoS in the context of the ‘big picture’
❯ explore ways in which How Science Works can be integrated, developed and mapped into your SoW
❯ consider how published resources might be utilised to enhance teaching and learning
❯ explore creative approaches to the day-to-day and periodic assessment of students, including APP

Code: 09019
Ideal for: secondary teachers, heads of science
Age group: 11 – 14 years
Length: 1 day
Course fee: £130
Impact Award: £200

For more information see enclosed supplement or visit: www.slcs.ac.uk/network/09014

Science for Non-specialists

SCIENCE FOR NON-SPECIALISTS

Chemistry for Non-specialists (KS3)

This course will enable you to explore your understanding of chemistry and develop the confidence, flair and enthusiasm to teach chemistry at KS3. Chemistry provides excellent opportunities for engaging with practical work and you will be provided with opportunities to develop those important skills to illustrate key ideas and phenomena. The course will identify the topics that challenge students’ conceptual understanding of chemistry and provide you with strategies to tackle them. Links to relevant contexts are made throughout and chemistry career opportunities for prospective students will be presented. The courses are sufficiently flexible to respond to your individual needs – offering a personalised learning experience.

You will:
❯ increase your understanding of chemistry at KS3
❯ become more confident and competent in the teaching of chemistry at KS3
❯ rehearse relevant and interesting practical experiments and demonstrations to help inspire and engage your students
❯ develop an understanding of common student misconceptions and how these can be addressed
❯ develop the effective use of scientific models relevant to the teaching of chemistry

Code: 09062
Ideal for: secondary teachers, heads of science, NQTs
Age group: 11 – 14 years
Length: 4 days
Course fee: £200
Impact Award: £800

For more information visit: www.slcs.ac.uk/network/09062

Physics for Non-specialists

SCIENCE FOR NON-SPECIALISTS

Physics for Non-specialists (KS3)

This course will focus on the physics principles needed to teach physics at KS3. Explanation in science is key to understanding and you will be provided with opportunities to explore your own understanding of physics and develop your skills in explanation to students. In doing so, you will refine your own conceptual understanding in a range of topics. Opportunities for the use of stimulating practical activities and demonstrations will also be presented and ICT based resources will be explored.

You will:
❯ increase your understanding of physics topics at KS3
❯ become more confident and competent in your teaching of physics at KS3
❯ develop an understanding of common student misconceptions and how these can be addressed
❯ develop the effective use of scientific models relevant to the teaching of physics
❯ rehearse opportunities for practical work and the use of ICT based activities

Code: 09085
Ideal for: secondary teachers, heads of science, NQTs
Age group: 11 – 14 years
Length: 3 days
Course fee: £330
Impact Award: £400

For more information visit: www.slcs.ac.uk/network/09085

Non-specialists (KS3)

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09135

Physics for Non-specialists (KS4)

This course will focus on the physics principles needed to teach physics at KS4. Explanation in science is key to understanding and you will be provided with opportunities to explore your own understanding of physics and develop your skills in explaining ideas to students. In doing so, you will refine your own conceptual understanding in topics such as forces, earth and space, electricity and energy. Opportunities for the use of stimulating practical activities and demonstrations will also be presented and the use of ICT based resources will be explored.

You will:
❯ increase your understanding of physics topics at KS4
❯ become more confident and competent in your teaching of physics at KS4
❯ develop an understanding of common student misconceptions and how these can be addressed
❯ develop the effective use of scientific models relevant to the teaching of physics
❯ rehearse opportunities for practical work and the use of ICT based activities

Code: 09086
Ideal for: secondary teachers, heads of science, NQTs
Age group: 14 – 16 years
Length: 2 days
Course fee: £230
Impact Award: £400

For more information see enclosed supplement or visit: www.slcs.ac.uk/network/09086

You might also be interested in: Physics for Non-specialists (11-16) at the National Centre. Visit www.slcs.ac.uk/national/110153
Physics for Non-specialists (KS3 & KS4)

This course will focus on the physics principles needed to teach physics at KS3 and KS4. Explanation in science is key to understanding and you will be provided with opportunities to explore your own understanding of physics and develop your skills in explaining ideas to students. In doing so, you will refine your own conceptual understanding in a range of topics. Opportunities for the use of stimulating practical activities and demonstrations will also be presented and ICT based resources will be explored.

You will:
- increase your understanding of physics topics at KS3/4
- become more confident and competent in your teaching of physics at KS3/4
- develop an understanding of common student misconceptions and how these can be addressed
- rehearse practical opportunities relevant to the teaching of physics
- rehearse opportunities for practical work and the use of ICT based activity

This course will enable you to explore your understanding of chemistry and develop the confidence, flair and enthusiasm to teach chemistry at KS4. Chemistry provides excellent opportunities for engaging with practical work and you will be provided with opportunities to develop these important skills to illustrate key ideas and phenomena. The course will identify the topics that challenge students’ conceptual understanding of chemistry and provide you with strategies to tackle them. Links to relevant contexts are made throughout and chemistry career opportunities for prospective students will be presented. The courses are sufficiently flexible to respond to your individual needs - offering a personalised learning experience.

You will:
- increase your understanding of chemistry topics at KS4
- become more confident and competent in the teaching of chemistry at KS4
- rehearse relevant and interesting practical experiments and demonstrations to help inspire and engage your students
- develop an understanding of common student misconceptions and how these can be addressed
- develop the effective use of scientific models relevant to the teaching of chemistry

This course will enable physics teachers and technicians to explore a range of ideas for teaching topics across the physics curriculum and develop an understanding of how practical work in physics lessons can be made more relevant and effective. There will be hands-on opportunities to explore creative approaches to a range of new and familiar practical techniques using resources, publications and software including those produced by the Science Enhancement Programme. How Science Works, through the provision of explanation and investigation, will be embedded.

You will:
- understand the nature, purpose and importance of practical work in science lessons
- be able to use materials from the Science Enhancement Programme
- be able to use free shareware for datalogging
- be able to develop new approaches to the teaching of topics such as radioactivity and energy transformation
- be able to use practical work to support learning

Chemistry for Non-specialists (KS4)

This course will enable physics teachers and technicians to explore a range of ideas for teaching topics across the physics curriculum and develop an understanding of how practical work in physics lessons can be made more relevant and effective. There will be hands-on opportunities to explore creative approaches to a range of new and familiar practical techniques using resources, publications and software including those produced by the Science Enhancement Programme. How Science Works, through the provision of explanation and investigation, will be embedded.

You will:
- understand the nature, purpose and importance of practical work in science lessons
- be able to use materials from the Science Enhancement Programme
- be able to use free shareware for datalogging
- be able to develop new approaches to the teaching of topics such as radioactivity and energy transformation
- be able to use practical work to support learning

Practical Work and ICT Focus

Effective Practical Approaches in Physics

This course will enable physics teachers and technicians to explore a range of ideas for teaching topics across the physics curriculum and develop an understanding of how practical work in physics lessons can be made more relevant and effective. There will be hands-on opportunities to explore creative approaches to a range of new and familiar practical techniques using resources, publications and software including those produced by the Science Enhancement Programme. How Science Works, through the provision of explanation and investigation, will be embedded.

You will:
- understand the nature, purpose and importance of practical work in science lessons
- be able to use materials from the Science Enhancement Programme
- be able to use free shareware for datalogging
- be able to develop new approaches to the teaching of topics such as radioactivity and energy transformation
- be able to use practical work to support learning

Chemistry Demonstrations: Effective and Safe

This course will enable you to explore your understanding of chemistry and develop the confidence, flair and enthusiasm to teach chemistry at KS4. Chemistry provides excellent opportunities for engaging with practical work and you will be provided with opportunities to develop these important skills to illustrate key ideas and phenomena. The course will identify the topics that challenge students’ conceptual understanding of chemistry and provide you with strategies to tackle them. Links to relevant contexts are made throughout and chemistry career opportunities for prospective students will be presented. The courses are sufficiently flexible to respond to your individual needs - offering a personalised learning experience.

You will:
- improve skills in carrying out science demonstrations
- extend your repertoire of science demonstrations at KS3 and KS4
- understand the preparation and planning requirements of a good demonstration
- analyse safety issues and resourcing of the practicals used on the course

Effective and Safe Science Demonstrations

This course will enable you to explore your understanding of chemistry and develop the confidence, flair and enthusiasm to teach chemistry at KS4. Chemistry provides excellent opportunities for engaging with practical work and you will be provided with opportunities to develop these important skills to illustrate key ideas and phenomena. The course will identify the topics that challenge students’ conceptual understanding of chemistry and provide you with strategies to tackle them. Links to relevant contexts are made throughout and chemistry career opportunities for prospective students will be presented. The courses are sufficiently flexible to respond to your individual needs - offering a personalised learning experience.

You will:
- improve skills in carrying out science demonstrations
- extend your repertoire of science demonstrations at KS3 and KS4
- understand the preparation and planning requirements of a good demonstration
- analyse safety issues and resourcing of the practicals used on the course

Science for Non-specialists

Physics for Non-specialists

Age group: 11 – 16 years
Length: 3 days
Course fee: £600
Impact Award: £330

Chemistry for Non-specialists

Age group: 11 – 16 years
Length: 4 days
Course fee: £800
Impact Award: £200

Practical Work and ICT Focus

Effective Practical Approaches in Physics

Age group: 11 – 16 years
Length: 1 day
Course fee: £130
Impact Award: £600

Chemistry Demonstrations: Effective and Safe

Age group: 11 – 16 years
Length: 1 day
Course fee: £130
Impact Award: £600

For more information see enclosed supplement or visit:
www.slcs.ac.uk/network/09019
www.slcs.ac.uk/network/09020
www.slcs.ac.uk/network/09063
www.slcs.ac.uk/network/09069
For more information visit:
www.slcs.ac.uk/network/09069

You might also be interested in Physics for Non-specialists (T1-16) at the National Centre. Visit www.slcs.ac.uk/national/09133
PRACTICAL WORK AND ICT FOCUS

Enhancing Science with ICT
ICT plays a fundamental role in support, enhancing and extending pupils’ learning in science. ICT tools can be used to develop understanding, explore models, and communicate ideas and to collect and analyse data. This course will be made up of a series of modules which address these criteria. The course will be designed to address both conceptual understanding of the role of ICT and, importantly, to equip you with the knowledge, skills and resources to make immediate use of ICT in your teaching. The course will be hands-on with content and activities clearly aligned to the secondary science curriculum.

You will:
- understand how ICT can support, enhance and extend science teaching and learning
- explore a range of relevant ICT applications
- develop materials and approaches to use in your teaching

Code: 09023
Ideal for: secondary teachers, science technicians
Age group: 11 – 16 years
Length: 1 day
Course fee: £130
Impact Award: £200 - teachers/£100 - technicians

For more information see enclosed supplement or visit: www.slcs.ac.uk/network/09023

Effective Practical Approaches in Chemistry
This course will enable chemistry teachers and technicians to develop an understanding of how practical work in their lessons can be made more relevant, accessible and effective. There will be hands-on opportunities to explore a range of interesting and creative practical techniques, including a look at resources and software produced by the Science Enhancement Programme. Links to the curriculum, including How Science Works, will be embedded throughout.

You will:
- understand the nature, purpose and importance of practical work in science lessons
- be able to use materials from the Science Enhancement Programme
- develop new and established practical ideas and techniques to teach chemistry topics or How Science Works
- plan how to incorporate these new ideas into Schemes of Work

Code: 09094
Ideal for: secondary teachers, science technicians
Age group: 11 – 16 years
Length: 1 day
Course fee: £130
Impact Award: £200 - teachers/£100 - technicians

For more information see enclosed supplement or visit: www.slcs.ac.uk/network/09094

Effective Practical Approaches in Biology
This course will enable biology teachers and technicians to explore a range of ideas for teaching topics across the biology curriculum and develop an understanding of how practical work in biology lessons can be made more relevant and effective. In particular, the course focuses on how biology practical work can be used to develop student awareness and understanding of How Science Works at KS3 and KS4. This will include investigative work using both plants and animals, and also how science is communicated and represented to the public. It will offer refreshing and dynamic approaches to teaching the new curriculum, that make the subject more accessible and relevant.

You will:
- understand the nature, purpose and importance of practical work in science lessons
- develop new and established practical ideas and techniques to teach biology topics or How Science Works
- plan how to incorporate these new ideas into Schemes of Work
- be able to explain the relevance of the subject content to real life
- carry out practical activities for enriching science teaching and learning
- develop skills and resources for teaching the new biology curriculum

Code: 09012
Ideal for: secondary teachers, science technicians
Age group: 11 – 16 years
Length: 1 day
Course fee: £130

For more information visit: www.slcs.ac.uk/network/09012

For more information visit: www.slcs.ac.uk/national/nac09113
Assessment for Learning in the Science Classroom

This course looks at how Assessment for Learning techniques can be used to raise achievement and help pupils become more independent in their learning in science. This course will offer subject-specific advice on how to develop your own learning and disseminate this knowledge to your department.

The course supports and extends Secondary National Science, NQTs andAPP courses. The emphasis moves on prioritise Assessment for Learning strategies that you will implement in your day-to-day practice.

You will:
- use a wide variety of Assessment for Learning teaching strategies to promote pupils’ learning in science
- apply the research that supports Assessment for Learning in science
- prioritise Assessment for Learning strategies that you will implement in your day-to-day practice

Code 09026
Ideal for secondary teachers, heads of science, NQTs
Age group 11–16 years
Length 1 day
Course fee £130
Impact Award £200

For more information visit:
www.slcs.ac.uk/network/09026

This course would lead into Leading Assessment for Learning in Science (5165) in the National Centre. Visit www.slcs.ac.uk/national/lead19144

Learning Outside the Classroom: Science in Informal Settings

From school grounds, industry, parks and museums, science is part of the everyday fabric of our world. We can therefore use this wealth of learning opportunities, outside the classroom, to put science into context and enthuse our students.

This course allows teachers to explore wider strategies for teaching science in informal settings, and offers suggestions for integrating new media and ICT resources to enrich learning. The approaches used are based on the findings of current education research.

You will:
- be able to explain science in context by using a range of diverse spaces outside the classroom
- describe how internet and ‘new media’ resources can enrich learning both inside and outside the classroom
- develop resources and approaches to engage, encourage discussion and allow students autonomy
- apply best practice in relation to overcoming barriers when visiting planning
- create resources that can be used back at school

Code 09036
Ideal for secondary teachers, heads of science, NQTs
Age group 11–16 years
Length 1 day
Course fee £130
Impact Award £200

For more information visit:
www.slcs.ac.uk/network/09036

This course would be complemented by Exploring Science in the Outdoor Classroom at the National Centre. Visit www.slcs.ac.uk/national/lead1907

TEACHING, LEARNING AND ASSESSMENT

Active Approaches in A-level Applied Science

In June 2008, over 100,000 students completed an applied science course at AS Level. With numbers set to rise further, schools are reporting that students of a kind who would not previously have continued with science post-16 are choosing to do so. More and more schools and colleges are introducing A-level applied science, using AQA or OCR specifications. This one-day course will help teachers new to teaching A-level applied science. As A-level applied science has a limited lifetime (expires 2013), the course will include an update on Science Diploma developments.

You will:
- understand the rationale for applied science and how teaching approaches differ from separate science A-levels
- gain confidence in planning assignments and assessment through illustrative examples and case studies
- explore, with colleagues, ways of making a year plan that incorporates Unit 1
- become familiar with sources of appropriate learning materials and ongoing teacher support

Code 09032
Ideal for post-16 teachers, further education lecturers, heads of science
Age group 16–19 years
Length 1 day
Course fee £130
Impact Award £200

For more information visit:
www.slcs.ac.uk/network/09032

This course would be complemented by Exploring Science in the Outdoor Classroom at the National Centre. Visit www.slcs.ac.uk/network/0907

TEACHING, LEARNING AND ASSESSMENT

Inspiring Post-16 Physics

This course aims to support you in the planning and delivery of the new specifications for post-16 physics, to review your subject knowledge and explore a range of approaches to teaching and learning. The course will include several practical activities that are applicable to student investigations and explore approaches to delivery.

You will:
- develop strategies for making your teaching of post-16 physics more engaging and inspiring
- explore creative approaches to practical work in post-16 physics
- consider how to embed aspects of How Science Works into your teaching

Code 09090
Ideal for post-16 teachers, further education lecturers, heads of science
Age group 16–19 years
Length 1 day
Course fee £130
Impact Award £200

For more information see enclosed supplement or visit:
www.slcs.ac.uk/network/09090

This course would be complemented by Exploring Post-16 Physics at the National Centre. Visit www.slcs.ac.uk/network/09018

COURSE AVAILABLE AT OTHER REGIONAL CENTRES

TEACHING, LEARNING AND ASSESSMENT

Active Approaches in A-level Physics

The course aims to support you in the planning and delivery of the new specifications for post-16 physics, to review your subject knowledge and explore a range of approaches to teaching and learning. The course will include several practical activities that are applicable to student investigations and explore approaches to delivery.

You will:
- develop strategies for making your teaching of post-16 physics more engaging and inspiring
- explore creative approaches to practical work in post-16 physics
- consider how to embed aspects of How Science Works into your teaching

Code 09090
Ideal for post-16 teachers, further education lecturers, heads of science
Age group 16–19 years
Length 1 day
Course fee £130
Impact Award £200

For more information see enclosed supplement or visit:
www.slcs.ac.uk/network/09090

This course would be complemented by Exploring Post-16 Physics at the National Centre. Visit www.slcs.ac.uk/network/09018

COURSE AVAILABLE AT OTHER REGIONAL CENTRES
Active Approaches in A-level Chemistry

The course aims to support you in the planning and delivery of the new specifications for post-16 chemistry. The course is designed to update your subject knowledge, and explore a range of approaches to teaching and learning. In particular, the course will include opportunities to practice interesting creative approaches to practical work. You will look at how to embed How Science Works into your teaching, looking at the history of the subject, current issues in chemistry research and green chemistry.

You will:
- develop strategies for making your teaching of post-16 chemistry more engaging and inspiring
- explore new creative approaches to practical work in post-16 chemistry
- consider how to embed aspects of How Science Works into your teaching

Code: 09089
Ideal for: post-16 teachers, further education lecturers, heads of science
Age group: 16 – 19 years
Length: 1 day
Course fee: £130
Impact Award: £200

For more information visit: [www.slcs.ac.uk/network/09089](http://www.slcs.ac.uk/network/09089)

This course would be complemented by Inspiring Post-16 Chemistry at the National Centre. Visit [www.slcs.ac.uk/national/nac09156](http://www.slcs.ac.uk/national/nac09156)

Personalising Learning in Science

Active Approaches in A-level Biology

The course aims to support you in the planning and delivery of the new specifications for post-16 biology, to review your subject knowledge and explore a range of approaches to teaching and learning. The course will include several practical activities that are applicable to student investigations and explore approaches to delivery. You will conduct a number of practical activities that lend themselves to student investigations and use other active teaching techniques to enrich the delivery of the curriculum.

You will:
- develop strategies for making your teaching of post-16 biology more engaging and inspiring
- explore new creative approaches to practical work in post-16 biology
- consider how to embed aspects of How Science Works into your teaching

Code: 09091
Ideal for: post-16 teachers, further education lecturers, heads of science
Age group: 16 – 19 years
Length: 1 day
Course fee: £130
Impact Award: £200

For more information visit: [www.slcs.ac.uk/network/09091](http://www.slcs.ac.uk/network/09091)

This course would be complemented by Inspiring Post-16 Biology at the National Centre. Visit [www.slcs.ac.uk/national/nac09137](http://www.slcs.ac.uk/national/nac09137)

Action Research for the Physics Programme

This programme will explore how new approaches to teaching physics can increase young people’s engagement with the subject and encourage them to pursue physics beyond GCSE level.

The programme will comprise of three, one day professional development sessions over a two year period. It will comprise an initial professional development day which introduces new ideas and approaches. This will be followed by action research in your school or college to test out ideas and then two further professional development sessions to reflect and refine your approaches and to add new ideas to the school based research activity.

You will:
- gain a greater understanding of factors affecting engagement in physics
- acquire strategies that can lead to increased engagement and achievement of young people in physics
- explore ways to make your students aware of the contribution of physics to their future lives
- review and reflect on your own and your school’s practice
- plan how you can implement appropriate change in your school

Code: 09303
Ideal for: secondary teachers, heads of science
Age group: 13 – 16 years
Length: 3 days CPD and an action research project over a period of two years
Course fee: £330
Impact Award: £200

For more information see enclosed supplement or visit: [www.slcs.ac.uk/network/09303](http://www.slcs.ac.uk/network/09303)

You might also be interested in Science for All: Challenging the Gifted and Talented Students

Science for Gifted and Talented Students

This course will raise awareness of the importance of supporting Gifted and Talented (G&T) students in science by providing the opportunity for you to consider your current practice and how this can be enhanced within normal teaching programmes. Strategies for identifying G&T students will be covered as well as techniques for teaching and learning. In addition the course will provide a number of stimulating activities designed to engage, challenge and inspire G&T students. You will also have the opportunity to share best practice and develop new ideas and activities.

You will:
- acquire a greater understanding of the needs of G&T students
- develop ideas for G&T activities that will inspire students
- gain confidence in using varied strategies for G&T teaching
- take part in a range of hands on activities which can be used back in the classroom
- be aware of opportunities offered by outside agencies

Code: 09037
Ideal for: secondary teachers, heads of science, teaching assistants
Age group: 11 – 16 years
Length: 1 day
Course fee: £130/£95 teaching assistants
Impact Award: £200

For more information see enclosed supplement or visit: [www.slcs.ac.uk/network/09037](http://www.slcs.ac.uk/network/09037)

You might also be interested in Science for All: Challenging the Gifted at the National Centre. Visit [www.slcs.ac.uk/national/nac09116](http://www.slcs.ac.uk/national/nac09116)
STEM Curriculum Innovation & Implementation

PERSONALISING LEARNING IN SCIENCE

Teaching Science to Students with SEN

This course will consider approaches and strategies for overcoming potential barriers to learning science and provide you with practical ideas and examples that can be used to help your SEN students in mainstream classrooms and also in special school environments. There will include examples of good practice, such as using multisensory learning, symbol supported texts and learning games. Reference will be made to P-scales, Schemes of Work and assessment materials. The course provides strategies for SEN co-ordinators to support their school departments in addressing inclusion.

You will:

- improve your understanding of differentiation in science teaching and learning
- acquire a range of ideas for addressing student accessibility to science with a focus on scientific enquiry
- develop techniques to assess progress and provide feedback to students with special educational needs
- gain increased confidence for teaching science in an all-inclusive way
- consider how you can use what you have learned to make an impact in your own school or department

Code 09038
Ideal for secondary teachers, heads of science, teaching assistants
Age group 11-16 years
Length 1 day
Course fee £130/£95 teaching assistants
Impact Award £200

For more information visit: www.slcs.ac.uk/network/09038

You might also be interested in Developing Skills to Support Special Needs in Science at the National Centre. Visit www.slcs.ac.uk/network/09108

PERSONALISING LEARNING IN SCIENCE

Personal Learning and Thinking Skills in Science

This course will highlight strategies that will help pupils develop PLTS and SEAL in an integrated way within science lessons. Principles will be stressed so that you can personalise your approaches within your departments and/or in the whole school.

We will clarify the approaches using examples which underpin the role of the teacher. We will illustrate where PLTS and SEAL can be explicitly taught and where pupils need to be provided with opportunities to experience in order to develop. The issues around assessment will be addressed.

You will:

- be able to explain the value of these developments in teaching and learning
- understand the pedagogic principles underpinning PLTS and SEAL
- be more confident to use a variety of strategies in the classroom
- be able to judge different assessment approaches

Code 09013
Ideal for secondary teachers, heads of science, teaching assistants
Age group 11-16 years
Length 1 day
Course fee £130/£95 teaching assistants
Impact Award £200 (teachers)

For more information see enclosed supplement or visit: www.slcs.ac.uk/network/09013

KS3 STEM Subjects Working Together

As part of the government blue print to bring about better co-ordination to the STEM world, the network of Science Learning Centres will be offering courses and events to explore strategies for teaching and learning and the sharing of resources across STEM subjects. This course will provide opportunities to share effective practice in teaching and leaning with colleagues from mathematics, science and design and technology. In particular, we will be looking at developing common approaches to enrich the learner experience, exploring cross-curricular themes and identifying ways to enthuse and engage learners in STEM subjects.

You will:

- explore the challenges and opportunities presented by the new KS3 curriculum
- share good practice and network with other colleagues
- collaboratively plan how you will use the information and ideas generated

Code 09013
Ideal for secondary teachers, heads of science
Age group 11-14 years
Length 1 day
Course fee £130
Impact Award £200

For more information see enclosed supplement or visit: www.slcs.ac.uk/network/09013

COURSE AVAILABLE AT OTHER REGIONAL CENTRES

STEM Curriculum Innovation & Implementation

Collaborative Learning in Science and Design & Technology

This course provides an opportunity for teachers of design and technology (D&T), and science to work together to explore and develop their own understanding of the key processes and concepts in each other’s subjects. You will investigate how these can be used to engage and motivate students in order to enhance pupils’ achievements and skills in both science investigations and designing and making assignments.

You will:

- consider pedagogies appropriate to the development of joint science and D&T projects at KS3
- consider the cross-curricula opportunities for science and D&T
- develop collaborative approaches to promote joint working between science and D&T
- devise a collaborative science and D&T project that uses engaging topics eg smart materials

Code 09219
Ideal for secondary teachers, heads of science
Age group 11-14 years
Length 1 day
Course fee £130
Impact Award £200

For more information see enclosed supplement or visit: www.slcs.ac.uk/network/09219

COURSE AVAILABLE AT OTHER REGIONAL CENTRES

Teaching Science to Students with SEN

This course will consider approaches and strategies for overcoming potential barriers to learning science and provide you with practical ideas and examples that can be used to help your SEN students in mainstream classrooms and also in special school environments. There will include examples of good practice, such as using multisensory learning, symbol supported texts and learning games. Reference will be made to P-scales, Schemes of Work and assessment materials. The course provides strategies for SEN co-ordinators to support their school departments in addressing inclusion.

You will:

- improve your understanding of differentiation in science teaching and learning
- acquire a range of ideas for addressing student accessibility to science with a focus on scientific enquiry
- develop techniques to assess progress and provide feedback to students with special educational needs
- gain increased confidence for teaching science in an all-inclusive way
- consider how you can use what you have learned to make an impact in your own school or department

Code 09038
Ideal for secondary teachers, heads of science, teaching assistants
Age group 11-16 years
Length 1 day
Course fee £130/£95 teaching assistants
Impact Award £200

For more information visit: www.slcs.ac.uk/network/09038

You might also be interested in Developing Skills to Support Special Needs in Science at the National Centre. Visit www.slcs.ac.uk/network/09108

PERSONALISING LEARNING IN SCIENCE

Teaching Science to Students with SEN

This course will consider approaches and strategies for overcoming potential barriers to learning science and provide you with practical ideas and examples that can be used to help your SEN students in mainstream classrooms and also in special school environments. There will include examples of good practice, such as using multisensory learning, symbol supported texts and learning games. Reference will be made to P-scales, Schemes of Work and assessment materials. The course provides strategies for SEN co-ordinators to support their school departments in addressing inclusion.

You will:

- improve your understanding of differentiation in science teaching and learning
- acquire a range of ideas for addressing student accessibility to science with a focus on scientific enquiry
- develop techniques to assess progress and provide feedback to students with special educational needs
- gain increased confidence for teaching science in an all-inclusive way
- consider how you can use what you have learned to make an impact in your own school or department

Code 09038
Ideal for secondary teachers, heads of science, teaching assistants
Age group 11-16 years
Length 1 day
Course fee £130/£95 teaching assistants
Impact Award £200

For more information visit: www.slcs.ac.uk/network/09038

You might also be interested in Developing Skills to Support Special Needs in Science at the National Centre. Visit www.slcs.ac.uk/network/09108

PERSONALISING LEARNING IN SCIENCE

Personal Learning and Thinking Skills in Science

This course will highlight strategies that will help pupils develop PLTS and SEAL in an integrated way within science lessons. Principles will be stressed so that you can personalise your approaches within your departments and/or in the whole school.

We will clarify the approaches using examples which underpin the role of the teacher. We will illustrate where PLTS and SEAL can be explicitly taught and where pupils need to be provided with opportunities to experience in order to develop. The issues around assessment will be addressed.

You will:

- be able to explain the value of these developments in teaching and learning
- understand the pedagogic principles underpinning PLTS and SEAL
- be more confident to use a variety of strategies in the classroom
- be able to judge different assessment approaches

Code 09013
Ideal for secondary teachers, heads of science, teaching assistants
Age group 11-16 years
Length 1 day
Course fee £130/£95 teaching assistants
Impact Award £200 (teachers)

For more information see enclosed supplement or visit: www.slcs.ac.uk/network/09013

This course would be complemented by Teaching Science using Thinking Skills at the National Centre. Visit www.slcs.ac.uk/network/09145

KS3 STEM Subjects Working Together

As part of the government blue print to bring about better co-ordination to the STEM world, the network of Science Learning Centres will be offering courses and events to explore strategies for teaching and learning and the sharing of resources across STEM subjects. This course will provide opportunities to share effective practice in teaching and leaning with colleagues from mathematics, science and design and technology. In particular, we will be looking at developing common approaches to enrich the learner experience, exploring cross-curricular themes and identifying ways to enthuse and engage learners in STEM subjects.

You will:

- explore the challenges and opportunities presented by the new KS3 curriculum
- share good practice and network with other colleagues
- collaboratively plan how you will use the information and ideas generated

Code 09013
Ideal for secondary teachers, heads of science
Age group 11-14 years
Length 1 day
Course fee £130
Impact Award £200

For more information see enclosed supplement or visit: www.slcs.ac.uk/network/09013

COURSE AVAILABLE AT OTHER REGIONAL CENTRES

STEM Curriculum Innovation & Implementation

Collaborative Learning in Science and Design & Technology

This course provides an opportunity for teachers of design and technology (D&T), and science to work together to explore and develop their own understanding of the key processes and concepts in each other’s subjects. You will investigate how these can be used to engage and motivate students in order to enhance pupils’ achievements and skills in both science investigations and designing and making assignments.

You will:

- consider pedagogies appropriate to the development of joint science and D&T projects at KS3
- consider the cross-curricula opportunities for science and D&T
- develop collaborative approaches to promote joint working between science and D&T
- devise a collaborative science and D&T project that uses engaging topics eg smart materials

Code 09219
Ideal for secondary teachers, heads of science
Age group 11-14 years
Length 1 day
Course fee £130
Impact Award £200

For more information see enclosed supplement or visit: www.slcs.ac.uk/network/09219

COURSE AVAILABLE AT OTHER REGIONAL CENTRES
You will:
- build confidence in drawing on work related and career contexts within STEM subject teaching
- identify the needs and potential for development of this area within your own practice and / or beyond your subject area
- gain awareness of personal skills and capabilities development within your own lessons and beyond linked to STEM careers
- reflect on practice within the classroom / school in order to identify a coherent and inclusive approach to embed STEM subject choice and careers

Code
09015
Ideal for
secondary teachers, heads of science
Age group
11 – 14 years
Length
1 day
Course fee
£130
Impact Award
£200
For more information see enclosed supplement or visit:
www.slcs.ac.uk/network/09015

You might also be interested in Careers from STEM conference at the National Centre. Visit www.slcs.ac.uk/network/09304

STEM Subject Choice and Careers: Inspiring Experienced Teachers and Subject Leaders
This day course will provide a thorough insight into the innovative approaches and curriculum resources developed by the Centre for Science Education and VT Enterprise in the DCSF funded STEM Subject Choice and Careers initiative. The course will enable experienced teachers and subject leaders to benchmark their own practice and learn how to develop this area of growing importance within their own school and across the STEM subjects. The course will illustrate how to progress and further develop effective associated areas of teacher practice such as development of students' personal skills and capabilities, equality and diversity and cross-curricula working. There will be an opportunity to consider how to develop external partnerships with careers practitioners and STEM enrichment providers.

You will:
- build confidence in drawing on work related and career contexts within STEM subject teaching
- identify the needs and potential for development of this area within your own practice and / or beyond your subject area
- gain awareness of personal skills and capabilities development within your own lessons and beyond linked to STEM careers
- reflect on practice within the classroom / school in order to identify a coherent and inclusive approach to embed STEM subject choice and careers

Code
09034
Ideal for
secondary teachers, heads of science
Age group
11 – 14 years
Length
1 day
Course fee
£130
Impact Award
£200
For more information visit:
www.slcs.ac.uk/network/09034

You might also be interested in Careers from STEM conference at the National Centre. Visit www.slcs.ac.uk/network/09034

STEM Subject Choice and Careers: Inspiring NQTs and Early Career Teachers
This course will prepare STEM teachers to set up a successful and thriving science and engineering club. You will experience inspiring cross-curricular resources and project ideas and will access support networks, organisations and previous good practice for the running of a science and engineering club.

The course reflects the Government’s ambition to offer engaging and stretching opportunities to KS3 pupils with an interest and potential in science, as a way of helping young people to understand the opportunities that science, technology, engineering and maths (STEM) education can offer.

You will:
- consider the opportunities and challenges for setting up a club to enrich, enhance and extend the KS3 curriculum
- be aware of organisations that can be called upon to improve collaboration between schools, industry and research
- try out suitable hands on and practical activities and consider longer term projects
- be informed of and share good practice with established clubs in your region

Code
09092
Ideal for
secondary teachers, heads of science
Age group
11 – 16 years
Length
1 day
Course fee
£130
Impact Award
£200
For more information visit:
www.slcs.ac.uk/network/09092

You might also be interested in Science in Secondary Schools conference at the National Centre. Visit www.slcs.ac.uk/network/09034

STEM CURRICULUM INNOVATION & IMPLEMENTATION

Delivering Effective Professional Development
How confident are you at supporting your colleagues? Do you load training on INSET days and at staff meetings? Do you deliver training to colleagues in your cluster? This course will improve your confidence and capability in delivering effective professional development. Being able to deliver CPD effectively is an important skill. Internally, it can raise the knowledge base of a college, school or department and the profile of a presenter. Aimed at primary, secondary and post-16 teachers and lecturers, we are offering a course seminar to develop skills to successfully deliver CPD events both within your school and to external agencies. Through a number of interactive exercises, you will explore what makes a learning experience memorable and effective.

You will:
- select and relevant valid CPD topics and define key learning outcomes
- develop key techniques to use with peer groups
- plan a CPD or training session
- deliver engaging and succinct learning presentations
- understand how to engage different audiences

Code
09042
Ideal for
secondary teachers, heads of science
Age group
11 – 16 years
Length
1 day
Course fee
£130
Impact Award
£200
For more information visit:
www.slcs.ac.uk/network/09042

You might also be interested in Science in Secondary Schools conference at the National Centre. Visit www.slcs.ac.uk/network/09034

Leadership

Successful Science and Engineering Clubs

This course will prepare STEM teachers to set up a successful and thriving science and engineering club. You will experience inspiring cross-curricular resources and project ideas and will access support networks, organisations and previous good practice for the running of a science and engineering club.

This course reflects the Government’s ambition to offer engaging and stretching opportunities to KS3 pupils with an interest and potential in science, as a way of helping young people to understand the opportunities that science, technology, engineering and maths (STEM) education can offer.

You will:
- consider the opportunities and challenges for setting up a club to enrich, enhance and extend the KS3 curriculum
- be aware of organisations that can be called upon to improve collaboration between schools, industry and research
- try out suitable hands on and practical activities and consider longer term projects
- be informed of and share good practice with established clubs in your region

STEM CURRICULUM INNOVATION & IMPLEMENTATION

Leadership

Delivering Effective Professional Development
How confident are you at supporting your colleagues? Do you load training on INSET days and at staff meetings? Do you deliver training to colleagues in your cluster? This course will improve your confidence and capability in delivering effective professional development. Being able to deliver CPD effectively is an important skill. Internally, it can raise the knowledge base of a college, school or department and the profile of a presenter. Aimed at primary, secondary and post-16 teachers and lecturers, we are offering a course seminar to develop skills to successfully deliver CPD events both within your school and to external agencies. Through a number of interactive exercises, you will explore what makes a learning experience memorable and effective.

You will:
- select and relevant valid CPD topics and define key learning outcomes
- develop key techniques to use with peer groups
- plan a CPD or training session
- deliver engaging and succinct learning presentations
- understand how to engage different audiences

Code
09042
Ideal for
secondary teachers, heads of science
Age group
11 – 16 years
Length
1 day
Course fee
£130
Impact Award
£200
For more information visit:
www.slcs.ac.uk/network/09042

You might also be interested in Science in Secondary Schools conference at the National Centre. Visit www.slcs.ac.uk/network/09034

Leadership

Successful Science and Engineering Clubs

This course will prepare STEM teachers to set up a successful and thriving science and engineering club. You will experience inspiring cross-curricular resources and project ideas and will access support networks, organisations and previous good practice for the running of a science and engineering club.

This course reflects the Government’s ambition to offer engaging and stretching opportunities to KS3 pupils with an interest and potential in science, as a way of helping young people to understand the opportunities that science, technology, engineering and maths (STEM) education can offer.

You will:
- consider the opportunities and challenges for setting up a club to enrich, enhance and extend the KS3 curriculum
- be aware of organisations that can be called upon to improve collaboration between schools, industry and research
- try out suitable hands on and practical activities and consider longer term projects
- be informed of and share good practice with established clubs in your region

STEM CURRICULUM INNOVATION & IMPLEMENTATION

Leadership

Delivering Effective Professional Development
How confident are you at supporting your colleagues? Do you load training on INSET days and at staff meetings? Do you deliver training to colleagues in your cluster? This course will improve your confidence and capability in delivering effective professional development. Being able to deliver CPD effectively is an important skill. Internally, it can raise the knowledge base of a college, school or department and the profile of a presenter. Aimed at primary, secondary and post-16 teachers and lecturers, we are offering a course seminar to develop skills to successfully deliver CPD events both within your school and to external agencies. Through a number of interactive exercises, you will explore what makes a learning experience memorable and effective.

You will:
- select and relevant valid CPD topics and define key learning outcomes
- develop key techniques to use with peer groups
- plan a CPD or training session
- deliver engaging and succinct learning presentations
- understand how to engage different audiences

Code
09042
Ideal for
secondary teachers, heads of science
Age group
11 – 16 years
Length
1 day
Course fee
£130
Impact Award
£200
For more information visit:
www.slcs.ac.uk/network/09042

You might also be interested in Science in Secondary Schools conference at the National Centre. Visit www.slcs.ac.uk/network/09034
Supporting Science Teaching

**Working as a Science Technician - An Introduction to the Role**

This course is ideal for new or inexperienced technicians and is designed to give grounding in the role of the school or college science technician. Sessions on this course will cover the role of a technician, general health and safety, technician skills and working in a science department. This course complements other skills related to professional development courses available through the Science Learning Centre network.

You will:

- work towards successfully implementing the new skills and knowledge acquired in the course
- describe and apply policies, procedures and actions that will lead to an effective and efficient technical service
- describe and explain safety implications and how to address them.

**Code** 09072

**Ideal for** science technicians

**Age group** 11 – 16 years

**Length** 1 day

**Course fee** £95

**Impact Award** £100

For more information see enclosed supplement or visit: www.slcs.ac.uk/network/09072

This course would lead well into Skills for New Technicians at the National Centre. Visit: www.slcs.ac.uk/network/09148

**Senior Technicians - Leadership, Training and Management**

This course is for senior technicians who are responsible for running or aspiring to run their science department’s technical service. The course is designed to enhance leadership and management skills, examining the role of the senior technician, managing an effective technical service, creating and contacting local groups, and training other technicians and teachers.

You will:

- enhance your leadership skills
- develop skills to share good practice and address key issues that are essential for effective performance in your role
- evaluate your situations and identify any necessary changes to improve practice
- develop and enhance the technical service delivered in your school or institution.

**Code** 09073

**Ideal for** science technicians

**Age group** 11 – 16 years

**Length** 1 day

**Course fee** £95

**Impact Award** £100

For more information see enclosed supplement or visit: www.slcs.ac.uk/network/09073

This course would lead well into Technicians Co-Leaders in Education at the National Centre. Visit: www.slcs.ac.uk/network/09147

**Higher Level Teaching Assistants (Science) Training**

This course will contribute towards the training of a teaching assistant to meet the Teacher Development Agency standards for the award of HLTA secondary science status. You could also receive mentoring to help produce a portfolio of your work for assessment and record your progress using the ‘subject knowledge and skills review tool’. The four or five day programme is designed to cover the key areas of science knowledge and incorporate relevant concepts, processes and skills.

You will:

- acquire science subject knowledge and practical skills
- be familiar with key science concepts and processes
- collect documentary evidence and record progress using the subject knowledge and skills review tool
- explore a range of relevant pedagogies and resources.

**Code** 09074

**Ideal for** teaching assistants

**Age group** 11 – 16 years

**Length** 1 day

**Course fee** £95

**Impact Award** £100

For more information see enclosed supplement or visit: www.slcs.ac.uk/network/09074

You might also be interested in Teaching Assistants Taking the Lead at the National Centre. Visit: www.slcs.ac.uk/network/09171

**Teaching Assistants Training**

This course will provide teaching assistants with a basic background in popular experiments frequently encountered in the KS3 and KS4 science curriculum. Throughout the day you will be given advice and the opportunity to ask questions about practical science and how best students can be supported when in practical lessons.

You will:

- try out popular science practicals and investigations
- be made aware of laboratory management and health and safety issues
- know about resources and other courses to provide support.

**Code** 09075

**Ideal for** teaching assistants

**Age group** 11 – 16 years

**Length** 1 day

**Course fee** £95

For more information see enclosed supplement or visit: www.slcs.ac.uk/network/09075

You might also be interested in Teaching Assistants Taking the Lead at the National Centre. Visit: www.slcs.ac.uk/network/09171
Regional

REGIONAL COURSES

Experience Counts: An Opportunity to Work with Gifted & Talented Students

This course will give KS3 teachers the opportunity to work with and share experiences about more able students.

You will be invited to bring with you four of your most able year 9 science students in order to work on two challenging tasks. The tasks set will be both science and problem based and designed to be thought provoking, improve knowledge and stretch more able students.

You will have the opportunity to facilitate your own students work on one of the set tasks. In the second you will work with a different group of students from one of the other schools participating.

You will:

➤ develop your teaching skills with G&T students
➤ have the opportunity to share experiences with colleagues
➤ practice several activities developed to challenge more able students

Code
EMC08117
Target audience
secondary teacher, heads of science
Age group
11 – 14 years
Length
1 day
Course fee
£190

Basic Practical Microbiology for Secondary Schools

This accredited one day course for secondary teachers and technicians will provide basic training in the techniques needed to carry out interesting microbiology investigations safely. The course is suitable for both complete beginners and those wishing to "brush up" on their practical microbiology skills.

The day will comprise a number of short presentations and plenty of hands on activities. The course will end with a short theory test of 20 questions and a practical examination, in order to gain accreditation. The SGM will further support this course by offering £110 towards supply cover for each teacher. If your school is a member of SGM the course cost will be discounted by a further £10.

You will:

➤ become aware of safety in all aspects of microbiology practice
➤ practice a range of microbiological techniques
➤ gain an accreditation from the Society of General Microbiology

Code
EMC08115
Target audience
secondary teachers, heads of science, post-16, NQTs, science technicians
Age group
11 – 19 years
Length
1 day
Course fee
£75

Advanced Practical Microbiology for Secondary Schools

This accredited one-day, practical based course for secondary teachers and their technicians will deal with a variety of suitable methods for measuring microbial growth. To attend you must be competent in basic microbiological techniques through having completed an appropriate training course.

The SGM will further support this course by offering £110 towards supply cover for each teacher. If your school is a member of SGM the course cost will be discounted by a further £10.

You will:

➤ become aware of safety in all aspects of microbiology practice
➤ practice a range of microbiological techniques for investigations relevant to the curriculum
➤ gain an accreditation from the Society of General Microbiology

Code
EMC08116
Target audience
secondary teachers, heads of science, post-16, NQTs, science technicians
Age group
11 – 19 years
Length
1 day
Course fee
£75

For more information see enclosed supplement or visit:
www.slcs.ac.uk/network/emc08117
www.slcs.ac.uk/network/emc08115
www.slcs.ac.uk/network/emc08116
Radiation Protection Supervisor Training

This one-day course will support practical work involving radioactive substances by providing guidance on their safe storage, handling and use and is designed for the school or college Radiation Protection Supervisor (RPS), the designated person responsible for the safe storage, use and monitoring of radioactive substances within the science department. The RPS will normally be a member of the teaching staff and is often the head of physics; however, the day will also be of benefit to any teacher who uses radioactive sources in their teaching.

Throughout the day there will be the opportunity to ask questions and raise issues. The day will cover:
- Nuclear physics, radioactivity and radiation – teaching and resources
- Storage of radioactive substances
- Using radioactive sources to demonstrate the properties of ionising radiations
- Doses and biological effects of ionising radiations
- Radiological protection and its management
- Different types of radioactive sources and their care (including preparing sources for half-life investigations)
- Monitoring and record keeping
- Disposal of radioactive sources

You will:
- Become aware of legislation and DCSF guidance
- Understand the responsibilities of the RPS including the Local Rules

Target audience: Secondary teachers, heads of science
Age group: 11 – 19 years
Length: 1 day
Course fee: £130

For more information see enclosed supplement or visit: www.slcs.ac.uk/network/emc08211

Biology for Non-specialists

This two day course responds to requests from teachers with limited specialist knowledge in biology who wish to increase their knowledge and pedagogical skills. The course will comprise a series of practical workshops addressing the teaching of some fundamental concepts in biology.

Throughout both days there will be lots of hands-on practical activity, providing ideas for demonstrations and class practicals. This will include appropriate applications of ICT, chosen to amplify understanding as well as plenty of opportunity for discussion of concepts and teaching techniques.

You will:
- Develop confidence in tackling key biology topics at KS4
- Develop your teaching skills in biology
- Have the opportunity to practice a range of hands-on activities

Target audience: Secondary teachers
Age group: 14 – 16 years
Length: 2 days
Course fee: £215

For more information see enclosed supplement or visit: www.slcs.ac.uk/network/emc08114
All the National Centre courses listed in this catalogue are eligible for an ENTHUSE Award provided by the ENTHUSE Charitable Trust. The ENTHUSE Award covers:

- course fees
- travel and supply cover
- accommodation and food
- a contribution to support follow-up activities in your school/college

All teachers, lecturers, teaching assistants and technicians involved in science teaching in maintained schools and colleges in England, Scotland, Wales, Northern Ireland and the Republic of Ireland are eligible for ENTHUSE Awards.

Before coming on one of our courses you will be asked to complete an Impact Identifier form. The purpose of this is to help you to maximise the impact the course will have in your school or college. Most of our courses are residential and split over two periods between which you’ll carry out a gap task. Finally you will develop and submit an action plan, identifying ways in which you can implement your ideas on your return to your school or college.

National Science Learning Centre courses focus upon the subject and the realities of the classroom as well as individual and school needs.

Project ENTHUSE is a partnership supported by the Wellcome Trust, the Department for Children, Schools and Families, Astra Zeneca, Astra Zeneca Science Teaching Trust, IAE Systems, BP, General Electric Foundation, GlaxoSmithKline, Rolls-Royce, Vodafone and Vodafone Group Foundation.
Courses at a Glance

**THEME: Contemporary Science and How Science Works**

**CONTEMPORARY SCIENCE & HOW SCIENCE WORKS**

**How Science Works: Contemporary Science Conferences**

How do we use today's science to motivate learners? Do we go beyond headlines to nurture critical consumers and inspire enquiry?

With contemporary science integral from KS3 to post-16, these conferences bring in a variety of scientists to explore the cutting edge. We model and explore classroom strategies to help you engage your learners.

See our web portal to find out how the two conferences are slanted towards physical or life sciences.

**Why you will be able to:**

- describe some contemporary science topics and implications
- evaluate a variety of inspiring approaches for encountering contemporary science
- draw inferences for classroom practice

**Code**: NA090112

**Course fee**: £748.50 + VAT

**Age group**: 11 – 19 years

**Ideal for**: secondary teachers, further education lecturers, advanced skills teachers, others

**Course website**: www.slcs.ac.uk/national/na090112

**Science Industries Study Tour**

Look out for the Science Industries Study Tour being planned for summer 2010. Of relevance across the sciences, you will visit a range of industries that make extensive use of scientists’ and engineers’ skills. As well as learning more about these industries and the cutting edge science they employ, you will consider how to get the most from science industries in your own regions and how to connect industrial aspects to pupils’ learning and careers awareness.

**You will be able to:**

- give examples of cutting-edge science in industrial settings
- develop your own ideas for getting the most out of industries for your learners

**Code**: NAC09171

**Ideal for**: secondary teachers

**Age group**: 11 – 19 years

**Course fee**: £1546.50 + VAT

**ENTHUSE Award**: £748.50

**Age group**: 11 – 19 years

**Course fee**: £748.50 + VAT

**ENTHUSE Award**: £1546.50

For more information see enclosed supplement or visit: www.slc.ac.uk/national/nac09171

You might also be interested in Bringing Cutting Edge Science into the Classroom at a Regional Centre.
New Initiatives in the Curriculum

Leading Change in the Science Curriculum
Whether managing a major curriculum change or other innovation, this course will provide the skills and knowledge to lead change successfully in your department. Particularly valuable to current and aspiring heads of science, as well as science key stage co-ordinators, it will explore factors to help middle managers deal with a range of issues. From people management and leadership to influencing classroom culture, it will give a broad coverage to suit a range of needs.

You will be able to:
- develop skills for managing problematic situations which curriculum change causes
- describe concrete ways of embedding the curriculum
- describe strategies for student-centred learning

Code: NAC09129
Ideal for: secondary teachers, heads of science
Age group: 11 – 16 years
Course fee: £547.50 + VAT
ENTHUSE Award: £1147.50

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09129

Success in Vocational and Applied Pathways (14-19 Science)
Vocational and applied science courses can be very rewarding for both students and teachers. Teachers often lack the time and experience to identify and develop suitable resources and industrial links, and the teaching strategies needed for successful vocationally orientated curricula. This two part course will show you how to translate an awarding body specification into authentic experience of science-based industries and workplaces.

You will be able to:
- develop good working relationships with experts from the world of work
- draw upon the vast array of teaching and learning materials available
- develop new pedagogical skills, to help maximise student outcomes

Code: NAC09128
Ideal for: secondary teachers, heads of science, further education lecturers
Age group: 14 – 19 years
Course fee: £896 + VAT
ENTHUSE Award: £1896

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09128

SCIENCE FOR NON-SPECIALISTS

Physics for Non-specialists (11-16)
This two part course is an opportunity for non-specialist teachers of physics to develop greater confidence and competence in their teaching of the subject.

This hands-on course will allow you to spend time looking at pupils’ common alternative conceptions as well as the key basic principles to develop sound physics teaching.

You will be able to:
- teach physics confidently by effectively using a range of teaching strategies to assess your pupils’ prior understanding, counter alternative conceptions and move their learning forward
- prioritise an area of action research that you will carry out in your education establishment

Code: NAC09135
Ideal for: secondary teachers
Age group: 11 – 16 years
Course fee: £896 + VAT
ENTHUSE Award: £1896

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09135

Success for New Psychology Teachers
This two part course provides a foundation for those with little or no experience of teaching psychology. Through engaging classroom practice, it focuses on key concepts, fostering an independent approach to further development.

You will be able to:
- explain how “How Science Works” applies to psychology, including its similarities to other sciences
- describe examples of contemporary psychology and the vocational routes that psychologists take
- practise effective classroom strategies for learning concepts and approaches
- action plan to extend and apply your learning

Code: NAC09134
Ideal for: secondary teachers, further education lecturers
Age group: 11 – 19 years
Course fee: £896 + VAT
ENTHUSE Award: £1896

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09134
PRACTICAL WORK AND ICT FOCUS

Inspiring Science Learning Through Demonstrations

This in-depth course will give teachers confidence to demonstrate safe yet spectacular experiments in physics, chemistry and biology.

If you are looking for a quick way to enliven your teaching and to help other members of your science department to do the same, this course is for you.

You will be able to:

 › teach a range of approaches to make science teaching more inspiring and exciting
 › decide when it is appropriate to use demonstrations and how you can promote deeper learning and enthusiasm for science
 › describe safety regulations and management of pupils during demonstrations
 › put together a demonstration lecture for special occasions

you will be able to:

 ◗ describe a broad repertoire of skills in practical science
 ◗ connect practical science to other aspects of learner’s experiences
 ◗ evaluate your professional responsibilities to plan and organise engaging science lessons in a safe and secure environment
 ◗ effectively manage risk in practical science

Code NAC09133
Ideal for secondary teachers
Age group 11 – 16 years
Course fee £547.50 + VAT
ENTHUSE Award £1147.50

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09133

This course would be complemented by Science Demonstrations: Effective and Safe at a Regional Centre. Visit: www.slcs.ac.uk/network/09020

ICT Innovations in Science Teaching and Learning

During this two part course you will learn about exciting ways to make the most of a vast array of ICT tools and techniques. The course is packed with high-tech techniques to bring learning to life. You will have time to practice and reflect on new skills, and get expert training in the techniques featured. Although confidence in ICT would help, you do not have to be a computer expert.

You will be able to:

 › describe how to use a variety of multimedia techniques to improve teaching and learning
 › describe how the latest technology and hardware can improve pupil engagement

you will be able to:

 › describe some of the latest applications for collaboration using the internet
 › identify learning experiences in the science curriculum which could be enhanced through the use of collaborative web technologies

Code NAC09174
Ideal for secondary teachers, heads of science, post-16 teachers, advanced skills teachers
Age group 11 – 16 years
Course fee £547.50 + VAT
ENTHUSE Award £1147.50

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09174

Online Science: Web Tools and Technologies for Improving Teaching and Learning in Science

Through this course you will experience the latest techniques for exploiting the power of the internet to improve science teaching and learning. Whether it is through virtual online communities, wikis, blogs or a selection of other high quality web applications, the course will blend expert input with hands on development to explore how this potential can be put to good use in school.

You will be able to:

 › describe the some of the latest applications for collaboration using the internet
 › identify learning experiences in the science curriculum which could be enhanced through the use of collaborative web technologies

Code NAC09174
Ideal for secondary teachers, heads of science, post-16 teachers, advanced skills teachers
Age group 11 – 16 years
Course fee £547.50 + VAT
ENTHUSE Award £1147.50

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09174

Practical Work: Planning, Preparing and Practising

This course is for science teachers about to start their first job. It will help you prepare effective practical science, through professional advice and hands-on workshops, and sessions on safety, the art of demonstration, and learning outside the classroom.

You will be able to:

 › demonstrate a broad repertoire of skills in practical science
 › connect practical science to other aspects of learner’s experiences
 › evaluate your professional responsibilities to plan and organise engaging science lessons in a safe and secure environment
 › develop judgement in accessing appropriate supportive resources, including department colleagues such as technicians
 › effectively manage risk in practical science

Code NAC09161
Ideal for NQTs
Age group 11 – 16 years
Course fee £547.50 + VAT
ENTHUSE Award £1147.50

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09161
PERSONALISING LEARNING IN SCIENCE

Developing Skills to Support Special Needs in Science
This two part course is aimed at teachers in mainstream and special schools who are teaching science to pupils with a range of diverse special educational needs. You will look at overcoming barriers to learning and engaging learners through a multi-sensory approach to scientific enquiry. There are optional sessions on specific issues eg autism, dyslexia and behaviour strategies. You will consider how to differentiate science so that pupils have a meaningful learning experience that is age appropriate.

You will be able to:
- ensure that inclusion is genuinely embedded in your planning and teaching
- use strategies to support access to science for pupils with special needs

Code: NAC09108
Ideal for: secondary teachers, others
Age group: 11 – 16 years
Course fee: £896 + VAT
ENTHUSE Award: £1896

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09108

You might also be interested in Teaching Science to Students with SEN at a Regional Centre. Visit www.slcs.ac.uk/network/09038

PERSONALISING LEARNING IN SCIENCE

Personalising Learning: How can Science Contribute?
This two part course will look at how ‘learning to learn’ can be managed, and where Every Child Matters can be highlighted and explored in science. The changes to the 14-19 curriculum will also be investigated, so that choice for the pupils can really mean anytime, anywhere learning.

You will:
- consider ways to ensure Personalised Learning is genuinely embedded in your planning
- recognise how the major changes in the curriculum will affect your own teaching
- plan and develop a model of cascade training for your own departments

Code: NAC09131
Ideal for: secondary teachers, heads of science
Age group: 11 – 16 years
Course fee: £896 + VAT
ENTHUSE Award: £1896

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09131

This course would be complemented by Personal Learning and Thinking Skills in Science at a Regional Centre. Visit www.slcs.ac.uk/network/09301

PERSONALISING LEARNING IN SCIENCE

Science for All: Challenging the Gifted
This two part course will support you in ensuring high achieving pupils are sufficiently challenged and fulfil their potential. It will enable you to translate exemplary practice and current research on gifted pupils into highly effective and engaging teaching and learning strategies. Sessions include enquiry skills, promoting higher order thinking, questioning tools and a host of enrichment and practical ideas.

You will be able to:
- deliver a range of challenging activities particularly suited to able, gifted and talented pupils
- plan to implement their learning to make an impact in your own school

Code: NAC09116
Ideal for: secondary teachers
Age group: 11 – 16 years
Course fee: £897 + VAT
ENTHUSE Award: £1897

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09116

You might also be interested in Teaching Science using Thinking Skills at a Regional Centre. Visit www.slcs.ac.uk/network/09038

PERSONALISING LEARNING IN SCIENCE

Teaching Science using Thinking Skills
You will explore a variety of ways to develop thinking skills in science that aim to improve pupils’ progress and deepen and enrich their learning. Interactive sessions will explore the underlying principles behind thinking skills and you will be able to experience a host of science-based activities. Having identified the principles involved, you will then work collaboratively to develop your own thinking skills activity.

You will be able to:
- use classroom strategies that will support the development of thinking skills in science
- use current research in neuroscience to debunk the myths and help overcome barriers to effective engagement in thinking

Code: NAC09145
Ideal for: secondary teachers
Age group: 11 – 16 years
Course fee: £347.50 + VAT
ENTHUSE Award: £695.50

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09145

This course would be complemented by Personal Learning and Thinking Skills in Science at a Regional Centre. Visit www.slcs.ac.uk/network/09301

You might also be interested in Science for Gifted and Talented Students at a Regional Centre. Visit www.slcs.ac.uk/network/09037

You might also be interested in Personal Learning and Thinking Skills in Science at a Regional Centre. Visit www.slcs.ac.uk/network/09301

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09145
**TEACHING LEARNING AND ASSESSMENT**

### Success in Teaching 11-16 Physics for Specialists

This two part course is for teachers who are confident to teach secondary physics and have been teaching it for some time. You will find out how your pupils learn physics by engaging with research and applying it to your classroom practice.

You will practice a wide range of activities to use in the classroom.

**You will be able to:**

- use a wide variety of teaching and learning strategies that motivate all learners in physics
- apply current research on engaging girls in physics to your classroom practice
- prioritise an area of action research that you will carry out in your education establishment

**Code** NAC09146  
**Ideal for** secondary teachers  
**Age group** 11 – 16 years  
**Course fee** £857 + VAT  
**ENTHUSE Award** £1857

For more information see enclosed supplement or visit:  
www.slcs.ac.uk/national/nac09146

### Summer School for Newly and Recently Qualified Science Teachers

This course will provide time to reflect on good practice, opportunities to learn from highly experienced practitioners, support for effective behaviour management, time to try innovative, creative and inspiring learning activities, to share ideas, and to develop networks for on-going peer support.

**You will be able to:**

- use a wide variety of teaching strategies to promote pupils’ learning in science eg demonstrations, scientific enquiry, thinking skills and behaviour management
- form networks with fellow professionals for on-going support
- action plan changes in your own practice resulting from your learning on the Summer School

**Code** NAC09142  
**Ideal for** secondary teachers, NQTs  
**Age group** 11 – 16 years  
**Course fee** £945.50 + VAT  
**ENTHUSE Award** £1945.50

For more information see enclosed supplement or visit:  
www.slcs.ac.uk/national/nac09142

### Leading Assessment for Learning in Science (5-16)

This two part course is for teachers who want to develop an assessment for learning (AfL) culture within their department/across their school. Sessions include how to establish a climate for learning, embed peer and self assessment, and develop independent learners. You will consider how to enable staff to work collaboratively to have a shared understanding of AfL practice and the systems that are needed to support this.

**You will be able to:**

- apply current research on AfL to your classroom practice
- use a wide variety of AfL teaching strategies to promote pupils’ learning in science
- create a climate for learning
- support colleagues to improve their practice

**Code** NAC09144  
**Ideal for** secondary teachers  
**Age group** 11 – 16 years  
**Course fee** £896 + VAT  
**ENTHUSE Award** £1896

For more information see enclosed supplement or visit:  
www.slcs.ac.uk/national/nac09144

### Exploring Science in the Outdoor Classroom

The outdoor classroom provides opportunities to inspire science learning, from ecology to geology.

This course includes workshops drawing on all sciences to promote outdoor enquiry, a focus on sustainability issues and a visit to a local school with outstanding outdoor learning practice. You will carry out science activities in the field and explore how you can develop your school environment to incorporate outdoor learning.

**You will be able to:**

- apply science trail ideas and other opportunities to extend science learning in your school
- take your science teaching through the window and into the environment beyond the classroom, considering your local resources

**Code** NAC09117  
**Ideal for** secondary teachers  
**Age group** 11 – 16 years  
**Course fee** £547.50 + VAT  
**ENTHUSE Award** £1147.50

For more information see enclosed supplement or visit:  
www.slcs.ac.uk/national/nac09117

For more information see enclosed supplement or visit:  
www.slcs.ac.uk/network/09035
Success in Teaching 11-16 Biology

This two part course for inexperienced or non-specialist teachers introduces a range of approaches to enhance progress and enjoyment. It explores:

- progression through key ideas, eg cell theory, evolution
- how to avoid misconceptions
- extending able pupils

We will discuss strategies for teaching contemporary and controversial biology, find out about current knowledge and understanding in key areas, practise engaging demonstrations, and make effective use of learning outside the classroom.

You will be able to:
- employ a variety of strategies to motivate and support learners
- describe and introduce some contemporary biology relevant to 11-16 pupils
- plan a focused classroom project

Code: NAC09127
Ideal for: secondary teachers, further education lecturers, advanced skills teachers
Age group: 11 – 16 years
Course fee: £896 + VAT
ENTHUSE Award: £1896

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09127

Success in Teaching 11-16 Chemistry

This two part course will give experienced or inexperienced teachers the opportunity to sharpen their skills and knowledge in teaching chemistry up to KS4. The course will have a strong emphasis on laboratory work, with sessions to help you deal with common misconceptions, incorporate thinking skills into lessons, and see how chemistry is applied in the "real world". You do not need to be a chemistry specialist.

You will be able to:
- confidently carry out chemistry practicals and demonstrations
- describe relevant health and safety guidance
- describe common misconceptions in chemistry and how to overcome them
- describe activities to engage pupils with chemistry theory

Code: NAC09143
Ideal for: secondary teachers, NQTs
Age group: 11 – 16 years
Course fee: £896 + VAT
ENTHUSE Award: £1896

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09143

Inspiring Post-16 Chemistry

This two part course will give you opportunities to be reconnected with the frontiers of chemistry and the teaching of it by engaging in a wide variety of stimulating sessions employing new skills and ideas. You will identify misconceptions held by your students and develop a variety of teaching approaches to counter these.

You will be able to:
- demonstrate ways to make the teaching of chemistry more engaging and inspiring
- describe and develop strategies to help your students learn and understand chemistry effectively
- plan with support how they can use what they have learnt to make an impact in your own school /college

Code: NAC09136
Ideal for: secondary teachers, post-16 teachers, further education lecturers
Age group: 16 – 19 years
Course fee: £896 + VAT
ENTHUSE Award: £1896

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09136

This course would be complemented by Active Approaches in A-level Physics at a Regional Centre. Visit www.slcs.ac.uk/network/09090

Success in Teaching 11-16 Biology

This two part course for inexperienced or non-specialist teachers introduces a range of approaches to enhance progress and enjoyment. It explores:

- progression through key ideas, eg cell theory, evolution
- how to avoid misconceptions
- extending able pupils

We will discuss strategies for teaching contemporary and controversial biology, find out about current knowledge and understanding in key areas, practise engaging demonstrations, and make effective use of learning outside the classroom.

You will be able to:
- employ a variety of strategies to motivate and support learners
- describe and introduce some contemporary biology relevant to 11-16 pupils
- plan a focused classroom project

Code: NAC09127
Ideal for: secondary teachers, further education lecturers, advanced skills teachers
Age group: 11 – 16 years
Course fee: £896 + VAT
ENTHUSE Award: £1896

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09127

Success in Teaching 11-16 Chemistry

This two part course will give experienced or inexperienced teachers the opportunity to sharpen their skills and knowledge in teaching chemistry up to KS4. The course will have a strong emphasis on laboratory work, with sessions to help you deal with common misconceptions, incorporate thinking skills into lessons, and see how chemistry is applied in the "real world". You do not need to be a chemistry specialist.

You will be able to:
- confidently carry out chemistry practicals and demonstrations
- describe relevant health and safety guidance
- describe common misconceptions in chemistry and how to overcome them
- describe activities to engage pupils with chemistry theory

Code: NAC09143
Ideal for: secondary teachers, NQTs
Age group: 11 – 16 years
Course fee: £896 + VAT
ENTHUSE Award: £1896

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09143

Inspiring Post-16 Chemistry

This two part course will give you opportunities to be reconnected with the frontiers of chemistry and the teaching of it by engaging in a wide variety of stimulating sessions employing new skills and ideas. You will identify misconceptions held by your students and develop a variety of teaching approaches to counter these.

You will be able to:
- demonstrate ways to make the teaching of chemistry more engaging and inspiring
- describe and develop strategies to help your students learn and understand chemistry effectively
- plan with support how they can use what they have learnt to make an impact in your own school /college

Code: NAC09136
Ideal for: secondary teachers, post-16 teachers, further education lecturers
Age group: 16 – 19 years
Course fee: £896 + VAT
ENTHUSE Award: £1896

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09136

This course would be complemented by Active Approaches in A-level Physics at a Regional Centre. Visit www.slcs.ac.uk/network/09090

Inspiring Post-16 Physics

This two part course is aimed at teachers and lecturers who want to update their own knowledge and understanding of contemporary physics. Working alongside research scientists, teachers and examiners to practise new activities, approaches and experiments, you will identify how this can inform and change your classroom practice.

You will be able to:
- describe various contemporary areas of research in physics
- employ new skills and ideas for teaching physics
- be more confident in carrying out new activities back in the classroom
- plan to implement your learning to make an impact in your own education establishment
- evaluate the impact of a change within your teaching

Code: NAC09138
Ideal for: secondary teachers, post-16 teachers, further education lecturers
Age group: 16 – 19 years
Course fee: £896 + VAT
ENTHUSE Award: £1896

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09138

This course would be complemented by Active Approaches in A-level Physics at a Regional Centre. Visit www.slcs.ac.uk/network/09090
Throughout the conference you will explore how you can raise awareness about exciting STEM career opportunities available to young people. STEM qualifications develop students’ analytical skills, prestigious and transferable attributes that employers seek. Through workshops, you will work on strengthening existing practice to enthuse young people and maximize their interest in STEM careers.

You will be able to:
- identify a range of sources of information to help promote STEM careers
- evaluate STEM careers activities for use in school or college
- use innovative ways to encourage young people to pursue STEM careers
- develop a focused action-research project during the course

Code: NAC09137
Ideal for: secondary teachers, further education lecturers
Age group: 16 – 19 years
Course fee: £896 + VAT
ENTHUSE Award: £1896

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09137

This course would be complemented by Active Approaches in A-level Biology at a Regional Centre. Visit www.slcs.ac.uk/network/09091

You will be able to:
- describe a range of alternative scientific qualifications available for secondary-age learners
- evaluate the opportunities that alternative qualifications offer to enrich your curriculum

Code: NAE09185
Ideal for: secondary teachers, post-16 teachers, others
Age group: 14 – 19 years
Course fee: £348.50 + VAT
ENTHUSE Award: £748.50

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nae09185
Excite and Engage: How to Enrich the Teaching of Science in Secondary Schools

The pressure of delivering the curriculum can sometimes result in formulaic lessons and disengaged students. This two part course will inject some excitement and variety to get them excited by science again! Whether through science clubs, drama, creative arts, trips, or visitors, it will provide some stimulus for these teachers who are looking to take science beyond the conventional.

You will be able to:
- describe benefits of enrichment in the science curriculum
- identify opportunities for enrichment and informal learning within science in your own school
- describe opportunities for learning outside the classroom
- produce an action plan for delivering enrichment activities within school

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For more information see enclosed supplement or visit: www.slcs.ac.uk/network/nac09115

You might also be interested in Successful Science and Engineering Clubs at a Regional Centre. Visit: www.slcs.ac.uk/network/09034

Engineering Across the Curriculum

Engineering is a genuinely cross-curricular subject that represents an opportunity to develop student competency across the new programme of study. It can be used to develop not only their knowledge, but also their skills in creativity, sustainability and enterprise. With its focus on how to look for solutions, not problems, it’s also an example of how imagination and application result in technology across all parts of our lives. This is a two part course.

You will be able to:
- enhance and enrich the curriculum with engineering contexts at KS3 and KS4
- develop opportunities to collaborate with external providers to give experiential learning to students

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For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09130

Supporting the Science Elements Across the 14 – 19 Diplomas

This two-day event will enable lecturers, teachers and trainers delivering on vocational courses the opportunity to reflect on their teaching practice, engage in experiment workshops and update their skills, so increasing their confidence in their approach to the teaching and learning of the science elements, and the associated learning and thinking skills that are essential to today’s students.

You will be able to:
- broaden your knowledge of the underlying science in several Diploma lines
- practise strategies that highlight associated development of students’ personal, learning and thinking skills (PLTS)
- identify potential external collaborative providers to support delivery of the Diplomas

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For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nae09183

Practical Introduction to Electronics

This three-day course will help develop mutually supportive curricular foundations for science and design and technology teachers. It provides hands-on practical experience of developing circuits and products. This will enable you to develop activities that maximise learning in electronics so that your pupils develop a coherent understanding of key concepts and processes.

You will be able to:
- broaden your knowledge of the underlying science in electronics
- explore and explain electrical circuits that can be integrated into everyday products
- investigate applications of PIC chips that enhance the relationship between science and design and technology

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For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09173
Supporting Science Teaching

Skills for New Technicians

This course will provide a thorough grounding in the science technician profession for those new to the role in a school or college.

Sessions on the course include:

- the role of a technician
- Health and Safety
- technician skills
- biology
- input from experienced technicians
- chemistry
- physics
- ICT
- demonstrations
- work towards implementing the new skills and knowledge acquired in the course
- Health and Safety
- demonstrate and explain safety implications and how to address them
- enhance your leadership skills
- address changes to practice

You will be able to:

- develop understanding of the science behind hair and beauty studies
- discover and produce new resources to help in your teaching
- develop your skills in specific areas of science technician work
- be able to plan and create a programme of professional development activities to support a group of technicians in your own school or cluster of schools
- you will:
- evaluate your own situations and identify any necessary changes to practice

Code: NAC09147
Ideal for: science technicians
Age group: 11 – 19 years
Course fee: £721 + VAT
ENTHUSE Award: £1721

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09147

You might also be interested in:

Senior Technicians: Leadership, Training and Management at a Regional Centre.
Visit www.slcs.ac.uk/network/09073

You might also be interested in:

Working as a Science Technician: An Introduction to the Role at a Regional Centre.
Visit www.slcs.ac.uk/network/09072

This course would be complemented by:

Science Demonstrations: Effective and Safe at a Regional Centre.
Visit www.slcs.ac.uk/network/09020
LEADERSHIP
Science AST Conference
This annual event brings together both primary and secondary science advanced skills teachers. It includes key note speakers and optional workshops on a range of areas from leadership and pedagogy, to innovation in teaching and contemporary science. The sessions are delivered by current ASTs, scientists and educational experts and, as ever, there will also be opportunity to share best practice with your colleagues.

you will be able to:

- learn new teaching and learning strategies
- develop your awareness of current advancements in science and science education
- have more confidence to lead science in your school and partner schools

You will be able to:

- learn new teaching and learning strategies
- develop your awareness of current advancements in science and science education
- have more confidence to lead science in your school and partner schools

Code: NAE09109

Ideal for: advanced skills teachers, secondary teachers

Age group: 11 – 19 years

Course fee: £348.50 + VAT

ENTHUSE Award: £748.50

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nae09109

Leadership
Coaching: Unlocking the Potential in Others
Research shows that coaching is the most effective form of CPD in changing classroom practice. Coaching enables teachers to extend their repertoire of teaching skills and to transfer them between different classroom settings.

This two part course gives you the opportunity to explore the skills needed to become a coach including how to ask effective questions and how to support colleagues to achieve their goals. There will be time to share coaching experiences and plan follow up in school.

You will be able to:

- define the nature and aims of coaching
- develop coaching skills
- identify actions needed in your own school to implement and develop coaching

Code: NAC09110

Ideal for: secondary teachers

Age group: 11 – 16 years

Course fee: £876.50 + VAT

ENTHUSE Award: £1876.50

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09110

SUPPORTING SCIENCE TEACHING
Part 2: Improving Practical Work Extension Courses
These four courses are part of the Experienced Technicians Programme. You will need to have completed NAC09178 Part 1: Technicians Improving Practical Work before attending any of these courses.

The courses will include:

- biology: biotechnology, molecular biology, living material and microbiology
- chemistry: new and unusual practicals, storage and use of chemistry equipment
- physics: new and unusual practicals, engineering links and use of physics equipment
- practical IT: data-logging kit and ideas, technology to enhance practical work

You will:

- work towards successfully implementing the new skills and knowledge acquired in the course
- develop skills to share good practice and address key issues that are essential for effective performance in your role and to build team capacity
- describe and explain safety implications and how to address them
- enhance your communication skills

Code: NAC09179

Ideal for: science technicians

Age group: 11 – 19 years

Course fee: £278.50 + VAT

ENTHUSE Award: £678.50

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09179

Experienced Technicians Programme
Part 1: Technicians Improving Practical Work
This course is the first part of an Experienced Technicians Programme.

This two day course is designed for technicians who are motivated to assist with improving practical work in their departments.

The course will include:

- an advanced technician’s role in practical work
- sourcing new ideas and equipment
- inspiring practical ideas showcase
- how to disseminate information and train others

Code: NAC09178

Ideal for: science technicians

Age group: 11 – 19 years

Course fee: £278.50 + VAT

ENTHUSE Award: £678.50

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09178

SUPPORTING SCIENCE TEACHING
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SUPPORTING SCIENCE TEACHING
LEADERSHIP

Lab Design: Future Science Accommodation for Teaching and Learning

Science advisers, heads of science and technicians are increasingly likely to be faced with discussions about how labs, prep rooms and other spaces should be designed to create the best possible learning environments. Through engaging with school science accommodation specialists, you will explore the range of materials, equipment and health and safety guidelines available and develop an understanding of new developments and policy concerning science, for your lab design.

You will be able to:
- increase awareness of issues facing lab design that affect teaching and learning
- develop a range of contacts for support in your design process
- be able to produce designs for your science space needs

Code: NAC09132
Ideal for: secondary teachers, heads of science, further education lecturers, science technicians
Age group: 11 – 19 years
Course fee: £547.50 + VAT
ENTHUSE Award: £1147.50

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09132

New and Aspiring Heads of Science

This course is designed to develop teachers who have recently become heads of science or those who are looking to become one in the near future. The course will run at the National Science Learning Centre over 18 months and involve you attending four residential periods which will focus on four ongoing themes within a science context. The themes are:
- Strategic Leadership and Management
- Supporting and Enriching Learning
- Teaching and Learning
- Leading Teams and Change

Successful completion of the course will result in a Postgraduate Certificate in Science Education and Leadership.

You will be able to:
- employ a range of methods to strategically lead and manage the science department
- evaluate the skills you have and identify areas you need to develop to become a highly effective leader
- explain what outstanding teaching and learning in science is and use this to provide effective feedback
- use a variety of strategies to make teaching and learning in science more engaging and inspiring for pupils and colleagues
- employ a range of techniques to enable you to create a high performing team
- describe a variety of methods you can employ to develop the members of your team
- articulate how a range of approaches can be employed to support and enrich pupils’ experiences in science
- produce an action plan linked to your School Development Plan to implement back in school that you can evaluate

Code: NAC09122
Ideal for: secondary teachers, heads of science
Age group: 11 – 19 years
Course fee: £2190 + VAT
ENTHUSE Award: £4590

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09122

Leading Science in Challenging Circumstances

This two part course will provide opportunities for those in challenging circumstances to maximize their own potential as leaders. It will support you in team building and unlocking individual potential of your colleagues. You will be provided with ideas and additional direction in how to motivate colleagues and engage pupils in meaningful learning experiences.

You will be able to:
- employ a range of strategies including coaching to build and effectively utilise your team
- demonstrate ways to enhance pupils’ learning experiences including issues around creating and implementing a departmental behaviour policy
- identify how to succeed during a school inspection

Code: NAC09120
Ideal for: heads of science, senior leaders, lead practitioners
Age group: 11 – 16 years
Course fee: £857 + VAT
ENTHUSE Award: £1857

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09120
LEADERSHIP

Post-16 STEM Leaders Conference

The STEM Report (science, technology, engineering and mathematics) highlighted the United Kingdom’s need to improve the number and quality of skilled scientists, technologists, engineers and mathematicians. This two day course for managers and leaders across science, engineering and mathematics explores “Excellence in STEM provision – what it looks like and how to get there”.

You will:

 › explore what STEM means for your college or organisation
 › find out how to access LSIS Excellence and Improvement Awards and obtain funding to move towards excellence in STEM provision
 › plan to move the STEM agenda forward through funded activity in your organisation
 › share good practice from across the sector

Code: NAC09176
Ideal for: post-16 teachers, further education lecturers
Age group: 16 – 19 years
Course fee: £348.50 + VAT
ENTHUSE Award: £748.50

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09176

LEADERSHIP

Taking Your Career Further: A Summer School for Experienced Science Teachers

Look out for this course, planned for summer 2010. Developed for experienced science teachers looking for new opportunities and next steps, we will build the course around key inputs and tailor the rest to you. Discover routes in subject and school leadership, and pathways via AST and Excellent Teacher roles. We will also help you identify opportunities beyond school and classroom, such as writing, examining, curriculum development and innovation, research and professional development.

You will be able to:

 › explain a range of career development options
 › evaluate their personal relevance and appeal
 › action plan the routes you choose, and take next steps

Code: NAC09172
Ideal for: secondary teachers
Age group: 11 – 19 years
Course fee: £547.50 + VAT
ENTHUSE Award: £1147.50

For more information see enclosed supplement or visit: www.slcs.ac.uk/national/nac09172
To book:

- go online to www.slcs.ac.uk/courses
- complete this form and fax to 01904 328 328
- call 0845 155 1714
- email enquiries@slcs.ac.uk

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Booked by (if different from above)

Authorised by

School/Organisation

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Postcode

Email (school/college/organisation)

Tel    Fax

☐ If an Impact Award is available please tick the box if you wish to apply for an award.

Please quote ref CT09_EM when making your booking. Your submission of this form is taken as acceptance of our terms and conditions which can be found at www.slcs.ac.uk/eastmidlands/courses/tacs for regional courses or www.slcs.ac.uk/national/courses/tacs for National Centre courses. The national network of Science Learning Centres is a joint initiative by the Department for Children, Schools and Families and the Wellcome Trust.

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