

Activity: Masterclass	
Title	Top tips for Improving your Science Writing Skills
Date	Wednesday 14 October 2009
Time	1:00pm – 3:00pm
Venue	TBC
Level	Years 12 and 13 Science students
Numbers	25
Course Content	A short presentation outlining the most common errors in science writing followed by a practical, hands-on session designed to enhance and encourage the writing skills necessary for science-based degree courses.

Activity: Masterclass	
Title	Spectroscopy – University Analytical Centre
Date	November 2009 (date TBC) and February 2010 (date TBC) (repeat)
Time	2:00pm – 4:00pm
Venue	TBC
Level	Years 12 and 13 Chemistry students only
Numbers	30
Course Content	This session will give you an introduction and hands-on experience to nuclear magnetic resonance spectroscopy, infrared spectroscopy and mass spectrometry.

Activity: Masterclass	
Title	CSI Las Bradford
Date	Wednesday 14 October 2009 and February 2010 (date TBC) (repeat)
Time	1:00pm – 4:00pm
Venue	TBC
Level	Year 13 Chemistry and Biology students only
Numbers	20
Course Content	<p>Jeremy is dead, his lifeless body lying in a pool of blood; the only clue, a few strands of hair clenched in his hand. "He must have torn them out in the struggle" said Inspector Snelling, "get it to the lab for analysis Jon and get me a sandwich on the way back, murders always make me hungry".</p> <p>That's where you come in, we have a few suspects, but no one to do the DNA fingerprinting. We need you to extract the DNA from the sample, run the restrictions and finally run them on a gel.</p> <p>Oh and Inspector Snelling is not a patient woman, she needs it in three hours.</p>

Activity: Masterclass	
Title	What can we do to save the planet? Environment and behaviour change
Date	Wednesday 18 November 2009
Time	2:00pm – 4:30pm
Venue	Phoenix SW
Level	Years 12 and 13
Numbers	30
Course Content	Have you ever wondered why some people seem to behave in ways that are wasteful, polluting or downright harmful to the environment? Or why others make great efforts to try and behave in ways that are sustainable or environmentally “friendly”? Why is there this difference? In this workshop we will examine the psychology of everyday behaviour from an environmental perspective, looking at recycling, how we use water and energy, how we travel and the purchasing decisions we make. Drawing on current social and personal psychology, and theories about the geography of everyday life, we will try to find answers to these questions, and importantly, how we might change people’s behaviour to be more conserving and less wasteful.

Activity: Masterclass	
Title	Hands-on Archaeological Materials
Date	Wednesday 2 December 2009
Time	2:00pm – 4:30pm
Venue	Phoenix SW
Level	Years 12 and 13
Numbers	30
Course Content	What people leave behind is the stuff of archaeology. Sometimes they leave themselves in the form of skeletons, but most often they leave behind traces of their everyday objects: the tools they used and the artefacts they made. Pottery, flint, and metalwork, because they do not completely decay, are the most common materials on archaeological sites and they can be used in a variety of ways by archaeologists to reconstruct the lifestyles and economies of past peoples. At this event you will have the opportunity to get hands-on experience of these materials with experts who will explain what they look for and what these traces can tell us about our ancestors.

Activity: Masterclass	
Title	The day after tomorrow?
Date	Wednesday 3 February 2010
Time	2:00pm – 4:30pm
Venue	Phoenix SW
Level	Years 12 and 13
Numbers	30
Course Content	The United Nations Intergovernmental Panel on Climate Change reported that temperatures have risen by 0.74°C over the past century, and could increase another 3°C by the end of this century. However, when we examine the climate of the Earth over several thousand years, it is clear that the only constant about climate is change. In this workshop we will investigate the nature, causes and effects of climate change in the Earth’s past and examine the evidence for recent global warming. The workshop will include hands-on experience of how palaeo-climatologists reconstruct ancient climate from fossils and cores, animations and movie clips, and will explore how computer modelling is used to predict future climate change and its effects.

Activity: Masterclass	
Title	People in the Past
Date	Wednesday 24 February 2010
Time	2:00pm – 4:30pm
Venue	Phoenix SW
Level	Years 12 and 13
Numbers	30
Course Content	This workshop focuses on the analysis of human bones, showing how we can construct the human profiles of people who lived hundreds or even thousands of years ago. Working with bones, the hands-on workshop includes age and sex assessments and evidence of disease and injury. From this evidence we begin to build a picture of people's lifestyles, health and events in their lives.

Activity: Masterclass	
Title	Human Physiology: how quickly can nerves send messages?
Date	Wednesday 24 February 2010
Time	1:30pm – 3:00pm
Venue	TBC
Level	Year 13 Biology students
Numbers	25
Course Content	Mixture of lecture and laboratory practical.

Activity: Masterclass	
Title	Ethics and Reproductive Medicine
Date	February/March 2010 (date to be confirmed)
Time	TBC
Venue	TBC
Level	Year 12 Science students
Numbers	25
Course Content	Awaiting details.

Activity: Masterclass	
Title	The Science of the Past
Date	Wednesday 17 March 2010
Time	2:00pm – 4:30pm
Venue	Phoenix SW
Level	Years 12 and 13
Numbers	30
Course Content	<p>This workshop will demonstrate some of the exciting ways in which science can be used to understand what happened in the past. Modern archaeology involves many scientific techniques, familiar through television programmes such as 'Time Team'. The University of Bradford has an international reputation for teaching and research in these areas, and this workshop will give you the opportunity to gain hands-on experience in two of the following areas:</p> <ul style="list-style-type: none"> ■ Seeing the invisible – using electrical and magnetic measurement to detect buried remains without excavation ■ From trench to bench – using biological remains to find out what people ate in the past ■ Molecules through time – making and analysing prehistoric glue <p>The topics will be introduced using talks about the scientific principles, case-studies of archaeological sites and hands-on laboratory/field activities.</p>

Activity: Masterclass	
Title	Life Sciences Taster Day
Date	Wednesday 24 March 2010
Time	9:30am – 4:30pm
Venue	Richmond Building
Level	Year 12 Science students
Numbers	30-80
Course Content	<p>Studying sciences can lead to numerous interesting and stimulating careers – why not come along to find out? The day provides an opportunity for a hands-on experience, through workshops in a range of Life Sciences areas (workshops to be confirmed, but possibly in the areas of Biomedical Sciences, Chemistry, and Forensic Science, Optometry and Pharmacy).</p> <p>Students will have the opportunity to choose two different workshop topics once they have booked. You will receive a form with your confirmation letter to inform us of your preferred choice of two workshops. Please ensure that you return your form immediately if there is one particular workshop you wish to do, as places on workshops are allocated on a 'first-come, first-served' basis. Once they are full, you will be allocated to your 2nd to 4th choices. Those not returning their form will be allocated to two workshops.</p>

Activity: Masterclass	
Title	Bradford CSI
Date	Wednesday 16 June 2010
Time	10:30am – 3:30pm
Venue	Phoenix SW
Level	Years 12 and 13
Numbers	30
Course Content	<p>We explore how methods from archaeological and environmental sciences help us to find and analyse crime scenes, both past and present. This workshop involves detective work outside and inside the laboratory.</p>

Activity: Presentation	
Title	Thinking of a career in medicine, the health sector or the pharmaceutical industry?
Date	Wednesday 23 June 2010 (*and by arrangement with schools/colleges)
Time	3:00pm – 4:00pm
Venue	University of Bradford (*Individual schools and colleges)
Level	Year 12
Numbers	8-50
Course Content	The Foundation Year in Medicine / Clinical Sciences and the BSc (Hons) Clinical Sciences are the result of a joint initiative with the Medical School at the University of Leeds. The courses have been designed to encourage local students from a wide range of backgrounds into medicine and other health-related careers. This presentation looks at entry requirements for both routes, what students will study and considers potential career opportunities for graduates. Both courses offer some students the opportunity to progress to the medical course at the University of Leeds Medical School (from the Foundation Year into Year 1 of the MBChB and from the BSc Year 1 into Year 2 of the MBChB).

Activity: Workshop	
Title	Making the most of your application to medicine
Date	Friday 25 June 2010
Time	10:00am – 12:00pm
Venue	University of Bradford / Individual schools by arrangement
Level	Years 12 and 13 (not necessarily science students)
Numbers	10-40
Course Content	<p>The session provides students with an opportunity to look at the different types of course including those designed for students without A levels in Biology and/or Chemistry, and guidance on how to choose the right course.</p> <p>We will explore what Medical Admissions Tutors look for in the Personal Statement and reference and what evidence students can include to support their application. Finally we will discuss what to expect at interview.</p>