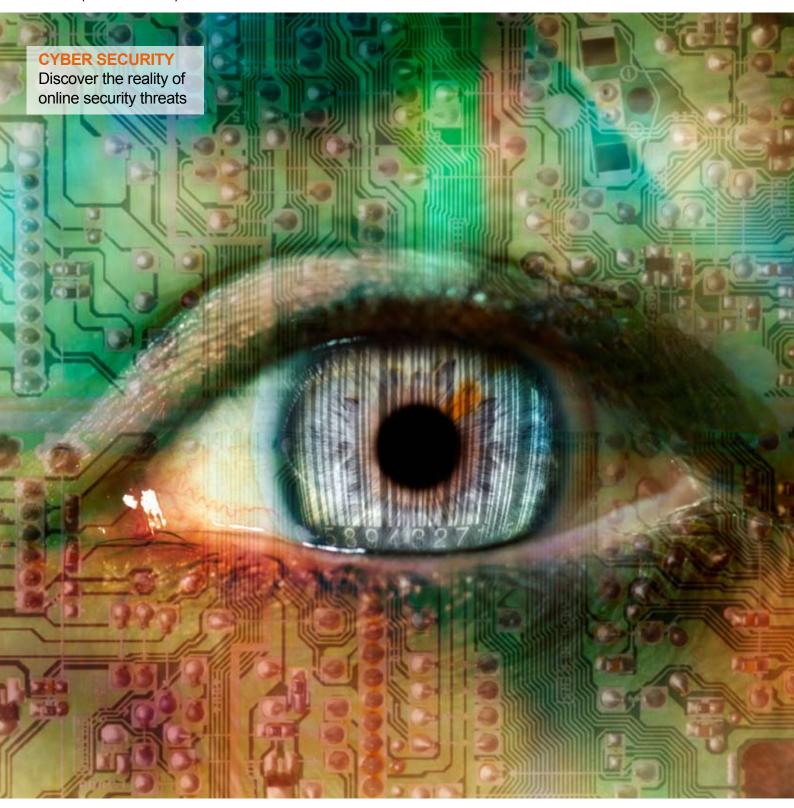
Sesame



The Open University Winter 2010 Issue 247



HEALTHCARE

New qualification route for key support workers

STAR WOMAN

Former student now astronaut instructor

MODULES

New modules in design, accounting and welding



The go-to magazine for thought-provoking analysis of global issues. Now with a wider range of articles, plus a fresh new reader-friendly design.





For 3 FREE issues **newint.org/3issues**

or call 01858 438896 (quote 1109)

"Everyone who wants to understand the world should read it"

George Monbiot

Welcome



THIS WINTER ISSUE of Sesame will have arrived with you early in the New Year - and we hope that the mix of educational and inspirational content will motivate you for whatever challenges you face in the year ahead.

We are very excited by our cyber security article (our cover feature) with Professor of Computing Bashar Nuseibeh. In a time

of such rapid advancements in online technology and software, we've picked his expert brain on a number of related issues such as cloud computing, cyber warfare and concerns about privacy. It's a fascinating interview, we're sure you'll agree (see p38).

Other academic contributions include a look at the current challenges faced by President Obama (see p34) and whether biofuels can solve the world's future energy problems (see p24). We also find out about the exciting new changes that are occurring to the OU's Science degree programme (see p20), a new qualification route for essential healthcare support workers (see p8) and the newest modules from the University (see p18).

We also have fascinating interviews with OU students and alumni, including an international skier (see p33), and astronaut instructor (see p23) and an award-winning author and distinguished academic (see p30).

Our student support feature this time around looks at what study care the OU offers to those who have dyslexia. And with one in 10 of the UK population having difficulty with spelling and memory, and with dyslexia often not being diagnosed until later life, we know how important this service is - as two current students and a former one will tell you.

You can contact the team at sesame@open.ac.uk For inclusion in the Letters pages please mark 'Letters' in your subject header.

Editor Scott Russon Contributors William Brown, Yvonne Cook, Robyn Slingsby, Carlton Wood

Head of Publications Jan Henderson Design Glen Darby

Published by The Open University

The Open University General Enquiries +44 (0)1908 274066

The Open University, Walton Hall, Milton Keynes MK7 6AA Email sesame@open.ac.uk

Website www.open.ac.uk/sesame

Printed by Belmont Press, distributed by Packpost

Advertising Square7Media

Email Mark@square7media.co.uk

Telephone +44 (0)203 283 4055

The editorial content of this magazine was correct at the time of going to press. No part of this publication may be reproduced in any form without the prior permission of the publishers. Views expressed in articles are those of the contributors and not necessarily of Sesame and The Open University. Publication of an advertisement or loose insert in Sesame does not imply The Open University's recognition or approval of the goods or services advertised.

Contents

Update

All the latest news from The Open University	4
New qualification route for healthcare support workers	8
Your letters	10
BBC/OU co-productions	12
Interview: Tim Harford on stats and More or Less	15
Study	
New module in environmental responsibility	17
The latest new modules from the OU	18
New changes in updated science degree programme	20
People	
Prize-winning author Carys Bray	21
Astronaut instructor Gail Iles	23
Opinion: biofuels to the rescue?	24
Simon Wharne: dealing with dyslexia	27
Bri Edwards: a sense of achievement	28
Member benefits	29
Zoe Wicomb: author, academic and honorary graduate	30
Michelle Sole: piste of the action	33
Opinion: the challenge for Obama	34
Danasanah	

Research

he latest OU research news	37
Research focus: cyber security	38

FSC* C015185

Support	
Study support: dyslexia	4
Careers: OU Careers Advisory Service	4







Update

All the latest news from The Open University

FUNDING REVIEW

Student fees

Government accepts case for 'level playing field'



Students across England continue to protest at planned tuition fee changes

GOVERNMENT HAS accepted the OU's case for a "level playing field" for part- and full-time students in England, with Universities Minister David Willetts announcing in November that part-time students will be entitled to a loan for tuition on the same basis as full-timers.

Under the proposed new funding regime, part-time students studying 40 credits or more a year will no longer have to pay fees up front, but will be eligible to take out fee loans. They will begin repaying these only after they have completed their intended programme of study and if they are earning above £21,000 a year, according

to the latest information available at time of going to press.

Currently, the measures apply only to England but governments in Scotland, Wales and Northern Ireland are reviewing their own fee arrangements

But part-time students will also feel the impact of tuition fee increases from the academic year 2012/13, as the government reduces the funding given to universities for teaching.

"We do not yet know how much the government is going to give universities from 2012/13," said Phil Berry, Senior Manager, Fees and Resources. "The University will not know its 2012/13 funding to set fee levels until February 2012. However, the OU is already the best value of any university in the UK – with total student fees for a degree ranging from £3,600 to £4,200 – and we are confident that we can remain best value."

The new funding regime will need parliamentary approval and in the interim the University says it is continuing to lobby for the best outcome for part-time students. This includes trying to secure support for the OU's poorest students and to extend the provision of loans to 30-credit modules.

To support the cause of part-time students, visit http://fourinten.org

SPACE

Professor Colin Pillinger autobiography

• ONE OF THE country's best-known space scientists, the OU's Professor in Planetary Science, Colin Pillinger OBE FRS, has published his autobiography, My Life on Mars: The Beagle 2 Diaries.

During his 25 years at the OU, Colin has not only contributed to but significantly raised the profile of the OU's space science research.

He conceived the Beagle 2 mission to land on Mars, and throughout the project he filled more than 30 notebooks recording the daily happenings which form the basis of his autobiographical account of the mission.

"Beagle 2 really captured the public's imagination; during the Christmas period 2003 it generated more than 10,000 newspaper articles all over the world," says Colin.

My Life on Mars was published by the British Interplanetary Society (BIS) in hardback in October.





STUDENT SATISFACTION

OU stays in top three

Ninety-three per cent happy with course quality

THE OPEN UNIVERSITY is in the top three places for Higher Education Institutions (HEIs) in the UK for student satisfaction, maintaining its position at the forefront of the National Student Survey ratings since they began in 2005. More than 30,000 OU students were surveyed – the sample size more than trebling since last year's survey – with 93 per cent saying they were satisfied overall with the quality of their course.

For the fifth year in succession the OU remains the top university in Scotland for student satisfaction according to the latest National Student Survey, with an overall satisfaction rating this year of 93 per cent.

Will Swann, Director, Students, at The Open University, said: "The OU



OU students say they are happy with the quality of their courses

places a huge emphasis on student support and course development, using the latest technologies and educational practices. I am delighted that this continual focus on the individual learning experience has meant that students continue to rate their OU experiences so highly, and that the OU has maintained a leading position in this table."

Key details

- A total of 152 HEIs and 113 Further Education Colleges from across the UK took part in the survey.
- 30,351 OU students were surveyed in this year's National Student Survey. In 2009, 9,118 OU students were surveyed.
- The National Student Survey results are available on www.unistats.com

Just in...



New look for About OU site ONE OF THE OU's main websites has a new look. The About the OU site has been updated and redesigned to give a better user experience, and to tell a more coherent story about the OU's work.

The site also serves as a gateway through to other OU sites where more detailed information is available.

"We'll be keeping the content under regular review to ensure it is accurate and presents a really positive and useful first impression of the University," said Online Managing Editor, Jane Matthews. Visit the About the OU website at www8. open.ac.uk/about/main

OU joins international technology project

A TEAM FROM The Open University Business School and the Faculty of Mathematics, Computing & Technology is part of a new international local government consortium which has secured European Commission (EC) funding for the 'EGOV4U' project, which will put accessible and relevant technology into the hands, homes and communities of the socially disadvantaged. Using modern communications technology, it will develop government and public services that will help increase the level and rate of engagement amongst some of the EC's most socially disadvantaged citizens.

STUDENT PROFILE

A new generation joins OU

One in four joiners now under the age of 25...



More younger people are choosing to study with the OU

● A WHOLE NEW generation is joining the 39 per cent of UK students who choose to study part time. More than 29,000 Open University students are now under 25, making up one in four of all OU new undergraduates. Most work

while they study, with 55 per cent of the OU's 18 to 24-yearold students in full-time employment.

Eighty-nine per cent of part-time students study to further their career aims.
Younger OU students tend to be

studying towards a qualification rather than for interest or as a one-off, and popular course choices among the under 25s at the OU are science, ICT and social sciences.

Christina Lloyd, Head of Teaching and Learner Support, said: "We're currently seeing how higher education is changing – the three-year full-time degree isn't the whole story any more, as the true picture of higher education is much more varied.

"The balance is already shifting as students opt for other models of study such as part time, and they often make positive choices about managing their own finances by choosing to work while they study."





Open up your mind to a new way of travelling...

· No High Season Surcharges - great for teachers and families

· No Single Supplements on most of our tours - great for solo travellers

· Many included highlights and activities - no hidden extras

· Strong commitment to sustainable tourism · Two decades of experience - travel with the experts

· Local guides with local knowledge

· Tours to suit every budget - 6 days from just £330

Here are 4 tours of a selection of over 200 small group adventures! Offering everything from culture, indigenous tribes, iconic sites, history, trekking, tropical beaches and relaxation.

Egyptology

14 days

A must for those who have ever marvelled at the history of this country. An unforgettable journey that brings the ancient Egyptian world back to life, giving you a real insight into a truly fascinating ancient civilisation, travelling from Cairo to Luxor and staving in 4&5 star hotels



Discover Ethiopia

14 days

Ethiopia is renowned for its warmth and hospitality. Visit villages and local markets, meeting many famous tribes. Explore the beautiful Rift Valley, the finest mountain scenery in Africa and impressive architecture often described as the Eighth Wonder of the World.



Galapagos Adventure

7 days

For a great tour of the southern islands of the Galapagos it's hard to go past this cruising adventure. This tour is a wildlife enthusiasts dream. Snorkel with sea lions and come face to face with the blue-footed booby, the giant tortoise, pink flamingos and the prehistoric iguana



Annapurna Community Lodge Trek

11 days

This is a wonderful trek, showcasing the beauty of the Annapurna region and utilising a series of local community lodges. It's the best short trek in Nepal. Well off the tourist trail you'll travel through some of the Himalayas most exhilarating and maiestic mountains



Flights

The complete package

Book your flight and tour directly for full financial protection. We'll provide you with the best flights for the best price. Save time and let us do the groundwork for you.

> Call our team of experts on 0845 287 0698

Take the family

Feluccas and Pharaohs

Our most popular family trip taking in Egypt's main historical sites - 10 days just £729 from Cairo

Kids in the Kasbahs

Vibrant Moroccan markets, traditional villages and camel rides on the beach - 8 days just £399 from Marrakech

Good Morning Vietnam

Beaches, markets, islands and colourful cities - 12 days just £869 from Hanoi

www.imaginative-traveller.com



FIELDWORK

CSI-style technology in action

Geology students trial interactive project...

THE FICTIONAL WORLD of CSI is becoming a reality thanks to a project that brings fieldwork and the lab closer together.

The 'Out There In Here' project, reminiscent of ITV's Treasure Hunt with Anneka Rice, is currently being trialled with geology students working on digs in local quarries.

It works by allowing a team of students in the field to communicate with another team based in the Ambient Lab at the OU's Walton Hall headquarters online and by mobile phones.

The team inside has an interactive table top, enabling them to map the work of the geologists who, have geo-tagged photographs taken on location with smart phones. The table top can enlarge images of rocks that have been



The interactive table back in the lab

discovered – prompting further investigation in the field.

At the same time the team inside is building up an overall picture of the dig, and can give feedback about the outside team's discoveries: sending back observations, links to relevant websites and even scanned pages from books.

Out There In Here has uses for other areas such as nursing, volcanology, disaster scenes, and aid work in developing countries.

Dr Anne Adams, who is leading the project, said: "Field trips are important for the OU and learning generally because they put theory into practice in the real world.

"Students can take part by being at our 'mission control' working with people in the field and potentially there are people who can take part in this field trip from home."

Out There In Here also enables students to reflect on their work in a way that they would not be able to do on a conventional field trip, by communicating with the team in the laboratory who can analyse their findings and feed back information to them.

Just in...



Jonathan is inaugural memorial prize winner SCORING AN AVERAGE of 99 per cent in his assignments, Jonathan Brown (above) is the first recipient of the Dave Sargent Memorial Prize for OU module Data, computing and information (M150).

Dave Sargent, a Senior Lecturer and Staff Tutor in the South East Region from 1974 to 2000, changed the lives of thousands of students through his influential contributions to many computing and mathematics modules and textbooks.



Children's literature (EA300) prize winner **FOLLOWING THE** successful completion of the first presentation of Children's literature (EA300), which ran from October 2009 to May 2010, the course team awarded a prize to the student who achieved the highest score on their ECA. From more than 1,800 students, it was Katherine Muskett (above) who achieved the highest mark. Katherine received a signed copy of Philip Pullman's Northern Lights as her prize.

STUDY

Chinese character 'app'

OU develops free iTunes download



Download a Chinese characters 'app' for free from the iTunes App Store

● HOW EASY IS it to read Chinese? If you want to give it a try, the OU's Department of Languages and Knowledge Media Institute have developed a Chinese Characters 'app' which you can download free from iTunes App Store. The app teaches you to write 20 Chinese characters and in doing so introduces you to the basic rules of Chinese character tracing.

You can also test yourself with a couple of quizzes which involve reading and listening to

words and expressions based on the characters you've learned.

To download the app on to an iPhone/iPad, go to iTunes App Store, search for 'Open University' and choose 'ChineseChars'.

The material on the app is linked with the OU's *Beginners' Chinese* course L197, which will give you the skills you need to speak and understand simple Chinese (Mandarin) in everyday contexts.

Chinese is currently spoken by one-fifth of the world's population and is one of the six official languages of the United Nations – and the rapid growth of China's economy is being matched by a growth of interest in learning its language. HEALTHCARE

A helping hand

Professor Jan Draper, Head of the Department of Nursing at the OU, tells *Sesame* why and how The Open University is providing a qualification route for those working in supportive healthcare roles...

THE UNIVERSITY IS launching a new learning and development offer which will give healthcare assistants/ healthcare support workers (HCAs) and assistant practitioners (APs) the opportunity to study towards a Certificate of Higher Education in Healthcare Practice, a Foundation Degree in Healthcare Practice (or Diploma of Health Education in Healthcare Practice in Scotland) or a BA in Health and Social Care while working.

Healthcare assistants/ healthcare support workers are one of the central pillars supporting our healthcare system. As health services have changed during the past few years, so has the role of HCAs and APs which have grown to include aspects of patient care that were once the responsibility of nurses. They perform many of the core caring tasks such as assisting patients to keep clean, nourished and comfortable. They also record temperatures, take blood pressure and read pulses, and some more advanced healthcare assistants (known as assistant practitioners) are working in highly specialised clinical areas, performing increasingly specialist tasks.

There are no entry qualifications to become a



Healthcare assistants support nurses by performing many important tasks

sector, where their largest employer is care homes. The changing landscape in healthcare means that the number is set to rise.

"Healthcare assistants are an integral part of the UK's health and social care service," says Professor Jan Draper, Head of the Department of Nursing at the OU. "In response to their changing roles, and to formally

needs and those of their organisation.

"The key to the framework is the flexibility. Students can fit study around work commitments and employers can address the training needs of their staff in a way that minimises the time needed out of the workplace."

The Foundation Degree in Healthcare Practice is made up of 120 credits at academic level 1 and a further 120 at academic level 2, but students can step off with a Certificate in Healthcare Practice after completing 120 credits at academic level 1.

"The framework closely integrates theory and practice, enabling students to directly relate their learning to their practice setting," says Jan.

"Academic level 1 will be a general introduction to the fundamentals of caring for clients. At academic level 2. students will choose from themes in long-term conditions, children and young people, mental health, health and well-being and end-of-life care. These themes reflect the current health service priorities and will enable organisations to meet the needs of HCAs/APs working across a diversity of settings. This level will also incorporate optional modules in various specialised clinical skills offered by the educational charity Education for Health."

A 'fast-track' route will enable students to complete the full foundation degree in two years.

"The foundation degree builds in even greater flexibility as it has been designed to 'mesh' with the OU's new preregistration nursing degree, planned from September 2012 onwards," says Jan. "This means there is the potential for HCAs and APs to progress to nursing education or, alternatively, individuals can continue to study to achieve a BA in Health and Social Care."

There are no formal entry requirements, and students do not need to be financially sponsored by their employers. But because it is a work-based qualification, they will need to be working in a healthcare role for a minimum of two days a week and have their employer's support to study.

Modules within the framework will be available from February. But it is possible to register now by taking the introductory module *An introduction to health and social care* (K101).

For more information email msdg-moreinfo@open.ac.uk

"Healthcare assistants are an integral part of the UK's health and social care service"

healthcare assistant and no-one is exactly sure how many there are in the UK. It is estimated that the NHS employs around 180,000, with thousands more working in the private care

recognise the professional needs of this valuable workforce, we have designed a 'step on, step off' framework so that students can study in accordance with their own







- Write on any paper Capture & store Written Pages,





Wired Digital Pen & Mouse Our Price Only: £39.99

IntelliPen Wired makes an excellent learning tool for younger

students. Children can use it with e-learning software and similar applications, practice their handwriting skills or to work though math problems all with the benefit of being online. While older students can work with it on everything from algebra to poetry. Parents love it because they can easily check and track their children's progress and store files for future use or reference. And for teachers - grading papers has never been easier.



Wireless Digital Pen & Mouse Our Price Only: £59.99

Imagine sending an email, but in your own handwriting. What about writing notes freehand, then converting it to digital text. Or during your next presentation, drawing a diagram in real time as you explain what it means. Both teaching and learning is enhanced with IntelliPen Wireless. When you start to think of all the possibilities, it is apparent that IntelliPen Wireless is not only a very powerful communication tool its functionality can save you expensive software costs.

Digital Pen & USB Flash Drive Our Price Only: £99.99

With Intellipen PRO, professionals and students alike can annotate directly into MS Office applications such as PowerPoint, Word, and Excel. And with Vista and Win 7, Intellipen Pro users can take advantage of even more unique and exciting digital handwriting resources. The built-in flash drive also allows users to store 1000's of handwritten pages, MP3's, picture files, presentations and more. And by converting handwritten notes to digital text, users will save time and energy that used to be spent re-typing all their notes. This version is compatible with MACs also.

Find these and many other offers at our new look website www.studentexpressware.co.uk



phone: 01453 827899 email: sales@studentexpressware.co.uk

We've got mail!

If you'd like your letter or email to *Sesame* to be considered for inclusion in the Letters pages, please email **sesame@open.ac.uk** or write to *Sesame* at The Open University, Milton Keynes, MK7 6AA. Please include your name, address and daytime telephone number. We reserve the right to edit letters. Letters may be permanently available to read online at **www.open.ac.uk/platform**

ARTS MODULE SUGGESTION

This year I received not one but two honorary awards from the University of Exeter, and I have The Open University to thank for being my inspiring Alma Mater.

I was awarded an honorary doctorate (DLitt) for an outstanding contribution to world art in July – a first ever award as my specialist art form is mosaic (not painting or sculpture). In August I received an honorary research appointment by the University's College of Humanities – an exciting prospect as I have further explorations into the wondrous medium of mosaic to do.

I work as an abstract artist holding frequent exhibitions worldwide using the traditional mosaic materials of Venetian gold, Ravenna glass and Carrara marble. I also teach the history and art of mosaic through practical and, I hope, inspiring books (six to date).

I wonder whether I may offer a course (or part thereof) on the art of mosaic – this could be part of an art and belief course, as mosaic appears in Pagan, Christian, Islamic and secular guises as a propagandist medium to extol strongly held beliefs and concepts. Or perhaps there is another way this ancient but enduring and appealing art form might be utilised within The Open University's vast canvas of courses?

ELAINE M GOODWIN, VIA EMAIL

Richard D Brown, Arts & Humanities Associate Dean, Curriculum & Awards, responds: Many thanks for your letter, Elaine, and congratulations on your honorary awards. At the moment, the Arts Faculty is unlikely to expand into new curricular areas such as mosaic. This is for a number of reasons, including sector-wide pressures on public spending and we also do not currently offer modules in practical arts. Best wishes with your future work.

WHAT A DIFFERENCE

Have just been reading the Autumn edition and it's brilliant! As an alumna from 29 years ago, I can see the huge difference in studying with the OU - soooooooo much better and technological than before, no more having to get up early to watch a programme on BBC2! The fact that electronic mail has taken the place of snail-mail is superb - in fact, even though I haven't started my course yet, I've been in touch twice already with my tutor. I don't have to rely on whether she is in to take my calls etc. I'm really looking forward to finishing my degree.

The magazine is superbly written and so much information too! Keep up the great work.
GLYN JOHNS, VIA EMAIL

Scott Russon, Editor of Sesame, responds: Thank you, Glyn, for your kind comments. It's comments like yours and Marilena's (below) that keep the Sesame team going.



CLASSIC PROBLEM

I have been studying with the OU off and on since 1981, and hold a BA Open and an MA in Education. I owe a great deal to The Open University.

However, I find that the Diploma in Classical Studies has to be finished by December 2011. I knew this some while ago, but I thought I would be able to opt for one of the few 60-credit courses remaining (there were not many in the first place) in February 2011.

I now find that the 60-credit courses left to me only run from October to June. They are not being offered for a February start. As an examiner myself, I am unable to sit OU examinations in June. Is this

AN INTRIGUING READ

Hello, my name is Marilena Anastasiou and I have enrolled to study education management as a postgraduate degree and have just received your email with the link to the autumn issue of Sesame (246). I would like to tell you that it was very interesting to read the fascinating subjects, including the helpful and informative article on the OpenLearn website. I really enjoyed reading the inspirational stories about people of all ages going back to education, and also discovering how much the OU, the alumni and students help people around the world.

I was particularly intrigued to read about brand marketing (p40), as I studied this as part of my home economics degree course at Liverpool John Moores University. I would like to wish the team all the best with the new module, *An introduction to retail management and marketing* (B122).

MARILENA ANASTASIOU, VIA EMAIL



preference for October to June courses due to the number of 18-year-olds opting to study with the OU? I realise very well that the present economic climate and the cost of courses has made younger people resort to the OU, and I am all for it. But please do not forget us older people who have work or family commitments and need the summer in which to study. Julia Lewis MA, BA, BEd (Hons)

Richard D Brown, Arts & Humanities Associate Dean, Curriculum & Awards, responds: The main reason for making this shift is that we believe the current mix of February and October starts makes it harder to plan a clear pathway through the diploma programme. Our experience also suggests that the majority of students prefer and perform better on modules which run from October to June. To cause as little disruption to study plans as possible, the changes are being phased so that there is a gradual shift from February to October starts, and we have put transitional arrangements in place to help students adjust study plans. The age of our students was not the decisive factor in making the change

and we do appreciate that for some students the changes will be frustrating. We do hope, however, that the changes will be beneficial for the majority.

CRITICAL CARE

The Autumn 2010 issue of Sesame carried several items of particular interest to me.

I have always regretted not having a degree, and vowed that when I retired I would join the OU. So a few years ago I embarked on a BA Humanities course. Unfortunately in 2002 my wife developed dementia, and has recently entered a care home. Her move coincided with my grappling with the final essay for AA315 [Renaissance art reconsidered]. If successful I will have achieved a BA Hons. Not an easy time but a doubleedged sword. The upheaval at home was traumatic, and yet I found the pressure of the course took my mind off my personal problems. So I have a lot to thank the OU for.

Gerry Robinson's feature on critical care in the previous issue of *Sesame* was timely. He is absolutely right in saying that whatever else one looks for in a care home, in the end it is the quality of care which is paramount. I am lucky in that

my wife's care is excellent.
Gerry also raises the question
of paying for quality care. Most
of the staff in my wife's home
are on the minimum wage and
when I see the care and love
they give to residents I have
nothing but admiration for them.
But in the country's present
financial situation I cannot hold
out any hope for extra money
being put into care for the
elderly. As he said, there are
no votes in dementia.
Douglas Jones, Ramsbottom

Scott Russon, Editor of Sesame, responds: Thank you for your letter, Douglas, and congratulations on your achievement during such a difficult time. Best wishes to both you and your wife.

NEGATIVE RESPONSE

I have just received my copy of the Autumn 2010 edition of Sesame. As a keen amateur photographer I was fascinated by Jane Bown's story (p33). As she says, "you have to be very alert, very receptive and very instinctive". Indeed, which is why I don't think she would make the mistake of printing a negative in reverse. Especially of herself. Jane is using an Olympus OM: this

camera has the shutter release on the right of the top plate, so I was curious that Jane's camera had the release on the left. I then looked for the Olympus logo on the pentaprism housing and saw that it was reversed!

JOHN ROBINSON, FRANCE

P.S. Oops! Humble pie might be my next meal. It has occurred to me that the camera which took the picture is the one Jane is holding, in which case she took the shot in a mirror.

Scott Russon, Editor of Sesame, responds: Thank you for your email, John – it certainly got us thinking. The photo is indeed a self portrait, so we also suspect the image was taken using a mirror.



I CANNOT BELIEVE IT

At last, I passed. I still cannot believe it. I never thought it possible that someone from the back to backs of Birmingham without any formal qualifications could pass an Open University course! Well, after four tries I have done it. In law, the hardest course I am sure.

I am now hoping to go on to *Rules, rights* and justice: an introduction to law (W100) and then who knows, after all I am only 65.

I left school at 15. I have loved doing all my courses and was a very hard student for my tutors. God bless them, as I did not even know what 'et al' meant. I am so thankful to the OU for giving me the chance. After working 60 hours a week for 42 years and having four

children, I now have the time (in between my other works for charity) and I have loved every minute. If I can do it, anyone can.

And here's an inspirational poem that my friend Peter wrote in my congratulation card...

You kept on going when the going got tough, You did well in the TMAs but that was not enough, Page after page, until you could not hold the pen, Trying to get that elusive 10 out of 10, Though you never quite believed it, You've finally achieved it.

Pauline Solihull, West Midlands



EYEWITNESS

Witness appeal

Available now on DVD is *Eyewitness*, the fascinating three-part co-production from the BBC and OU that looks at the susceptibility of the human memory during eyewitness testimony...



Eyewitness looks at the importance and process of the police identification parade

● TEN PEOPLE WITNESS a dramatic stabbing in a pub, but can they accurately identify the assailant? Can you, the viewer? Memory is on trial in the BBC2 series *Eyewitness*. The inspiration for the series came from the OU's forensic psychology research group, which stages mock crime investigations and invites people to take part as witnesses.

The Innocence Project organisation (which is dedicated to exonerating those wrongfully convicted) estimates that mistaken eyewitness identification plays a role in more than 75 per cent of wrongful convictions. But why are eyewitnesses so prone to error? The answer lies in the psychology of memory, as Eyewitness academic advisor Dr Graham Pike, an expert in eyewitness psychology, explains.

"Memory is an important topic in psychology, because it is a

fundamental part of how our minds work and also a very important part of our identity. But unlike a video of an event, which can be replayed, human memory can be inaccurate and is very suggestible.

"For example, the questions that you are asked about an

travelling faster than when they were asked 'About how fast were the cars going when they hit each other?' Subtly changing the wording in the question influenced the way people remembered the event.

"This has an obvious application to witness

"The UK justice system recognises that eyewitness testimony may be inaccurate, as jurors are warned"

event will to some extent determine your answers.

"In Discovering psychology (DSE141) we look at an experiment carried out by psychologist Elizabeth Loftus where witnesses were asked to recall details of a road accident they had seen on film. When people were asked 'About how fast were the cars going when they smashed into each other?' they remembered the cars as

interrogation. If a police officer asks you a question such as 'What colour hat was the man wearing?' you are likely to remember that the man was wearing a hat, even if he wasn't.

"We also have a tendency to develop shared memories. If two witnesses to the same event discuss what they've seen, they will unconsciously make changes to their recollection so that they agree more closely. "The contribution of psychology to criminal investigation is very important. The OU's forensic psychology research group has focused on witness work, particularly identification, and through our research we've helped the police develop systems and procedures which reduce the number of false-positive identifications while maximising the correct ones.

"An example of how psychology can help in police investigations is the practice of UK police to always tell an eyewitness taking part in an identification parade that the person they are looking for *may or may not* be present in the parade line-up.

"Research has shown that the inclusion of this subtle instruction reduces the number of misidentifications compared with questions such as 'Who is it?' because the latter indicates to witnesses that the guilty person must be present in the line-up, so they will tend to pick someone even if the guilty person is not there.

"The UK justice system recognises that eyewitness testimony may be inaccurate, as jurors are warned. Eyewitnesses continue to be important in trials, though, simply because we have nothing better. Although we have some fantastic forensic techniques, such as fingerprints and DNA, they still have their limitations. They are very good at proving that someone was at the crime scene, but less good in determining exactly what they did there."

Graham is a member of the Discovering psychology (DSE141) module team.



MORE OR LESS



Stats mean facts?

The BBC/OU Radio 4 co-production returns this winter – tune in (or download or listen online) to More or Less to learn the truth about off-quoted figures...

DO YOU EARN more in the public or private sector? Are energy-saving lightbulbs really as bright as they claim? And how long can you expect to live?

If you've spotted a connection between these questions, it's likely you're among the devotees of More

or Less, the OU/BBC Radio 4 programme with a different take on reality.

"I don't think there's a comparable programme anywhere in the world," says series producer, Richard Knight. "We are a current affairs programme, but an unusual one. More or Less is a state of mind, a way of thinking about news stories.

"We drill down into the data. We don't just hold up two opposing views and let two people who hold those views argue it out, we actually get off the fence and say what we think is the truth."

The magic spectacles through which More or Less views the world are - statistics. It seems there's almost no topic under the sun that they can't make clearer.

"There are so many aspects to statistics," says series advisor Kevin McConway, the

"More or Less is a state of mind, a way of thinking about news stories – we drill down into the data"

OU's Professor of Applied Statistics. "Statistics are used in disciplines across the University. One of my roles is to talk to OU researchers in other disciplines who are dealing with statistics, and lately I've been talking about autism, about plants in South Africa, about snails and about health services and measures of economic wellbeing. It's not just the numbers I like, it's what they tell us."

OU students will find statistics popping up in all sorts of unexpected places, in social sciences and even arts subjects. But for some, the interpretation of numbers, percentages or ratios is a no-go area. It is this

intimidating image that *More* or Less seeks to shatter.

"There is a kind of worry that it is all terribly technical and complicated and we have to rely on experts to tell us what

> the numbers mean," says Kevin. "More or Less proves that a lot of it is straightforward.

given a bit of common-sense and clear thinking. It doesn't oversimplify, but it allows listeners to understand and take part in the debates, rather than leaving it to the experts."

Richard agrees. "Some of the emails we enjoy most are those from people who say 'I hated maths at school, but I enjoy your programme'. You should be able to listen and enjoy More or Less whether you have any knowledge or interest in maths or not."

More or Less, Radio 4, 1.30pm Fridays, repeated 8pm Sundays. More or Less is one of the few BBC/OU series that has its entire archive online, see www.bbc. co.uk/moreorless for more.

Top-selling OU DVDs

Top 5 DVDs



THE STORY **OF MATHS** Marcus de Sautoy shares the buzz of

classic puzzles and explores the most important unsolved problems facing modern mathematicians.



CAN GERRY ROBINSON FIX DEMENTIA CARE HOMES? The business expert visits

struggling care homes in a bid to improve the way they are run and make conditions better for vulnerable residents.

THE MUSIC OF THE PRIMES



A prize of a million dollars awaits whoever is smart enough to crack one of mathematics' big

mysteries. Marcus de Sautoy investigates the distribution of prime numbers.

EYEWITNESS



Can your memory play tricks on you? Staged crimes and investigations

test whether ordinary people would send the correct person to prison (see p12 for more).



BARRISTERS

Just one in five of those who start on the road to becoming a

'brief' will make it. This series follows four students as they try to gain entry to one of the UK's most influential professions.

DVDs are available from www.ouw.co.uk

Open University Set Books Feb 2011

- Up to 40% off on all complete sets
- Free UK (Mainland) Postage on all complete sets comprising 2 books or more
- All individual Set Books discounted

This price list supersedes previous lists and is correct at the time of going to press. However, all prices are subject to increases from publishers. All Prices shown are UK pounds. Please tick boxes for books or complete set required

December 2010

Eddington Hook

Supplying Open University students since 1971

Company Comp	■ A200 Exploring History: Medieval Modern 1400-1900	RRP	EH Price	■ AA300 Europe: Culture and Identities	RRP	EH Price	■ K311 Promoting Public Health: Skills, Perspectives & Pract	ice RRP I	EH Price
				•			- · · · · · · · · · · · · · · · · · · ·		
The Lange and Resembles Andrew, Baster, riches 580 Parks	■ Exploring History 1400-1900: An anthology of primary sources						The state of the s		
Part			45.00						
Set Price and PRIA sample (27.17 (26.59%) 28.61 62.00% 2.00%							9		
Prince of Population			100	☐ Norton Shakespeare					
June							•		
Gest Experience 1.50 4.50 1.5									
June 1.5	☐ Great Expectations							12.99	
Decide 1909 250							■ L140 En Rumbo: A Fresh Start in Spanish	RRP	EH Price
De Contraction 159 175			5.79 5.79						
Enthronoxy Service 150 1	☐ As You Like it	7.99	5.79	☐ The Death of Christian Britain (2nd edn)					24.99
Deck for Purple									
Debuts on A D C (De clay) 399 739	·								
### 24 Process and Page 1952 (P. 1879) ### 25				• •			■ L203 Motive: Upper Intermediate German	RRP	EH Price
Set Price for RPR average SLA (16.15%) 226.00 2.10				Set Price incl P&P, saving £10.00 (16.95%)					£46.48
Act Station and in Medicine 1.255 10.49 Act Station			100						26.99
Act March Sept Part Sept Part Sept Sept Part Sept Sept Part Sept									
### SP Principle FIRE Assisting \$12.00 (\$2.65%)							■ L204 Viento en popa: Upper Intermediate Spanish		
Self Price and FAR paramege (FLD) (26.05%) 55.9 1 Josephson Avery Sport Introduction 1.50 5.90 1 Josephson Avery Sport Introduction 1.50	■ A217 World Religions	RRP	EH Price	Giotto to Durer					£79.97
Debthins Alvey Short Introduction	Set Price incl P&P, saving £12,00 (25,03%)	£47.94	£35.94			11.49			
Settleman 1.79 1.	■ Buddhism: A Very Short Introduction	7.99	5.99						
Delation A Very Short Introduction	☐ Hinduism: A Very Short Introduction								
Judainst Airy Short Introduction 7-99 5-99									
Unbinded All	☐ Judaism: A Very Short Introduction	7.99	5.99						
MAST Best and Sectory of European Medicine S89 EM Price S84 EM P									
Set Price Intel Ref. Setting 12-100 (200-51) 12-20 12-	■ A218 A Social History of European Medicine	RRP	EH Price				*		
Hellin Disease and Society is turinger, \$501-190 15-99 13-99 14-87 14-87 13-99 14-87 14-87 13-99 14-87 13-99 14-87 14-87 13-99 14-87 14-87 14-87 13-99 14-87 1									
The Granter Benefit to Mankeled 20.00 13.92 Art in theory 1909-2000 24.99 24.99 24.99 24.90									
ASS From the PARP swing ELAS Contemporary Art History SRP El Price									
Set Price int PRP, saving 25.00 (15.17%) 15.99 15.99 15.90 15.					RRP	EH Price			
Virgit Available 1.05 9.05 9.05 1.05 9.05 1.05 9.05 9.05 1.05 9.05 1.05 9.05 9.05 1.05 9.					16.99	13,99			
The Protect Oxford Latin Dictionary (ord edn) 11.9 9.99 7.99 AA010 Pers Graduate Foundation Module Art History 88P Et Price 19.99 7.99 7.99 7.99 84.97 84.	□ Virgil: Aeneid II				RRP		•		
Virgil: Ne Asset 1998 7.59 7.	☐ The Pocket Oxford Latin Dictionary (3rd edn)	11.99	9.99				,		
Set Price into PRP, saving 22.197 (19.99%) \$28.79				☐ Equality, Participation and Inclusion 1: Diverse Perspectives	22.99				
Please visit website for set book details.					22.99			RRP	EH Price
ASSI Themes & Issues in Philosophy RP EH Price Introduction to Social Research With Children and Young People RRP EH Price Introduction to Social Research Philosophic With Grid Grant Introduction to Social Research Philosophic Withing Grd edn) 14.99 13.49 14.50 13.49 13.49 13.49 13.49 13.49 13.49 13.49 14.50 13.49 13.49 13.49 13.49 13.49 13.49 13.49 14.50 13.49 13.49 13.49 13.49 13.49 13.49 13.49 14.50 13.49 13.49 13.49 13.49 13.49 13.49 13.49 14.50 13.49 13.49 13.49 13.49 13.49 13.49 13.49 14.50 13.49		£109.90	£87.93	■ E303 English Grammar in Context	RRP	EH Price			
Set Price incl P&P, saving £18.07 (13.0%) £140.40 £121.73 Introduction to Social Research on the Continue and Young People Set Price incl P&P, saving £18.07 (13.0%) £140.40 £121.73 Introduction to Social Research £6.99 23.49 Introduction to Analytic Number Theory £6.99 33.49 ASSI Price incl P&P, saving £4.67 (10.0%) £41.94 £37.48 EH Price £4.95 £4.94 £37.48 EH Price £4.95 £4.94 £37.48 EH Price £4.95 £4.94 £37.48 EH Price £4.95 £				☐ Student Grammar of Spoken and Written English	24.50	23.49			
ABS0 Post Graduate Foundation Module Philosophy				■ EK310 Research with Children and Young People	RRP	EH Price	·		
ASS Dest Graduate Foundation Module Philosophy RRP EH Price		£140.40	£121.73	☐ Introduction to Social Research	26.99	23.49		46.99	34.99
Philosophical Writing (3rd edn)		DDD	EII Deiss	■ EK311 Early Years Focus on Research with Children	RRP	EH Price	■ M828 Applied Complex Variables	RRP	EH Price
A851 Issues in Philosophy				☐ Introduction to Social Research	26.99	23.49	□ Applied Complex Variables	16.99	11.99
A Set Price intol P&P, saving 92.46 (10.63%) E41.94 E37.48 E37.48 E41.94 E41.94 E37.48 E41.94				■ K101 An Introduction to Health and Social Care	RRP	EH Price	■ M832 Approximation Theory	RRP	EH Price
A Theory of Listice (1999 Revised Edition) The Blackwell Guide to Social and Political Philosophy 24,99 21,99 21,99 21,99 21,99 24,99 21,99 21,99 21,99 21,99 21,99 21,99 22,99 21,99 22,99 21,99 22,				Set Price incl P&P, saving £7.00 (20.60%)	£33.98	£26.98	☐ Approximation Theory and Methods	38.00	34.99
The Blackwell Guide to Social and Political Philosophy 24.99 21.99 A860 Post Graduate Foundation Module Classical Stud. RRP EH Price A871 Performances and Repertories RRP EH Price A872 Performances and Re	Set Price Incl P&P, Saving £4.46 (10.63%) A Theory of Justice (1999 Paying Edition)			☐ Understanding Health and Social Care					
■ A860 Post Graduate Foundation Module Classical Stud. Set Price incl P&R saving £14.61 (21.99%) □ A861 The Greek Theatre ■ A861 The Greek Theatre RRP EH Price Set Price incl P&R saving £25.88 (14.80%) □ E37.85 □ E48.99 □ E4			21.99						
Set Price incl P&R, saving £14.61 (21.98%) E68.46 E51.85 Rese wist website for set book details. RRP EH Price Handbook for Practice Learning in Social Work Practice RRP EH Price Handbook for Practice Learning in Social Work and Social Care: Knowledge and Theory (2nd edn) 19.99 17.99 17.99 17.99 17.99 17.99 18.85 18.87		RRP	EH Price				The state of the s		
R8P EH Price R8P				□ A Brief Introduction to Social Work Theory	14.99	12.79	•		
ABJORANCE Fire Agree Fire Fir	Please visit website for set book details.	200110	201100	■ K216 Foundations for Social Work Practice	RRP	EH Price			
RRP EH Price Please wist website for set book details.	■ A861 The Greek Theatre	RRP	EH Price	☐ Handbook for Practice Learning in Social Work and Social Care:			5 ,		
Please visit website for set book details. A870 Post Graduate Foundation Module in Music A870 Post Graduate Foundation Mo	Set Price incl P&P, saving £25.88 (14.80%)	£174.86	£148.98				2 .	43.00	
□ Music in Words 14,50 11,49 ■ X225 Diverse Perspectives on Mental Health RRP EH Price □ Algorithm Agent (and the price of the	Please visit website for set book details.						■ M840 Dissertation in Mathematics	RRP	EH Price
■ A871 Performances and Repertories RRP EH Price Image: Music in Words RRP EH Price X260 Death and Dying RRP EH Price \$20.09 (13.96%) \$28.99 (19.99	■ A870 Post Graduate Foundation Module in Music	RRP	EH Price				Set Price incl P&P, saving £10.16 (9%)	£123.93	£113.77
Music in Words	☐ Music in Words	14.50	11.49	■ K225 Diverse Perspectives on Mental Health	RRP	EH Price			32.99
Massic in Words	■ A871 Performances and Repertories	RRP	EH Price	☐ Mental Health Still Matters	23.99	20.99			
RRP	☐ Music in Words	14.50	11.49	■ K260 Death and Dying	RRP	EH Price			
Set Price incl P&R, saving £0.00 (13.85%) £64.99 £55.99 Making Sense of Death, Dying & Bereavement: Anthology 20.99 17.99 Religion and Society in Newtheth-Century Britain 24.99 19.99 19.99 18.90 Exploit of Society in Newtheth-Century Britain 24.99 19.99 18.90 Exploit of Society in Newtheth-Century Britain 24.99 19.99 18.90 Exploit of Society in Newtheth-Century Britain 24.99 19.99 18.90 Exploit of Society in Newtheth-Century Britain 24.99 19.99 18.90 Exploit of Society in Newtheth-Century Britain 24.99 19.99 18.90 Exploit of Society in Newtheth-Century Britain 24.99 19.99 18.90 Exploit of Society in Newtheth-Century Britain 24.99 19.99 18.90 Exploit of Society in Newtheth-Century Britain 24.99 19.	■ A880 MA Religious Studies	RRP	EH Price						
□ Religion and Society in Eventieth-Century Britain □ The Routledge Companion to the Study of Religion (2nd edn) □ The Routledge Companion to the Study of Religion (2nd edn) □ The Routledge Companion to the Study of Religion (2nd edn) □ The Souther Reflegious Studies □ The Sut and Present Set Price incl PRP, saving £23.00 (42.63%) □ The Sut and Present □ The Banaging Care □ The Managing Care Reader □ The Souther Social Care Reader □ The Souther Social Care Reader □ The Social Care	Set Price incl P&P, saving £9.00 (13.85%)			Making Sense of Death, Dying & Bereavement: Anthology	20.99	17.99			
Critical Termis for Religious Studies 15.0 13.50 The Law and Social Work: Contemporary issues for practice (2nd edn) 22.99 19.49 ALOU The Arts Past and Present RP EH Price Set Price incl P&R, saving £23.00 (42.63%) £53.95	☐ Religion and Society in Twentieth-Century Britain	24.99	19.99				■ S205/ SXR205 The Molecular World	RRP	EH Price
AA100 The Arts Past and Present							☐ The Sciences Good Study Guide	14.99	11.49
ARIU Ine Arts Past and Present RRP EH Price \$ \$303 Managing Care RRP EH Price \$ \$609 Managing Care RRP EH Price \$ \$600 Managing Care RRP EH							■ S330 Oceanography	RRP	EH Price
Set Price into Park saving £23.00 (42.63%) 253.99 2				3 3					32.99
Blaji on the Beach dvd 15.99 4.99 \$3.09 Communication & Relationships in Health & Social Care RP Et Price The Earth System 56.99 41.				☐ The Managing Care Reader	24.99	20.99			EH Price
Doctor Facusts the A text 7.99 6.89 Set Price incl P&P, saving £7.00 (14%) £49.98 £42.98 The Faber Book of Beasts 9.99 5.79 Relating Experience: Stories from Health and Social Care 24.99 21,49				■ K309 Communication & Relationships in Health & Social C	are RRP	EH Price			
	☐ Doctor Faustus the A text	7.99	6.89						
una kvorno or umrerence: an antinology or snort stones 9.99 / A9 ul Communication, kelationships and Care: A Keader 24.99 21.49 ul Basic Clinical Kadiobiology (4th edn) 39.99 35.99									
	☐ A World of Difference: an anthology of short stories	9.99	7.49	Communication, Relationships and Care: A Reader	24.99	21.49	☐ Basic Clinical Radiobiology (4th edn)	39.99	35.99

Freephone Orderline: 0800 0182 799 (UK Only) Or visit: www.eddingtonhook.com

Total Books Ordered	Total Cost	Postage*	TOTAL £
---------------------	------------	----------	---------

*Postage (free on Complete Sets of 2 books or more for UK Mainland orders). UK Mainland (incl. BFPO) Postage: 1 book £1.95, 2 or more books £3.50, Express £4.95.

N. Ireland/Scottish Highlands/Channel Isles: 1 book £1.95, 2 books £3.50, 3 or more books £8.95. Europe: 1 book £4.95, 2 books £7.70, 3+ books £11.95 (excluding Greece, Switzerland & Norway)

Payment Method

Cheque: I enclose cheque made payable to Eddington Hook for: £ Credit Card: Please charge my Mastercard / Visa / Maestro / Amex Card No Expiry Date Start Date Issue No (Maestro only) Name on card Signed

Delivery (please use an address where someone is available to receive parcel eg work)

Name Mr/Mrs/Miss/MsAddress	
Post Code Email*	Phone *
Special instructions (eg leave with neighbour)	
*Required for credit card purchases	

Orders To: Eddington Hook Unit Y, PWDC, Paddock Wood, Tonbridge, Kent TN12 GUU. Phone: 01892 839816 Fax: 01892 837272



Logistics of statistics

Tim Harford, presenter of BBC/OU co-production More or Less, talks to Sesame about his Radio 4 show which scrutinises the context behind the statistics quoted in the media...



BROADCASTER AND author Tim Harford writes the 'Undercover Economist' column and 'Dear Economist' problem page in the Financial Times. Here he talks to Sesame about More or Less, the BBC/OU Radio 4 co-production, in which he and his team investigate numbers in the news...

Does More or Less have a mission?

It's really about empowering people to treat numbers and statistics as their friends, rather than as something that can be used to intimidate them, exclude them or browbeat them. And we try hard to make it fun.

How do you select your themes?

We're lucky to have a very active group of listeners, and we take a lot of our ideas from them. We also try to respond to at least

have more time to get at the truth: the evening news might have two or three hours; we have a couple of days. That gives us an unfair advantage

How do you get at the truth?

It's often about taking a number that has been stripped of any context and saying: the number is correct, but you have to understand the context before you can understand what it

one news item every week. We - we try and use it.

means. To know how a number

provoke strong reactions? We've tried not to shy away from contentious topics. We talk

Are there some topics which

10 years we weren't?

"Sometimes subjects are controversial, to our great surprise. We've tried not shy away from contentious topics"

was collected can tell you a lot about it. One of my favourite examples is, how many security cameras are there in the UK? The answer is, we don't know.

about politically charged subjects, we talk about crime, we have an item I'm quite proud of on human trafficking and forced prostitution. Sometimes

Most security cameras are subjects are controversial, to our installed on private property, great surprise. We had an item and why would anybody count about how many birds are killed them? But there's a number by cats and an item on whether that goes around, and is very cyclists should wear helmets. commonly cited. We looked at Both subjects turned out to have where it had come from and it huge lobby groups attached! came from researchers who had walked down two streets in Do you have any connection London and counted every with The Open University? camera on those two streets, I have been seriously and scaled up. This happened in considering taking a statistics

Should people be more wary when statistics are used?

going around.

There's a basic health check you can do. Ask yourself: how big a number is that? There are 60 million people in the country, so if somebody says they're spending £6 million on some programme, that's 10p per person. If they say '£6 billion' that's £100 per person. Quite a difference. When you're told something has risen or fallen, ask yourself: compared with what? Since when? So if, as I heard recently, the government is said to be spending more on the armed forces since 1997, think: is that maybe due to the fact we're fighting a couple of wars, and in the previous

Module connection

course at The Open University.

me a strong grasp of a particular

My academic qualifications are in economics, which gives

kind of statistics but not of

statistics in general. So I've

I've been sitting and leafing

a sweetshop.

through them just like a kid in

www.bbc.co.uk/moreorless

ordered all the brochures and



Discovering mathematics (MU123)

This introductory course will help you to integrate mathematical ideas into your everyday thinking and build your confidence in using and learning mathematics. You will cover aspects such as statistical, graphical, algebraic and numerical concepts and techniques. Registration closes 8 September 2011. Call 0845 300 6090 or visit www.openuniversity.co.uk/ winter for more information





Scottish History by Distance Learning

Medieval and Early Modern Scotland: 1100-1707 Modern Scottish History: 1707 to the Present

The Dundee-Open University programme in Scottish History offers you the chance to study Scotland's history from 1100 until the twenty-first century. Each course is accompanied by five volumes of specially commissioned essays by leading Scottish historians, readings and original documentary sources to make these honours-level courses the most consolidated route to the study of Scotland's past.

The courses run from February to October and can count towards an OU degree (60 level 3 points each) but are also open to anyone interested in studying Scottish history.

For further information contact the Programme Administrator at the address below:

Distance Learning in Scottish History
School of Humanities • University of Dundee
Dundee • DD1 4HN • Scotland
t: 01382 385149 • e: scottish-history@dundee.ac.uk
www.dundee.ac.uk/history/distancelearning

The University of Dundee is a registered Scottish Charity, No: SC015096

ASSOCIATION of OPEN UNIVERSITY GRADUATES Are you an OU Graduate?

Whether you have just got your results, or graduated many years ago, AOUG would like to congratulate you and invite you to join our special independent Association for OU graduates. A fellowship of OU ambassadors since 1988.

Run by OU graduates for OU graduates!

Whilst supporting the OU, AOUG share a special fellowship in a wide programme of local educational and social activities.

Membership is by an annual subscription of £20 (UK) £32 (GB Pounds - Continent of Europe), or £37 (GB Pounds - Rest of the World) payable to "AOUG"

For more information talk to us: Tel: 01908 653316 or view our website www.aoug.org.uk, write to us at: AOUG Office, Walton Hall, Milton Keynes MK7 6AA or e-mail: aoug@open.ac.uk



Peter Christian Special Offer Chino Trousers

Chino Trousers

Special Offer

£25

a pair when you buy two pairs or more

Why pay £50 plus for chinos of this quality when you can buy two pairs for the same price? These trousers are made in mid-weight cotton twill with a reinforced French bearer fly front for a trim, tidy and secure waist fastening that will never pull out of shape.

In four attractive colours they are as smart as they are comfortable. Remember only Peter Christian Chinos have our Original Peter Christian Comfort System. The unique sliding waist that adjusts for a perfect fit.

- · Comfort System waist extends 2"
- 1 zipped & 1 buttoned hip pocket
- 100% Cotton Single pleat
- Machine washable at 30°
- Tough zip fly
- · Sand, Stone, Navy, Sage

Free return service and money back guaranteed if not delighted





Peter Christian

Order Now QUOTE 14H09 01273 493 393

open 8am-10pm 7days a week

www.peterchristian.co.uk/sh

Men's Apparel & Accessories Award Winner

By phone quote 14/H/09 or please send your coupon & payment to: Peter Christian, 25 Mackley Estate, Henfield Road, Small Dole, West Sussex, BN5 9XR

25 Mackey Estate, Hellicki Road, Shail Bole, West Sussex, Bit 5 7 Mic						
Please send me	Code	Colour	Waist	Ins Leg	Qty	Total
Cotton Twill Chino	MT06					
Cotton Twill Chino	MT06					
Cotton Twill Chino	MT06					
Cotton Twill Chino	MT06					
Colours: Sand, Stone, Navy, Sage p&p £5.00						
Waist: 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56 Inside Leg: 27, 29, 31, 33						
Please send me						
\square 1 pair for £30 + £5 p&p = £35 \square 2 pairs for £50 + £5 p&p = £55						
2 pairs for £75 ±	C5 n Prn					p = £105

Inside Leg: 27, 29, 31, 33	Total
Please send me 1 pair for £30 + £5 p&p = £35 \square 2 pairs for £3 pairs for £5 p&p = £80 \square 4 pairs for £	50 + £5 p&p = £55 100 + £5 p&p = £105
enclose a cheque made out to Peter Christian for £	
or please charge my credit/debit card. Card Type	
Card No	
Valid Expiry Maestro From Date Issue No	3 Digit Security No
Name	
Address	
7. I	

Please allow up to 14 days for delivery. If you do not wish us to pass your details on to other companies please tick the box ☐ A Division of Hills of Bramley Ltd Co Reg No 04767802

Study

The latest information on new and exciting modules

NEW MODULE

Environmental obligation

A new module examines just why companies should be aware of their environmental responsibility and, in worst case scenarios, how they are being held accountable when their actions have a negative result...

• IN A TIME when environmental concern is so acute and when corporate responsibility in general has superseded corporate social responsibility, businesses and organisations need to be more aware than ever before of their environmental responsibilities.

The Deepwater Horizon oil spill in the Gulf of Mexico may be an extreme example, but the clear message is that by being seen to damage the environment, through negligence, accident or otherwise, a company's reputation can suffer considerable damage as the unrelenting pursuit of profit is seen to be at the expense of the most important human resource we have: planet Earth.

Environmental responsibility: ethics, policy and action (TD866) is a new postgraduate level course aimed at those working in a professional capacity, at non-governmental organisations, civil service agencies, companies, members of the media and politics so that they are better equipped to deal with issues related to ethics and the environment.

Dr Martin Reynolds, Module Chair of TD866, says: "Being able to convey and contextualise that what a company is doing is appropriate and responsible is



"Businesses and organisations need to be more aware than ever before of their environmental responsibilities"

extremely important, particularly as people and businesses are increasingly being made accountable.

"Equally, being able to hold government, corporations and individuals to account on environmental issues requires a clear understanding of the seemingly intractable terrain of rights, entitlements, obligations and responsibilities."

The course material includes such items as live recordings of debates by experts on climate change and video recordings on controversial issues of environmental justice, with students of TD866 analysing the arguments. The core material is a specially produced book, *The Environmental Responsibility Reader*, a definitive collection of classic

and contemporary works, which steers the reader through a myriad of modern-day dilemmas. The book has been highly praised through reviews in widely circulated newspapers and academic journals alike.

Students also construct and make sense of environmentally related documentation such as briefing papers and viewpoint articles. Dr Reynolds suggests that what TD866 uniquely offers is a conceptual framework for thinking and acting responsibly.

"The course provides a handle on two key aspects of responsibility: firstly providing care for an environment of which humans are an integral part; and secondly ensuring accountability for any harm or wrong done to the environment." In an era of increasing awareness, the framework deals with issues ranging from environmental ethics, corporate responsibility, ecological justice, fair trade, global citizenship and the connections between environmental and social justice that impact on us all. **■** Module connection

■ Module connection

Environmental responsibility:
ethics, policy and action (TD866)
registration closes 31 March.
For more information, call +44
(0)845 300 6090 or visit www.
openuniversity.co.uk/winter

New modules

Whether you want to develop your career path, retrain or just broaden your horizons, the OU has more than 570 modules for you to try. Here are some of the latest available...



Design thinking (U101) encourages playfulness for creativity

DESIGN THINKING (U101)

Changing design thinking

Enhancing the creative thought process

THIS DESIGN THINKING module is like no other – students will apply their creativity in different contexts and expand it to industries not automatically associated with design, including business, health and local government.

"When people think about design, they often relate it to something that looks different and costs a lot," says Dr Peter Lloyd, Senior Lecturer in Design. "We are trying to move on from this, and change the way people think about design and how it can be applied in disciplines outside traditional design areas. It could

dramatically change the way people see and solve complex problems."

The module follows four themes which will develop individual creative skills; explore how design can impact on society; consider design for the needs of others; and investigate the global impact that design thinking can make.

■ Module connection

Design thinking: creativity
for the 21st century (U101)
registration closes 8 September
2011. For more information,
contact +44 (0)845 300 6090
or see www.openuniversity.
co.uk/winter

FINANCIAL ACCOUNTING (B291)

Build up your financial skills

Understanding accounting and audit practice...

• IF YOU ARE looking for a route into accountancy, or need accounting skills as part of your management role, then this new module should add up for you.

You'll learn the skills to prepare financial accounts, explore the differences in financial accounting for different businesses and build an understanding of what underpins accounting and audit practice. It covers the accounting regulatory framework in both the UK and the European Union.

Says programme manager Emir Forken of The Open University Business School: "The aim of the module is to help students learn to use and interpret accounting information. B291 is the first of two modules forming the Professional Certificate in Accounting which has been awarded exemptions by professional accounting bodies including ACCA and CIMA."

You should study B291 before *Management accounting* (B292), the other module forming the Professional Certificate in Accounting.

■ Module connection

Financial accounting
(B291) registration closes
14 April. For more information,
contact +44 (0)845 300 6090
or see www.openuniversity.
co.uk/winter



Learn about accounting in the various types of business and organisations

FOUNDATION DEGREE

Welding skills together

Progress towards engineer status...



THIS FOUNDATION degree brings together the welding diploma qualifications offered by The Welding Institute (TWI) – the world centre for materials-joining technology – and modules from The Open University.

Students will gain credits for welding engineering diploma courses taught at TWI. These courses start at a practical level, with successful completion of the exams providing points towards an OU degree. The Open University's

Professor Mike Fitzpatrick says: "This award is aimed at students working in technical roles in industry to help them progress toward engineer status through a combination of work-based learning and training."

■ Module connection
For more on the Foundation
Degree in Materials Fabrication
and Engineering (G18) and what
modules you will need to take,
contact +44 (0)845 300 6090
or see www.openuniversity.
co.uk/winter

POSTGRADUATE

New-style masters

Masters can be completed in two years...

NEW-STYLE MASTERS in English, history and religious studies are aimed at making the learning journey clearer, and helping bring students through from undergraduate level to research level and PhD, says programme administrator Dr Damon Miller.

"The new masters are much more rationalised, and can now be completed in two years. Two core modules and a dissertation fit in with what the rest of the sector offers."

MA English part 2 (A816), for example, builds on the study areas and approaches explored in part 1 (A816), and enables you to complete your MA with a 12,000-15,000 word



dissertation on a topic you choose yourself, guided by your tutor. A similar approach is taken in *MA history part 2* (A825) and *MA religious studies part 2* (A880).

■ Module connection
Registration closes 31 January
for A815, A825 and A880. For
more information contact +44
(0)845 300 6090 or see www.
openuniversity.co.uk/winter

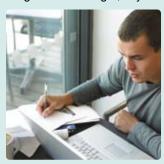
Openings modules

Bridging the gap

WITH THE ARRIVAL of a new suite of 15-credit modules, Openings students are set to have the opportunity to develop the computing skills necessary to be a successful OU student.

Openings modules are specially designed to help new students discover what it's like to study with the OU, get a taste of a subject area, develop learning skills and build confidence. At present most Openings don't require access to a computer.

George Marsh, Openings Programme Manager, says:



"These new modules are based on the current 10-credit Openings. They are being updated to include more up-to-the-minute content about the student's chosen subject whether that's the arts, psychology, the environment or society."

The new material will include interactive quizzes and web search activities which help students to discover more about their subject, while familiarising them with using a computer and internet for study.

These skills will be invaluable for future study





and will equip students with the ICT skills needed for further study at Level 1.

Julie Gowen, Centre Manager for the Centre for Widening Participation, says: "This is about bridging the gap so that students are properly prepared for their next module.

"We believe that being able to master a computer and use the internet are both essential skills for all students studying in the 21st century.

"Unfortunately we cannot provide all students with computers but we can offer



support to get them started and guidance as they take their first steps."

Students are encouraged to buy their own computer, if they can afford it; use a friend's PC; or use a PC at a local library or community centre.

If a student is unable to get access to a computer, they will have the option of completing the end-of-module assessment and gaining 10 credits without having to use a PC.

For more information about 10- and 15-credit Openings modules visit www.open.ac.uk/winter or call 0845 300 6090 SCIENCE

Natural sciences

Hazel Rymer, Associate Dean in the Faculty of Science and Professor of Environmental Volcanology, explains the exciting new changes that are emerging from the updated science degree programme...



The newly updated science degree programme will offer greater choice

• A RADICAL UPDATE of the science degree programme sees a raft of different science degrees replaced by a single BSc Honours in Natural Sciences (B64) available now.

The new degree – not to be confused with the old natural sciences BSc (B16) - still allows students to specialise by following one of six recommended pathways within the degree programme: astronomy and planetary science; biological and health sciences; chemistry and analytical sciences; environmental science; geology; and physics. Graduates will receive a transcript showing exactly which modules they've studied.

The biggest change is that the subject-based Level 2 residential schools are being replaced by a single 30-point module, *Practical science* (S288). This module offers students the option to do all their practical work online.

"This module is just full of choice," says Professor Hazel Rymer, Associate Dean in the Faculty of Science. "Those who want to do site-specific practical work in the lab or in the field will be able to do so. And there will also be the option to get credit for some experience outside the OU, such as an Earthwatch expedition [see later]. Or you can do all the practical work online through interactive scientific experiments."

Being able to complete all the practical work online will enable more science students to claim a named degree, she says. "We asked students why many of them weren't claiming science degrees and one reason seems to be that we've been too prescriptive about which modules students had to study, in particular the requirement to do three or more residential schools."

The Practical science module is also designed to give students experience of how 21st-century scientists actually work, she says.

"The final part of the module is a project conducted online as part of a team, made up of students following different pathways. So if you're majoring in chemistry, for example, you will be the chemistry expert in your group, and you'll get to work on a project with scientists from different disciplines, just like in the real world.

"What's really exciting is because this module has an online option it is available globally, so you could be working with someone on the other side of the world. This is a fantastic privilege and opportunity which you could only get through the OU."

Students who have already embarked on one of the old

BSc in Natural Sciences can receive credit for fieldwork carried out as volunteers with the environmental charity Earthwatch as an option in the *Practical science* module S288 (see www.earthwatch.org/europe/exped/rymer.html).

INTERACTIVE SCIENCE

Screen-based interactive experiments are so realistic that anyone who has operated virtual equipment will be able to go straight into a lab and use the real thing, says Professor Nick Braithwaite, Chair of the new *Practical science* (S288) module.

"What we are doing now is 3D virtualisation – changing a flat computer screen into a window through which you can browse round a laboratory and interact with the kit in it.

"A lot of practical science is now done at a distance. Some of the best fieldwork in the world is happening on Mars, using remotely controlled rovers.

"As a practical scientist, what you have to know is how

"Those students who want to do site-specific practical work in the lab or in the field will be able to do so"

science degree programmes have until 2014 to complete. But students who are starting a science degree this year are "very strongly advised" to aim for the new degree, says Hazel.

"If you try to fit the residential schools in before you are ready, you will not benefit. And S288 gives you a fantastic opportunity to engage with practical science in the way that practising scientists now do."

Students registered on the

to mine and process data, make a hypothesis, design an investigation and make observations and ensure you are being consistent. Actually being there to hold up the ruler is just a small part of it." See http://practical-science.open.ac.uk for details about practical science skills. For more on the BSc (Hons) Natural Sciences degree, call +44 (0)845 300 6090 or see www.openuniversity.co.uk/winter

Everything to do with you, from inspirational stories to fascinating interviews

GRADUATE STORY

Creative satisfaction

With the regret of not studying for a degree earlier in life, Carys Bray nervously embarked on an OU writing fiction module. Four years later, she now holds a BA and an MA and is a prize-winning author...



 CARYS BRAY GRADUATED from The Open University in 2009 with a degree in literature after three years of study and while raising four children.

After the hard slog of an OU degree, Carys, 34, from Southport, found that she enjoyed the creative writing element so much that she wanted to continue. She is now studying for an MA in Creative Writing at Edge Hill University in Lancashire and also has one eye on a career in teaching.

Things are going well, with Carys named 2010's MA Creative Writing winner in the Prize and she is currently talking to literary agents.

"I enjoyed the creative writing parts of The Open University BA so much that I didn't want it to end. I was beginning to think about teaching and I knew that the Edge Hill course examined

"I feel immeasurably grateful to

me to the pleasure of writing"

Edge Hill University Short Story

understand if I was hoping to teach writing one day."

After a decade of part-time work and consumed with motherhood, Carys wasn't too confident about returning to study when she approached the OU. She began with the 10-point Start writing fiction (A174) module and enjoyed it so much that she decided to pursue a degree in literature and was chuffed to discover she could study creative writing as part of it.

"I really enjoyed studying with the OU. I had very supportive tutors on every course and I very much wanted a degree. It was important to me to prove that I could achieve it, so I worked hard and made it a priority.

"Apart from some flexible and sporadic work for my husband, I wasn't working during my studies with the OU. My four children were between the ages of eight and two in 2006, so they required regular attention, but my life was my own every

The Open University for introducing

writers' poetics – their writings about writing - something which seemed important to

evening after 7pm when the children went to bed. I gave up television. I learned to cook the dinner while holding a book, which was actually easier than cooking the dinner while holding a child! I stopped caring if the house was a bit untidy. I ignored fingerprints on the glass doors. On Saturday nights I made my husband watch OU DVDs and in September 2008 my youngest child started school and that meant I had a significant amount of extra study time."

Carys' hard work paid off as she achieved grade one passes for all her assignments.

"It's something I'm very proud of. I regretted not doing my degree when I was 18. I think the force of that regret ensured that I took study with the OU seriously. It just became a priority for me and I always did my best."

Having recently received a distinction for her MA course, what's next for Carys is the prospect of a publishing deal should agents fall in love with her short stories. Beyond that, she has to choose between a PhD or writing a novel, but would one day like to teach for The Open University.

"I feel immeasurably grateful to the OU for introducing me to the pleasure of writing."

To find out more about writing modules, see www. openuniversity.co.uk/winter The journey is just the start of the adventure







USA Coast to Coast 21 days from £2,795

See the sights and feel the buzz of New York before embarking on a once-in-a-lifetime rail tour across the USA. Visit Washington, Chicago, Denver, LA and San Francisco, travel on historic railways and take in the Grand Canyon, Wild West and Rockies.



West Coast & Yosemite 14 days from £2,098

Travel on the stylish Coast Starlight from Seattle along the length of California's golden coast, discovering the dramatic Yosemite National Park, Spanish style Santa Barbara, delightful San Diego and the bohemian cool of San Francisco along the way.



New England in the Fall 10 days from £1,498

Enjoy the exclusive East Coast retreats of Cape Cod and Martha's Vineyard, see the sights of 'Old World' Boston and travel historic scenic railways into the mountains of Maine and New Hampshire, through the famous autumn spectacle of vivid reds, golds and oranges.



Las Vegas & the Golden West 15 days from £1,795

Discover the two sides of West Coast America, from glitzy, glamorous Hollywood and Las Vegas to the spectacular scenery of Yosemite and The Grand Canyon. See the sights of San Francisco and travel on California's Coast Starlight to Monterey, Carmel and the Big Sur.

Iconic trains, famous city sights and spectacular, ever-changing scenery – that's what makes our USA rail journeys so exceptional.

At Great Rail Journeys, we also add 25 years of experience to ensure the whole holiday will remain in your memory forever. We do this through well-researched itineraries and fascinating excursions, specially selected hotels and a wealth of information from your friendly, experienced Tour Manager, who will be at your service throughout. In fact, as our many loyal customers will tell you, no-one does rail holidays like Great Rail Journeys.

Call for your FREE brochure today



For your FREE brochures

CALL 01904 734 305

BOOK WITH 100% CONFIDENCE AIIO SABTA ABTANOV2170

WWW.GreatRail.com/USA



INTERVIEW

Reach for the stars

Many OU students achieve great things and work in many varied and interesting roles. We're sure, though, that not many can say they went on to become an astronaut instructor...



Former OU student Gail lles conducts exercises in 'zero-G' conditions

GAIL ILES IS used to perseverance. As an Open University student she moved house and had children alongside her study. Her determination and discipline has since led to bigger and better things.

After achieving a PhD, Gail applied to be an astronaut.

Despite not being selected, she's as close to the action as she can be – working as an Astronaut Instructor at the European Astronaut Centre (EAC).

"This is a story about space, physics and perseverance,"

mid-'90s. I remember the thrill of receiving a 1m³ box with the words 'Open University Experimental Kit' emblazoned across the side, complete with 'hazardous' and 'harmful to the environment' stickers.

"For those of you who are closet OU course number spotters I completed S103, T202, MST207, S207, S357, S371, SM355 and SMT356. In 2003 I received a distinction in quantum mechanics and became the proud and thoroughly shocked owner of an OU Bachelor of Sciences

"This is a story about space, physics and perseverance. You're all probably well accustomed to 'perseverance'"

she says. "You're all probably well accustomed to 'perseverance' as you need lots of it to complete an OU course.

"S102 was the science foundation course back in the

degree. That led to a PhD place at the University of Leicester.

"During the eight years it took to complete my degree I moved house five times, had two babies, fought two court battles, held four different jobs, became quite ill and then got better again. It's a similar story for so many OU students, but it breeds versatility, resourcefulness and perseverance.

"After the PhD I received a fellowship from the European Space Agency (ESA) to work in Grenoble, south-east France, at the European Synchrotron Research Facility (ESRF) and the Institut Laue-Langevin (ILL).

"Working on the IMPRESS project (a pan-European, multi-million Euro project on materials science), I used a third generation light source and the most intense neutron source in the world to characterise two key intermetallics for new energy-saving industrial materials.

"ESA provides microgravity platforms such as parabolic flights in which to perform research. I have participated in five flight campaigns accumulating 2.5 hours in 'zero-G' on board the Novespace Airbus A300.

"An OU degree, a physics PhD and lots of zero-G time contributed to my partial success during astronaut selection. So what do you do when you get so far but don't quite make it? To quote Winston Churchill, 'Never, never, never give up.' So I took the job as astronaut instructor and am thrilled to be able to call astronauts 'my colleagues'.

"At the EAC our new recruits have just graduated from their basic training and I wish them every success in the next step of the journey. I shall continue to train expedition crew on operation of the Columbus Communications System and, who knows, maybe I'll find a way to make my dreams come true.

"If you're reading this, perhaps you're thinking of studying with the OU and wondering how will I find the time? Will it be worth it? To you I say, take that first small step. Studying with the OU will give you access to some of the best course materials in the world and dedicated and enthusiastic lecturers.

"You'll probably drip ice-cream on your course books reading them on the beach, and you may need to prop your eyelids open with matchsticks watching study DVDs at midnight, but the rewards are worth every drop of sweat and tears. Maybe you're studying for fun. Maybe you're waiting to embark on a new exciting career. Or maybe you're OU alumni. This is to every one of you out there, 'Shoot for the moon – even if you miss you'll land among the stars".

Find out more about OU science courses at www. openuniversity.co.uk/winter

ENERGY

Biofuels to the rescue?

Carlton Wood, Senior Lecturer in the Department of Life Sciences, outlines the possibilities and potential of using biofuels to solve the world's future energy requirements...

CARLTON WOOD, SENIOR Lecturer in the Department of Life Sciences, and Module Team Chair of *Plants and people* (S173), outlines the possibilities and potential of using biofuels to solve our future energy requirements...

"A biofuel is a source of energy that is derived from material that was once living. This sounds simple enough, but there are so many ways of generating biofuels that things quickly get complicated.

"In its simplest form, burning wood on a fire for warmth is using a biofuel. The wood was once alive and part of a living tree and it became 'energyrich' through the process of photosynthesis. This, as many of us know, is where the plant

some of the electricity you use is produced by burning biomass. The largest power station in the UK, Drax in North Yorkshire, produces around seven per cent of the UK's electricity and burns around 300,000 tonnes of biomass a year. It is looking to increase the amount of biofuel it uses to around 1.5 million tonnes, at the expense of the fossil fuel coal that it normally uses. But why?

"There are advantages to using biofuels compared with fossil fuels such as coal that are derived from plants that were alive millions of years ago. To produce a fossil fuel, plants died, became buried and subsequently compressed and ultimately produced fossil fuels such as coal and oil, which are

"The problem with using seeds and nuts as a biofuel is that you are using a potential food source for fuel purposes"

uses the energy from sunlight to allow it to take carbon dioxide from the atmosphere and convert it into sugars, and ultimately into all the carboncontaining structures within the tree. These structures contain energy that has been converted from the sunlight.

"Burning the wood allows this 'trapped energy' to be liberated as heat and also light. Indeed, any plant material that can be burnt can be used in a similar way.

"You may not be aware that

energy-rich in the same way as living plant material is.

"Burning fossil fuels, however, releases both the energy and the carbon dioxide which was trapped millions of years before. The energy is useful, but the carbon dioxide is widely accepted to be a cause of global warming.

"Burning a biofuel, however, releases carbon dioxide that was trapped only a few years prior. It is therefore classed as 'carbon neutral' and won't cause an increase in global warming.







(From clockwise): Biofuel E10 on sale in France; oilseed rape being grown for

"We have already seen that wood can be used as biofuel but there is a lot of interest in using certain types of grasses such as Miscanthus which can grow rapidly, using minimal inputs of fertiliser, and can be grown on land that is not used for growing agricultural crops. These last two points are important, as producing fertiliser requires energy and so it is nonsensical to use energy-requiring fertiliser to produce something that is going to be used as an energy source. Also, using land for growing biofuel that could be used for producing agricultural crops is hard to justify in a time of increasing food shortage.

"Indeed, the increases in the global cost of wheat in 2008/09 were partly caused by poor worldwide harvests, but also by the USA using around 25 per cent of its harvest to produce biofuel for transport purposes.

"The transport fuels petrol and diesel can both be substituted by liquid biofuels. Both the sugars and starches that are found in plants' stems and seeds can be fermented to produce alcohol such as ethanol. This is what happens when beer is produced - barley seeds rich in starch have the starch converted to sugar and then yeasts break the sugar down to produce ethanol. In the case of beer, we drink the ethanol but it can be used to produce bioethanol and used as a replacement for petrol.

"Biodiesel is produced in a slightly different way: the oils found in many seeds and nuts of plants such as sunflowers, oil seed rape or palm oil can be











biofuel in Britain; Jatropha plant research; an Ethanol biofuel factory in the USA; Brasil Ecodiesel; and a wood-powered biofuel power station in Scotland

treated with chemicals to convert the energy-rich oils into biodiesel. The problem with using seeds and nuts is that you are using a potential food source for fuel purposes. Additionally, growing huge areas of plants such as palm oil, some of which is used for biofuel, has caused large tracts of biodiverse rainforest habitat to be cut down, threatening such species as the orangutan.

"Scientists have found solutions to such problems. Some transport biofuels such as the biodiesel produced from the fruit of the Jatropha tree do not have such disadvantages. Jatropha fruit is inedible and, also importantly, the tree can tolerate drought conditions and grow on land unsuitable for agricultural crops. One example where

Jatropha has been used successfully is in India where the diesel train that runs from Delhi to Mumbai uses 15 per cent biodiesel derived from Jatropha.

"Biofuels, though, are not a full answer to our energy needs. Many experts believe that biofuels have an increasing and significant role to play in the generation of our fuels, but renewable sources of energy such as wind and solar power.

"In some countries with greater land reserves than the UK, biofuels could be even more useful. In Brazil, for instance, 40 per cent of cars run on bioethanol and there are plans to increase this percentage.

"The overall answer to our fuel issues is to use less fuel in the first instance, to

"It is nonsensical to use energy-requiring fertiliser to produce something that is going to be used as an energy source"

in the UK particularly there is extensive pressure on our land resource from population growth and the requirements for both housing and for food production. Biofuels are part of the answer, alongside other

decrease our reliance on fossil fuels, increase our reliance on biofuels and to work for a solution that requires global initiatives to maximise the use of non-agricultural land for producing biofuel crops."

■ Module connection

Carlton Wood is Module Team Chair of *Plants and people* (S173). *Plants and people* is one of a series of short, flexible 10-credit modules introducing fascinating topics in science.

"This is a particularly exciting module, given the input from experts at the Royal Botanic Gardens Kew, the Royal Horticultural Society and also the Eden Project," says Carlton.

"The module will appeal to anyone who finds plants interesting and wants to find out more about them," he adds.

This module explains the importance of plants on a local and global scale, and how they impact on everyday lives. For more information, call +44 (0)845 300 6090 or visit www.openuniversity.co.uk/winter



There's no finer inheritance

Picture a world in which everyone, everywhere has an equal chance to learn. For over forty years, The Open University has been at the forefront of social justice in education. We help thousands of talented people to study each year, and our support for disabled students is exceptional.

Education transforms people's lives. Please help us continue our vital work by leaving a gift to the OU in your Will – it's hard to imagine a more powerful legacy.

"Thank you, OU!"

Elva Young, who is in her third year of OU study, is sometimes kept in bed for weeks at a time by severe arthritis. She's also dyslexic, but none of this holds her back from her dream of getting a degree: "I've had some hurdles to overcome, but with the help of my tutor, extra support and specialist equipment, my whole life has changed. The OU has given me confidence, self worth and a future."

For more information contact:

The Legacy Officer
The Open University
Freepost ANG5780
Milton Keynes MK7 6BR
Tel: +44 (0)1908 659141
Fax: +44 (0)1908 653815
Email: fundraising@open.ac.uk
www.open.ac.uk/legacy

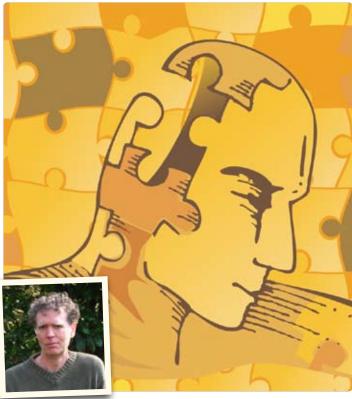
The Open University is incorporated by Royal Charter (RC 000391), an exempt charity in England & Wales and a charity registered in Scotland (SC 038302).



STUDENT STORY

Being mindful

Simon Wharne's schooldays may have been mediocre but studying with The Open University later led to many things, including identifying his dyslexia. Fourteen years on, and he's achieved so much more...



Simon Wharne (inset) studied psychology with the OU

WITH LITERACY problems and the expectation that he would work in the local farming industry, Simon Wharne's schooldays were

For Simon, any absence of academic effort was not due to a lack of intelligence instead it was a "frustrating inability to develop skills in

"A turning point came when a lady returned one of my letters corrected by her eight-year-old niece"

never destined to lead to academic success.

"I still have my report book from the Cambridgeshire village comprehensive that I attended during the 1970s," he recalls. "Many of the pages say 'Simon must try harder,' but I don't think anyone tried particularly hard. Boys expected to get jobs on the farms and the girls aspired to work in the shops in Cambridge."

reading and writing". Simon remembers English lessons being uncomfortably quiet, punctuated only by the alarming sound of the other pupils turning pages. "By the time that I had got to the end of a sentence, I had forgotten how it began!"

Any hope of academic achievement dwindled as schooldays became increasingly devoted to woodwork, sports and art. Simon, though, felt

he had something to prove: "I studied in the evenings using 'how to pass exams' guidebooks and I left that school with more qualifications than anyone had at that time - though a mediocre result by today's standards."

The timing of finishing school also coincided with more mechanised farming practices and thus fewer job opportunities. Instead, he was guided towards a career in technical illustration, which lasted until the manufacturing industry downturn during the 1980s.

It was while unemployed that Simon attempted to set up his own business and began writing to potential customers. "A turning point came when a lady returned one of my letters which had been corrected by her eight-year-old niece."

Though somewhat humiliated, the reply motivated him to sign on for his first Open University course. "It was when I read about dyslexia, while studying child development, that I sought help. I do not recall dyslexia ever being mentioned during my statutory education but after an assessment I was given support such as tape recordings of course material, study planning guidance, extra time in exams and general practical advice."

In the 1990s he gained employment in community mental health services ("and every day I thanked God for the invention of word-processing technology, with spelling and grammar checks").

"My confidence grew, but with all the complex recording of medications, with strange names and spellings, I did not feel that I could train as a mental health nurse and social workers then spent a lot of their time filling in forms by hand."

Having started studying with the OU 14 years ago, Simon is now studying his third year of a part-time PhD, having completed a Bachelor of Science (Honours) degree and a Master of Science in Psychological Research Methods. He has also contributed to the development of a form of service provision called 'Assertive Outreach' and contributed as an author and an editor of a forthcoming book, Assertive Outreach: Current Perspectives.

"I've not made time for a graduation ceremony yet," he says, "but I must when I get the PhD!"

Module connection



Discovering psychology (DSE141)

How much influence does personality have on the actions we take and beliefs we hold? How does personality work together with the world around us to shape our behaviour? How do other people affect our behaviour? This course will introduce you to the different ways in which psychologists investigate these and other questions. Registration closes 14 April. For more information, call **0845 300 6090** or visit www.openuniversity.co.uk/ winter

STUDENT STORY

A sense of achievement

After many years of undiagnosed dyslexia and drug addiction, Bri Edwards is now studying for a social work degree. It's not been easy, but with the help of his local OU Learner Support Team he's getting there...

"MY PREVIOUS experience of education was horrendous," says Bri Edwards, 56. "I grew up in a foster home in Scotland, and education in those days [during the '60s] was extremely different from what it is now.

"Having dyslexia meant you were stupid and my foster parents didn't care whether I had qualifications, so no-one looked into why I was struggling."

As a result, going to university was never a realistic option for Bri. "For someone growing up as an only child and living in foster care, university

Support connection



Right from the start, The Open University has been committed to making higher education accessible to all. The famous 'open doors' policy has given many hundred of thousands of people the chance of a first-class university education - regardless of their background or qualifications. Of course, for many people there are financial as well as academic barriers to overcome. Thanks to the generosity of its supporters over the years, the OU has been able to help thousands of disadvantaged students to study.

For information about how you can donate, please see www.open.ac.uk/fundraising/index.php

just didn't happen," he says. A period of heroin addiction and living on the streets in London followed.

"It is now 25 years since I had a shot," says Bri. "And I rejoice in that – every day is a victory for me now."

Bri is now studying with the OU towards a social work degree, but he admits that it hasn't been easy.

"When I first started at the OU I had no idea about the Disabled Students' Allowance (DSA), so I spent the first year struggling through Networked living: exploring information and communication technologies (T175) with the help of a friend."

Later he learned about the Disabled Students' Allowance and contacted the OU to see if he was entitled to any additional support. "The OU sent someone out who spent the day with me, assessing me. He said he thought I was a severe case and had the capacity to study but I'd need support.

"That to me was a relief because I then really understood what my problem was. Up until then, and even with the tutor telling me at night school I was dyslexic, it didn't mean a lot to me — I didn't understand it fully. The report explained it though: it was 17 pages long."

Realising that he was at a disadvantage, Bri applied for the support of a mentor. "I absolutely would not have been able to continue studying without the DSA support," he says.

Bri, though, failed his *Care*, welfare and community (K202) exam in June, perhaps not surprisingly given the tragic events that took place at Bri's



Bri Edwards was relieved when he was finally diagnosed with dyslexia

home village, Seascale, only a short time earlier. Referring to the Cumbria shootings that resulted in 12 deaths and 11 injuries, he says: "A week before really important to me.

"One thing I'd like to really raise the flag for is Learner Support in Newcastle [at The OU in the North Regional

"I absolutely would not have been able to continue studying without the Disabled Students' Allowance support"

the exam I saw the aftermath of the shootings, which also resulted in me losing a friend.

"It was really quite dramatic, but I decided to go ahead with my exam – which I think was a bit stupid as I failed it. A resit, though, was lined up for September and Bri passed. "It was really hard," he says. "I put a lot of effort into my studies, it's Centre]. Without them, I couldn't have carried on. They've moved heaven and earth for me — they've been absolutely brilliant."

Bri says to gain a social work degree would give him a huge sense of achievement. He is currently studying *Effective* practice in youth justice (K208). For disabled student support see www.open.ac.uk/disability

Great discounts for OU alumni and students

Visit our website for more information on these offers and for links to all discounts* – www.open.ac.uk/platform/member-benefits Please note you will need to sign in with your Open University Computer Username (OUCU) and password to view the offers...



Hoseasons holiday parks and lodges - 10 per cent off

HOSEASONS BRINGS you a superb choice of hand-picked self-catering holidays and short breaks.

Choose from holiday parks, lodges, boating holidays, city apartments, and villas and apartments with pools.

With the biggest choice of family holidays in Britain, Hoseasons is renowned for offering a fantastic holiday experience at numerous locations. Enjoy tranquillity in a timber lodge in the heart of the countryside, take a woodland walk or cycle through the surrounding areas of outstanding natural beauty.

Fancy something different? Then climb aboard one of Hoseasons cruisers or even a narrow boat and have a fun-filled holiday on the waterways of England, Scotland, Wales and Europe.

CONTINUING OFFERS

Jancis Robinson.com



Open University

Honorary Graduate and wine correspondent Jancis Robinson is offering discounted membership to her wine website for a price of £49 (usually £69) for 12 months. With thousands of articles, 40,000 wine reviews, news and friendly forums, it's a must for wine aficionados.

Petals Network



Receive a petals 10 per cent discount when ordering

online. Choose from bouquets, arrangements and celebration gift baskets. Same-day delivery in the UK and next-day delivery to more than 70 other countries around the world.

Egmont Books



The UK's largest children's publisher of books and

magazines is offering Open University members a 20 per cent discount on all books purchased.

AA Breakdown Cover



Save up to 30 per cent on AA Breakdown

Cover at enrolment and 10 per cent at renewal.

Please note, discount level is dependent upon level of cover purchased.

To find out more about modules, go to www.openuniversity.co.uk/winter Winter 2010 | Sesame 247

IHG weekend leisure breaks



Enjoy great discounts with IHG of up to 35 per cent

off your next weekend break at more than 200 selected hotels in the UK. The offer is available at participating Crowne Plaza, Holiday Inn and Express by Holiday Inn hotels across the UK.

Battery Force



Battery Force Ltd is a UK online retailer offering

a 10 per cent discount on a wide range of batteries, chargers and battery-related accessories on top brands.

LA Fitness

LA fitness

is offering 25 per cent

off membership fees to enjoy the use of 87 clubs throughout the UK. Terms and conditions apply. Length of contract 12 months. Offer and memberships subject to availability. Start-up fee applicable on all memberships.

Cadbury Gifts Direct



is offering a 10 per cent discount on

gift items for members of The Open University community. Visit www. cadburygiftsdirect.co.uk. The discount will be applied to gift items only (excluding postage & packing).

^{*} Reference in this publication/website to any specific commercial products, process, service, manufacturer or company does not constitute its endorsement or recommendation by The Open University.





INTERVIEW

Keeping the faith

Honorary graduate Zoe Wicomb is a published author and until recently was Professor in the Department of English Studies at Strathclyde University, Glasgow. Here she talks about the creative writing process...

ZOE WICOMB IS an honorary graduate of The Open University, a published author and until recently taught creative writing and post-colonial literature at the University of Strathclyde. Here she talks about the subject of writing...

How do you feel about being an honorary graduate of the OU, and what memories from the day do you have?

I am inordinately pleased to be honoured by an institution that brings education to many who would not otherwise have such access. And the day was indeed special, since I had received all my previous degrees in absentia, so the ceremony was a novel experience. Intimidating though, addressing so very large an audience in the Glasgow Royal Concert Hall.

You've talked about storywriting being a way to record history, and much of your writing is based around your own experiences. Why did you feel it important to write those experiences down?

There is a popular reading of black women's writing as autobiography but, as it happens, I have not written one.

My writing is only based on my experiences, in the banal

material is transformed as you embed it in new contexts or bend it to your design. You start with an idea, do the necessary research (geographical, historical, cultural, etc) related to the idea, and struggle with the problems of structure and appropriate ways in which to represent your material, until you end up with something you had not necessarily envisaged at the start. There is no such thing as 'writing things down' because 'things' do not exist in the medium of language which then could be transferred to the page. And that holds even for autobiography.

In my acceptance speech I told a story not about marking real events, but about writing's ability to transform the real.

Until recently you taught creative writing. What would you say to anyone who considered it to be an easy subject to teach or study?

Toni Morrison [Nobel Prize and Pulitzer Prize-winning American author] speaks of the difficulty of writing, of the sheer oppressiveness of the labour involved, the flailing about in the dark, the struggle to get something to work, and then the paradox of the completed work which, by dint of having made it,

"Writing is an act of faith; we have to keep doing it even when it doesn't appear to be going in the right direction"

sense of all writing being in some way related to an author's experience, whether things remembered, heard, overheard, lived, told by others, etc. But of course in the process of forging a narrative, all such known will show not a trace of that sweaty labour. Yes, it must look easy. Learning to write is difficult, and if the aptitude is not there, the student will not learn to write – that is what sets it apart from other disciplines. At

Strathclyde I have taught both creative writing and classes in literature and literary theory, and the former is by a long stretch the more labour intensive and difficult to teach, precisely because of its contingent nature and uncertainty of the outcome.

It precludes a fixed pedagogy; there has to be greater focus on students' individual practice and development, which means that in addition to a curriculum the teacher responds to what crops up in students' writing. Students have to do much more writing than in the traditional subjects — a far greater commitment on the part of students — and this has to be read by the teacher.

Strange how fine art has been taught for decades in this country and no one makes foolish comparisons between the 'easiness' of fine art and the 'rigours' of philosophy or English literature.

You've written short stories and full-length novels. What's your preference?

I work in both genres and don't think I have a preference. Short stories have the advantage of taking less time, so you have the earlier sense of satisfaction and relief that completion brings. What I both love and fear about the longer work is the magic of motifs that slowly work their way through the novel, making themselves known to you, accruing meaning, slowly revealing to you what the writing is about. The greater uncertainty (that is, over a longer period of time) has its rewards.

Of course this happens in a short story as well, but one is always aware of the demands of structure. If the shortness does not allow uncertainty, such free reign, the discipline of form has its own rewards.

What are your top 10 tips for someone who wants a career as a writer?

There are so many different kinds of writing, and my own experience is so limited that I would not presume to offer advice. All I know is that a writer of any kind of fiction will have to go through the process of struggling to find the appropriate words, even in the case of popular genres. We have to press on. Writing is an act of faith; we have to keep doing it even when it doesn't appear to be going in the right direction, or keep on trying when it's not going at all.

Module connection



Creative writing (A215)

This course is suitable for new writers as well as for those with some experience who would like to develop their skills. It will help you to identify your strengths and interests as a writer by giving you the opportunity to write in a range of genres: fiction, poetry, biography and autobiography. The emphasis is on finding your own directions and styles.

Registration closes

8 September. Call **0845 300 6090** or visit www. openuniversity.co.uk/winter



*Save up to 25% offer excludes Bank Holidays, Christmas and New Year, Special Themed breaks, Spa breaks and 2 night midweek breaks. Offers are from current Warner Leisure Hotels 2010/2011 brochure prices and cannot be used in conjunction with any other offer and apply to new bookings only. All bookings are subject to availability and terms and conditions in the current Warner Leisure Hotels brochure. All persons in your booking must be over 21 years of age. Warner Leisure Hotels reserve the right to change or reduce these offers at anytime without prior notice. Bourne Holidays Limited (trading as Warner Leisure Hotels) is a company registered in England and Wales with company number 01854900 whose registered office is 1 Park Lane, Hemel Hempstead, Hertfordshire HP2 4YL.



INTERVIEW

Uphill all the way

Full-time international skier Michelle Sole fitted in study while competing all round the world. And even repeatedly breaking her thumbs didn't stop her from gaining a degree in psychology...



When international ski-racer Michelle Sole retires from skiing she'd like to work in the field of animal behaviour

• HURTLING DOWN THE slopes at 100 kilometres an hour might seem enough of a challenge for most people. But international ski-racer Michelle Sole turned up the pressure by completing an OU psychology degree in three years.

Her study materials accompanied her as she travelled from France to Italy to Switzerland to New Zealand, following the snow and taking part in international West Oxfordshire District Council, and raising money herself. She spends the whole day either on skis or in the gym, so fitting in study could be a challenge.

"On the way to races I could be found in the back of the team van with a torch trying to read my OU books whilst we drove along rickety mountain roads."

And while Michelle calls high-speed skiing "good fun", she admits it can be hazardous achieve her academic goal. Following the thumb accident she was allowed her to sit her exam a year late without having to disrupt her study path. "I was really impressed with the help I had from OU tutors," she says.

"I couldn't attend many tutorials, but the OU's online capabilities were really good. Once I had to do a project online with a partner when I was based in New Zealand, which meant there was a 12-hour time difference, but it was OK."

The daughter of ski instructors, Michelle began ski-racing at age nine and at 14 was selected for the Great Britain children's team. She began her OU study at age 19 because all her friends had gone to university and she felt as though she was missing out. "My mum had taken an Open University course while she was pregnant and she recommended it to me."

Her degree, which she completed last year at 22,

is also an insurance policy in case things don't go as planned. "I wanted to do the degree in three years because, if I break my leg, my skiing career is over and I want to have the qualifications to do something else.

"When I retire from skiing I'd like to work in the field of animal behaviour, so I'm hoping to use the psychology degree to do something animal-related."

At the moment, Michelle's sights are firmly set on ski-racing. She competed in the British Ski Championships in 2009 and is aiming to achieve Europa Cup level this year. "My ultimate goal is the Winter Olympics but that's some way off yet."

"On the way to races I could be found in the back of the team van with a

torch trying to read my OU books"

competitions in slalom and downhill racing. "When I went to New Zealand my hand luggage was crammed with my laptop and OU books — luckily it wasn't weighed at check-in," she recalls.

Michelle, 23, is a full-time skier, relying on sponsorship from her home local authority, at times. "I have a bad habit of breaking my thumb – I've broken my right three or four times and my left twice – which makes writing difficult. I had to miss one exam and sit it a year later because I couldn't write."

Michelle says the OU has been very flexible and understanding in helping her

Module connection



Exploring sport online (Y164)

This introductory online course is for all sports fans, whether you're a spectator or a competitor. You'll be introduced to some of the ideas involved in studying this broad subject area and explore different aspects of sport from the perspectives of the individual, the team and society.

Registration closes March. For more information call **0845 300 6090** or visit www. openuniversity.co.uk/winter

Presidential campaigns



William Brown, Senior Lecturer in Government and Politics, examines the ongoing and maybe insurmountable challenges faced by President Obama...

IT NOW SEEMS a very long time since Barak Obama declared in his inaugural address that America was ready to lead once more. And while many noted at the time that the US President had been bequeathed 'an in-box from hell' by the outgoing Bush administration, few foresaw just how difficult the new direction in foreign policy was going to be.

Obama's aim, a leitmotif of his election campaign, was to redefine America's position in

Module connection

the world to undertake some much-needed maintenance and renovation of old alliances, and to try to shift the tone and content of relations with rising powers and obdurate opponents alike.

The core elements of this project included better relations with European countries, a 're-set' relationship with Russia and greater cooperation with China; holding out the prospect of dialogue with Iran and progress on the Middle East peace process; and the extrication of the US from Iraq and eventually Afghanistan.

To tackle this agenda in benign conditions would have been difficult: to tackle it in the midst of financial crisis is even tougher. More than two years into his presidency, and despite notable progress, each of these issues has encountered serious obstacles. Rising domestic problems, such as healthcare, job losses and a resurgent right wing, have not helped.

It hasn't, however, simply been bad timing that has slowed progress on Obama's foreign policy agenda. Underlying the specific contours of each of these problems lies a more fundamental shift in the international system that will continue to trouble US policy for years to come. The rise of China and other large developing countries such as India and Brazil has added a major new stimulus to the long-term diffusion of US economic dominance of the



Will Obama's optimism have decreased due to the immense challenges he faces?

A world of whose making? (DU301)

DU301 explores processes of interaction, change and transformation of the international system. As the core Level 3 module in the international studies degree (B11), it covers the key analytical tools you need to make sense of international political and economic issues as well as the changing cultural conflicts and technological transformations of today's world.

Call **0845 300 6090** or visit www.openuniversity.co.uk/ winter for more details.

challenges posed by new networked political actors.

In each of these areas the shift to a world that is economically, if not militarily, multipolar, poses a set of questions about the future of international order. What are the prospects for a new deal on world trade now that major developing countries such as China and India have become

economic governance. While the USA maintains a clear lead in military power, there are great difficulties in translating this power into an ability to "Obama's aim, a leitmotif of his election campaign, was to redefine

America's position in the world..."

regulate and police the multiple other problems it faces, not least nuclear proliferation.

world economy. The political

beginning to be played out in

disputes within international

organisations and in stalled

negotiations over international

effects of this are only now

The mid-life update of international studies module A world of whose making? (DU301) means that many of these issues are now addressed. The update examines the linked problems of the future of US hegemony, the growth of China and India, new collective action problems in managing the financial crisis and world trade, and the

key power brokers within the World Trade Organization? What are the prospects for cooperation over financial regulation if the USA is no longer in the unchallenged position of leader? And how can the world manage the crisis-ridden states of the Middle East and west Asia? Obama signalled a clear determination to meet these challenges, but time will tell how far the USA is still in a position to do so effectively.



Introducing Blue Sky Resorts.

An experienced team providing professional support and advice, helping our customers find their dream holiday home.

With superb holiday homes on award-winning independent holiday parks across the UK, trust Blue Sky Resorts to find your ideal location...

Contact our friendly team are here to help you discover the holiday home of your dreams...

Freephone 0800 111 40 50 Email enquiries@bluesky-resorts.co.uk www.bluesky-resorts.co.uk

The journey is just the start of the adventure





Interlaken & the Jungfrau Express in Winter 8 days from £1,345

Experience Interlaken, nestled between Lakes Thun and Brienz, and watched over by the mighty Jungfrau. Take an incredible journey through snowy mountains, by glaciers and sparkling lakes to the highest station in Europe and travel on board the famously scenic GoldenPass Line.



Venice Carnival & Lake Bled in Winter

10 days from £1,598

Combine the colourful costumes and masked merriment of Venice Carnival with a relaxing few days in Slovenia's romantic lakeside resort of Bled surrounded by stunning Alpine scenery and staying in 5-star luxury, with excursions to magical caverns and the capital Ljubljana.



The Harz Mountains in Winter 6 days from £915

Discover Germany's well kept secret of the Harz Mountains, taking panoramic narrow-gauge rail journeys through pristine scenery, exploring fairytale half-timbered towns and staying in charming, historic Quedlinburg where the Old Town is a UNESCO World Heritage site.



The Golden Pass in Winter

9 days for £1,498

Spoil yourself with stunning Alpine scenery through Switzerland and the Bernese Oberland, staying in the elegant lakeside cities of Montreux, Interlaken and Lucerne. Travel on the GoldenPass Line and climb through the Eiger to the 'Top of Europe' on the spectacular Jungfrau Railway.

Famous trains, fabulous surroundings and awe-inspiring and ever-changing scenery – that's what makes Great Rail Journeys winter holidays so special.

At Great Rail Journeys, we add 25 years of experience to turn them into holidays that will remain in your memory forever. We do this by including comfortable, specially selected hotels, enriching and well-researched itineraries, and a wealth of information from your friendly and experienced Tour Manager who will travel unobtrusively with you throughout. In fact, as our many loyal customers will tell you, no-one does rail holidays like Great Rail Journeys.

Call for your FREE brochure today.



For your FREE brochures CALL 01904 734 306

BOOK WITH 100% CONFIDENCE AITO SABTA ABTANOV2170

WWW.GreatRail.com/Winter

Research

A round-up of the latest research news from The Open University

ACOUSTICS RESEARCH

Noise reduction

OU sound research uses sonic crystals as barriers...

● THE OU HAS officially opened its noise barrier test site, which is currently being used to research the potential of using sonic crystals as noise barriers.

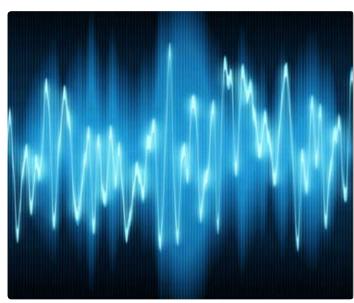
Sonic crystals, which are artificial composites that can be engineered to produce specific acoustical effects, may prove to be effective as noise barriers and could reduce disturbance from industry, traffic noise and aircraft ground operations.

Professor Keith Attenborough said: "The attraction of sonic crystal barriers relates to their more interesting appearance and the possibility that, unlike conventional noise fences, they would retain their performance even during adverse weather conditions – such as when the wind is blowing from source to listener."

The performance of sonic crystal noise barriers will be compared with conventional noise fences during a range of weather conditions.

The research team is currently planning to make an application for further funding to commercialise successful sonic crystal barrier designs.

There is a possibility that the test site will also be of interest for routine testing of commercial noise barriers. http://acoustics.open.ac.uk/



Sonic crystals could be used as noise barriers

Other news

Drought predicted

● CATASTROPHIC DROUGHT may be imminent for the capital city of Bolivia, according to new research by Florida Tech (USA) and the OU. The team predicts that if temperatures rise more than 1.5° to 2° above modern averages, then the two million inhabitants of La Paz would suffer the results of the Altiplano highlands of Peru/Bolivia becoming a desert-like setting. www.open.ac.uk/media

Biographies of Britain's finest

■ ACADEMICS FROM THE International Centre for the History of Crime, Policing, and Justice at the OU were specialist advisers and contributors to the latest update to the Oxford Dictionary of National Biography (ODNB). The ODNB contains the stories of 57,449 prominent people. Students can access the ODNB via logging into Student Home. www.oxforddnb.com

Mars research equipment

NASA AND THE European Space Agency (ESA) have embarked on a programme to study the chemical composition of the atmosphere of Mars. The ExoMars Trace Gas Orbiter mission, scheduled for 2016, will be the first of three joint robotic missions to the red planet. The OU is part of a consortium that will provide an instrument designed to detect trace gases. http://cepsar.open.ac.uk

Art depictions of hell studied

● FRESCOES FROM THE island of Crete depicting scenes of hell and the punishments of the damned are the focus of a new OU research project working with the University of Mainz. The aim is to assess the representations within a wider geographical and cultural context (the island of Crete was ruled by the Venetians from 1211 until 1669). www.open.ac.uk/

Cyber threats

The online realm is massively advantageous for the majority of people, with many of us rarely 'offline'. Bashar Nuseibeh, Professor of Computing at the OU, talks to Sesame about the potential risks to governments, companies and you...

 IN RECENT MONTHS. the UK government has identified cyberspace as a key battleground for future wars and also as a source of significant terrorist threats. While the potential for such disruption has been known for some time, it appears that only now has this issue been placed so firmly in the public arena.

In a world where many of us use technology that holds and facilitates the exchange of much personal information, where our online activities can be monitored, and viruses, hacking and online scams are everyday occurrences, understanding exactly what is at stake has never been more crucial.

With input from colleagues, Bashar Nuseibeh, Professor of Computing at the OU, talks about the reality and the risks of the cyber domain...

Terror suspects have been located through the use of their mobile phone or SIM card. Should such aspects of security and privacy concern the everyday phone user? And are there instances where this tracking capability could be extremely beneficial, for example, locating a child, elderly family member, etc? The ability to locate and track mobile phones (and therefore their users) is increasingly available, and high-profile cases such as locating terrorists on the run seem to have conditioned people to accept that the security services can and do make use of such capabilities. It seems that in such cases the security of citizens is generally

accepted as overriding concerns over location privacy.

Any mobile phone that is switched on is constantly communicating with the mobile phone masts around it, so that it can decide which is the best to use. This feature can be used by the mobile operator to triangulate a rough location of the handset. With authorisation, the police and security services can use this to track suspects.

Individuals can also use commercial services such as TrackAPhone or ChildLocate where the handset owner gives permission to the mobile operator to allow certain individuals to access the information. All of these have a low accuracy outside a dense urban area where the masts are close together.

The ability to track mobile phones has become prevalent in many end-user applications as well, and it is therefore increasingly important that



The UK government believes that cyber security is one of the top four strategic

their owners run specific apps they can have their phone automatically inform friends and family where they are. Our research at the OU, however, suggests that many people are overlooking the risks of location data leakage. Our research is exploring ways to make

"We are exploring ways to make mobile phone locations more visible while also offering safeguards"

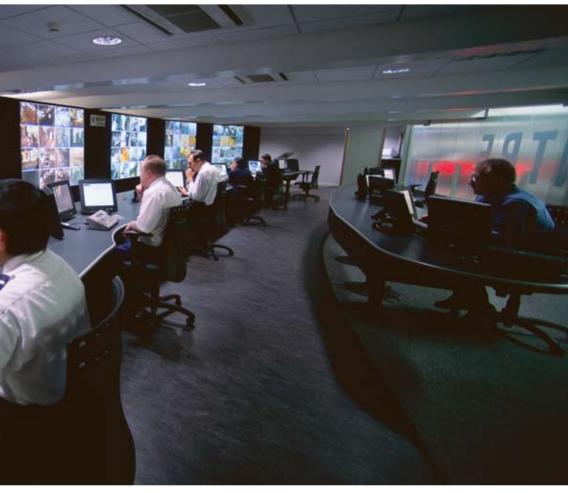
users are made aware that the same location-tracking that was supposedly used to enhance their safety can also be used maliciously by anyone to determine their movements, their habits and their vulnerabilities. Someone knowing that you are not at home, for example, can provide an opportunity to rob you.

Most new smart phones such as the iPhone or Android phones have built in GPS chips, and if

people's mobile phone location more visible to both trackers and those tracked, while at the same time offering safeguards such as blurring or hiding users' locations if they wish to. One interesting finding suggests that even apparently benign location tracking within families is highly contextual and is often driven by what people find socially acceptable. For example, we found that active tracking of a family member is reduced if that member is informed each time the tracker makes an explicit request for the tracked person's location. The stigma of 'stalking' overrides the urge to track.

With data capture seen as key to user experience in terms of enhanced web usage and tailored marketing, are the benefits worth the risk? The benefits certainly appear to be worth it for many people. Think about how much information we give out to supermarkets every time we allow the cashier to swipe our reward card. These issues are becoming more problematic as we use web or mobile computing technology because anonymity can be more difficult if we want to use credit cards and mobile phones.

The challenge for computing researchers is to both help give service providers richer opportunities to target or sell to customers interested in



threats to the country

their services, while still giving customers some control over their private information, habits and preferences. My view is that users should not have to choose between giving up everything or nothing, but rather be able to choose when and what to divulge. with full awareness of the consequences. It is also important to study ways to make it easier for people to change their minds, for example, by revoking permissions for a service provider to use personal data. We are researching some of these issues in collaboration with Imperial College London.

Can you explain what cloud computing is, the potential security implications and why it is important?
Cloud computing is about the ability to access data and services from anywhere a user needs them. It is also

about having immediate access to vast quantities of storage and computing power, without customised for different needs and usage scenarios. A company cloud containing

"Credit card security breaches are often due to some careless use by a human rather than technology flaws"

having to pay for them up front. You can think of 'the Cloud' as a big repository of information accessible by authorised mobile users. Security in cloud computing is currently an area of concern for both researchers and organisations keen to embrace this potentially empowering technology.

One interesting security research question about cloud computing is not only what are the assets that need protection, and who is authorised to access them, but *where* are these assets located?

Researchers are busy examining ways in which clouds can be designed and

sensitive product information, for example, may have more stringent security requirements for accessing that information, compared with other data.

We are also researching what we call 'adaptive security', which includes the ability to change security settings automatically, depending on the location from which the information is being requested.

How much data does the average person 'leak' online? As far as I am aware, there are no reliable figures. A more important question is what kind of information people are prepared to provide online.

Most sensible people avoid uploading sensitive information, such as bank account details, to unprotected websites, but the more concerning phenomenon is when apparently innocuous information about a person, gathered from different sources, is pieced together to reveal more sensitive or private information about that person.

Our research at the OU has shown that we are able to re-identify many people who have an online presence from very simple and publicly available information, such as supposedly bland usernames that don't bear any relation to their real names or identity. We wrote a report about this entitled 'I know what you did last summer'! (See http://bit.ly/9wACcq)

How common are data attacks or similar criminal activity on an average person and how do you know if you are a victim?

Again, it is very difficult to give accurate numbers but it is certainly the case that reported attacks are on the rise, if one counts 'incidents' reported to, say, credit card companies.

Liability depends on what kind of crime has been committed. Credit cards are relatively safe to use from a consumer perspective (with a few exceptional stories suggesting otherwise). Credit card security breaches are often due to some careless use by a human rather than flaws in the technology (but again there are exceptions to this generalisation). At the moment, credit card companies are willing to protect customers by guaranteeing to cover criminal losses, because they perceive a higher return from legal use of their cards.

In contrast, leaving large volumes of sensitive company data on an unprotected laptop on a train is not a good idea, and is a crime for which users should be and often are liable.

Our security research and education programme at the OU is addressing this particular



The ability to track mobile phones has become prevalent

issue through specific activities such as public engagement.

How severe is the current shortage of cyber security experts in the UK? As you have heard, the UK government believes that cyber security is one of the top four strategic threats to the country in the coming few years. I think the most compelling evidence of a shortage is the increasing number of successful attacks on computer systems, which suggests that more effort is needed to strengthen such systems. The more serious problem is what the government rightly identifies as a strategic threat: potentially crippling

It does not require aircraft carriers, fighter jets and tanks, but rather it needs computer security expertise and a well-informed and educated population that understand the need to lock computer systems in the same way doors to homes are locked.

Of course new attacks and ways of defending them emerge almost daily.

Can you ever be 100 per cent confident that your most crucial data stored electronically is secure? I'd love to say that it is possible to be 100 per cent confident about security, but of course this is not realistic. Security

"One important observation to note is that, while not ideal, security improves by learning from incidents and failures"

attacks on the country's computer-controlled critical infrastructure, such as power grids, communication networks and transportation. These threats are real and potentially very damaging.

The positive take on these threats, however, is that unlike physical warfare, cyber warfare is less costly to defend against. is always relative to some requirements that you can describe, and some potentially unpredictable attacker. For years, researchers have studied ways of modelling the most malicious and powerful attackers, but of course this exercise is always limited by the bounds of what the modeller knows. Attackers are

unpredictable. Nonetheless, individuals, organisations and nations each need to assess the risks of being attacked, and the impact of the losses they could incur if the attacks are successful. They then need to decide how much they can afford to spend in terms of resources such as time, money and inconvenience, in order to protect their assets to an acceptable level. For example, I protect data on my laptop through password access and encryption, to protect me from a casual hacker or my carelessness in losing the laptop on a train, but I acknowledge that my protection is unlikely to be sufficient should a government wish to deploy its full resources to discover what data is on my machine. Security is often all about trade-offs, even at the very highest levels of national security.

One important observation to note is that security improves by learning from incidents and failures. It's not ideal to wait until an attack before setting up protection mechanisms, but the ability to analyse incidents and prevent them from happening again is crucial.

Privacy issues with Facebook have been highlighted recently, but do you think users of such social media expect and accept that they will provide personal data without any real sense of apprehension? While attitudes to privacy by Facebook users can be very different from other social groups, I think that privacy is still a major issue for such users, their friends, families and professional colleagues or employers. In our PRiMMA project at the OU (http://primma. open.ac.uk), we studied groups of mobile Facebook users (that is, users of Facebook running on mobile phones), and we found that these users have very nuanced notions of privacy that were determined by their context: where they were, what they were doing, who they were

with, and so on. What we found to be particularly interesting was when the boundaries between users' physical world and online world become blurred. For example, some users felt it important to separate - keep private - activities in their physical world from some of their online friends, and vice versa. The challenge for us as researchers is to give such users the tools to be able to disclose selectively what information to giveen to whom and in what circumstances.

What course of action can companies and governments, etc, take against a data attack that originates a) domestically and b) overseas?

The UK Computer Misuse Act

1990 covers a whole range of cyber attacks from denial of service to hacking to creating automated botnets that take over systems and steal data.

The Act also covers any of these kinds of attack against any information asset that has a reasonable connection to the UK. even if the actors are outside the UK. Different countries have their own similar laws that cover such misuse. The biggest problem is catching people, not finding a law that applies to them. Then you have to prove it was them in front of the keyboard, which is hard, so usually other non-computerrelated laws are used instead. With traditional laws the police often find that it is easier to connect the actors to the evidence from traditional crimes. There is an international convention on cybercrime but it is really up to individual countries to apply their own laws in given cases. http://crc.open.ac.uk

■ Module connection

Information security
management (M886) and
Computer forensics and
investigations (M889)
registrations close 31 March
2011. For more information,
call 0845 300 6090 or visit www.
openuniversity.co.uk/winter

HOTO: SCIENCE PHOTO LIBRARY

Support

How The Open University opens up learning for all

STUDENT SUPPORT

Dyslexia support

If you are studying with the OU and declare that you have the learning disorder dyslexia, then you can receive a range of additional support...

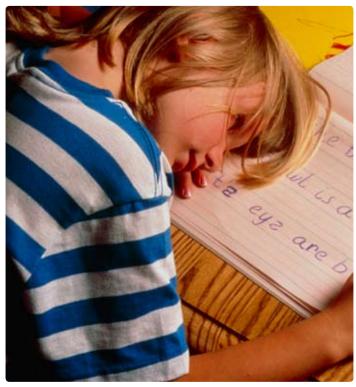
■ AROUND ONE IN 10 of the UK population has trouble with spelling and memory, with one in 25 experiencing difficulties that have a moderate to serious effect on their lives. More than 2,500 students who have disclosed dyslexia are currently studying with the OU.

Dyslexia is a learning difficulty that affects people in different ways: trouble reading; lack of concentration; poor spelling, grammar and handwriting; difficulty in remembering information, organising and planning, thinking and working in sequences; and visual difficulties or difficulties in listening to oral instructions.

Some people don't realise they have dyslexia until they are an adult, such as Chris Rowley from London. It was not until he was assessed by the OU that Chris received the help he needed: "I was called lazy, thick and stupid at school, which angered me greatly as I knew I had a brain. It was frustrating and I gave up on learning. So to be officially diagnosed as being dyslexic at the age of 33 was a great relief."

"Many students who disclose dyslexia will not have had a formal diagnosis," says Jane Swindells, Specific Learning Difficulties Advisor at The Open University.

"At the OU we work hard to take into consideration the needs of students with dyslexia at every stage of the student journey. We recognise the need for high-quality, accessible materials which include a variety of activities, many of which are interactive and may involve online discussion and self-checking tests alongside texts. In this way, we hope that



A dyslexic child working on a writing exercise

So, what can you do? Consider applying for the Disabled Student's Allowance (DSA), which is a governmentfunded grant awarded to people with disabilities that

"I was called lazy, thick and stupid at school. To be diagnosed as being dyslexic at the age of 33 was a relief"

we will meet the learning needs of most of our students.

"We have staff in every region and nation who can advise students on additional resources such as alternative formats. They can also assist with applications for a Disabled Students' Allowance and make additional arrangements for examinations where there is evidence of need."

impact on their learning. It can offer funding for additional support and assistive technology, as appropriate to student need. The OU can offer help in applying for this grant as well as supporting students to plan ahead in order to keep on track and meet assignment deadlines. Developing computer skills may help make tasks more

manageable and the OU offers advice on this, too. Discuss any concerns or queries with staff in regional and national centres who can advise on matters relating to your study.

You can also access the online study support through StudentHome and if you explain your difficulties to your tutor they'll be able to help, too.

Let the OU know about your additional requirements so that the right arrangements are made where there is evidence of need. These could include, for example, extra time to allow for the additional duration it takes to read material and process the information, or the use of a word processor to accommodate slow speed of writing or illegible script.



Julian Brower's dyslexia didn't stop him from achieving a first-class degree

● DYSLEXIA PREVENTED
Julian Brower from achieving his
potential at school, and as an
adult without a degree he
became increasingly frustrated
at being passed over for
promotion. Studying part-time
with The Open University,
at 48 he achieved a first-class
Honours degree in four years
and has landed a job at the
world-famous Rutherford
Appleton Laboratory working
on particle accelerators.

"I was very dyslexic when I was a kid – I still am – and it was

rage and the symptoms being described rang a bell. So I took a test and the conclusion was that I had dyslexia, but my coping mechanisms had become very efficient by then."

Dyslexia, though, didn't stop Julian from working towards his dream of a first-class degree. "There was support," he says. "The OU gave me lots of forms, letters and polite people asking me if I needed help. I learned that dyslexia is a very complex condition and needs investigation to assess the level

"I say to my colleagues the OU should be available on the National Health, because of what it does to a person"

not uncommon then for teachers to call kids stupid," says Julian. "You develop an inferiority complex which sticks with you.

"I remember being told I had a reading age two years less than my actual age and was sent to a school of low achievers. No support was given at school, or college, up to the age of 19.

"Some 15 years passed and dyslexia was becoming all the

of help required by a student. Someone of my age tends to ignore the problem.

"Today, my dyslexia affects my reading speed and spelling, which vary from atrocious to good. It's very frustrating but the spell check keeps me on track."

Julian wasn't just fighting against dyslexia, he also fought to fulfil his capabilities and develop a career but hit a stumbling block because of his lack of qualifications.

"I wanted to be a manager, but I would go for promotion and they'd say 'you don't have a degree, so you won't be considered'. In the end I decided to leave and run my own business because I was so frustrated.

"I was running my business and in the evenings for four years I was studying with the OU. I did an Open honours degree but it was mostly physics, which I've always enjoyed. I was just finishing the last few months of study when I got the job at Rutherford Laboratory.

A first-class degree and a top job. How does it feel?

"How does one feel with a degree within the worldrenowned Rutherford Labs where the cleaner has a PhD? I feel great but I'm a small fish in a sea of brains. But where life has dealt them the brains, it has dealt me the emotional intelligence to translate their findings and speak their successes in the language of you and me. My inner-self knew that I was not stupid and getting the degree really helped to jump that hurdle, but it has also made me realise that a degree is simply a badge, well earned, that society rates very highly. Sadly, the dyslexia makes it so much harder to gain that badge.

"The Open University has done so much for me in coordinating the way my brain works, showing me how to use my mind in ways it has never been used before. I say to my colleagues the OU should be available on the National Health, because of what it does to a person to improve them and make them feel good about themselves."

What advice does Julian have for other students with dyslexia? "Dyslexia is a complex and varied condition and by no means prevents a person from achieving high goals. Some of the biggest hurdles to overcome are those

of self-confidence that having dyslexia only exaggerates. You can do it if you want to, it's as simple as that. Success is not about intelligence, it's a matter of time and commitment, and developing a learning strategy that best suits you.

"My strategy used mind maps. I drew my way to a first. I loved the colours and the shapes and it made the learning fun. I always read the material three times; a skim read to engage and get a feel, a deep read to get the understanding, and finally the third read to distil the essence into my mind map. A lot is going on in the subconscious, so the real value is not always obvious, but it worked and the proof was in the exams."

For more information visit: www.open.ac.uk/disability

Insight

What to do if you have dyslexia...

- Think about your study and the extra support you may need by reading up on your course and looking through the advice offered online by Disabled Student Services.
- Contact your regional or national centre to talk about the services and support you might need.
- Make contact with your tutor and let them know about your dyslexia at the beginning of your course.
- Request a copy of the Studying with Dyslexia booklet and check out the Skills for OU study website www.open.ac.uk/ skillsforstudy/
- Find out if you're eligible for the Disabled Students' Allowance www.open.ac.uk/ disability/disabledstudents-allowance.php

ADVICE

Volunteering



OU student Sue Wybourn on how the OU's Careers Advisory Service

helped her achieve more...

MY NAME IS Sue Wybourn. I work for the NHS as a Medical Secretary in a Child and Adolescent Mental Health Service. I left school at the age of 18 with two average 'A' levels and was its first ever pupil to gain a place at university. The year was 1975.

I set off to the University of Essex to study English literature with a brimful of high hopes belonging mainly to my teachers and parents. I returned home to disappoint everybody less than a year later with a broken heart and severely damaged self-esteem.

A string of low-paid jobs followed. Marriage and motherhood offered solace, joy and a welcome break from my sense of underachievement in the job market. The later sorrow of divorce, though, brought this into sharp focus again as I found myself unskilled for the job market and needing to work full-time to pay the bills. This need led to my current job.

I do not wish to overstate the case but it is no exaggeration for me to claim that the OU



The Globe Theatre, London, where Sue is a volunteer steward

creative writing courses behind me, I now have one more ECA project to complete. If successful, this will complete my BA (Hons) Literature.

I cannot tell you about my life as an OU student without mentioning the fantastic OU Careers Advisory Service, which encouraged me to go further on my personal journey and embrace the world of volunteering.

This has involved wonderful experiences, such as becoming a volunteer steward at The Globe Theatre, London, which helped my work, the office work, the work with children and my time at home with family – all add up to a wide variety of skills that I have gained that are an asset, not something to feel embarrassed about.

I am still a Medical Secretary but I no longer see this as some sort of failure. My outlook has changed so much. I now have more awareness of the skills that I have gained during the years and which have been honed further by studying with the OU.

Some of my work colleagues have commented on how much more confident I have become during the past few years. It is never too late to take that first step. Don't let the fear of failure hold you back like it held me back all these years. You will discover a whole new world waiting for you - a warm community of adult learners and a supportive network of tutors and career advisers to help you develop. I guarantee you will never look back with regret again, even if the going gets tough.

If I can do it, so can you!

News

Online careers forums

THE CAREERS ADVISORY Service is running a number of online careers forums this year on topics such as teaching, volunteering, and computing and ICT. Look out also for the Graduate Opportunities forum where a number of graduate recruiters will be answering questions about the opportunities they have. The forums are available to read for a year after they have closed. www.open. ac.uk/careers/forums.php

Interested in helping out at the 2012 Olympics?

THE ROLE OF the 8,000 London Ambassadors is to provide an outstanding visitor welcome to visitors to London at Games time. The volunteers will be based at 35 sites around London from 20 July to 10 September 2012.

All London Ambassadors will need to commit to volunteer for a minimum of six consecutive days, with each day's shift lasting five hours. Full training will be provided.

London Ambassadors will need excellent interpersonal skills and a passion/enthusiasm for London. To find out more see www.london ambassadors.org.uk

Read OU student's blog about her study and career

PLATFORM'S STUDENT blogger Carrie Anne is working her way from dogsbody to doctorate to get a better career. You can read and be inspired by her story at www.open.ac.uk/ platform/blogs/student/ dogsbody-doctorate-onegirls-tale-quest-education

www.open.ac.uk/careers

"It is no exaggeration for me to claim that the OU changed my life by helping me confront my past failure"

changed my life by helping me confront my past failure.

In 2004, I dipped my toe into a 10-point *Writing fiction* course, which I loved. A year later I still only had the nerve for a second 10-point course. I completed my first 60-point course in *Creative writing* in 2006 and gained a distinction.

It is now August 2010, with a combination of literature and

understanding of Shakespeare during my studies and also my self-confidence. I also help out at my local theatre, get to see lots of plays and gain insight into the writing that I continue to develop and enjoy.

My careers adviser, Cathy Lovell, also helped me to see that all those jobs I have had over the years – the shop

www.open.ac.uk/careers

Savings on Software

with your exclusive Student Discount



Student Value Pack,

Only £89.99 with Free Delivery

RRP: £381.67 You Save 77%

Buy Office Professional plus 2010 and 2 years internet security in a great value bundle. Office Pro Plus includes more applications that ever before: Word, Excel, Power Point, Outlook, Publisher, Access & more. AVG Internet Security 2011 offers complete protection for 2 years from: Viruses, Spyware, Trojan Horses, Mallware & more.





Adobe® Photoshop® Elements 9 software combines power and simplicity so you can make your photos look extraordinary, share your life stories in unique print creations and web experiences, and easily manage and protect all your photos and video clips.

> Your Price: £45.99 RRP: £77.49 Save 40%

Adobe Design Premium CS5

Unleash your creativity, work fluidly across media, and produce exceptional results. Adobe CS5 DesignPremium is the ultimate toolkit for designers to realise their creative visioons in print, web, interactive, Your Price: £309.99 and mobile design

RRP: £1773.08 Save 83%

AVG 2011

Save Over 50%

AVG Internet Security



Comprehensive protection for Windows against all online threats from the world's most trusted security company. Newly launched AVG Internet Security 2011 protects against viruses, spyware, hackers, spam, malicious websites and now includes Identity theft.

Internet Security for one computer for one year AVG Internet Security Your Price £28.99 RRP £59.99

80% Micros

Windows 7

Ultimate Upgrade Your Price: £79.99 Professional Upgrade Your Price: £62.99

Office for Mac Standard 2011

Your Price: £57.99 RRP: £293.59 You Save 81% Office Pro Plus 2010 Includes: Word, Excel, Powerpoint, Outlook with Business contact manager, OneNote, Access, Publisher

Communicator and more

Your Price: £64.99 RRP: £349.98 Save 81 %

Pay As You Go. Microsoft products now available to rent with a teacher discount on a monthly basis with no minimum term. Access from any computer anywhere.

Try Free for 7 days!

Office Standard 2010 Your Price: £5.99 per Month

Office Pro 2010

Your Price: £6.49 per Month

Project Pro 2010

Your Price: £8.49 per Month

More Microsoft products avaliable to rent, see the full range online.

Adobe cs5 **Full Creative Suite 5 range**





DRAGON 11 NEW

Create Documents and Spreadsheets, Manage Email, Surf the Web and More... All by Voice! Dragon NaturallySpeaking 11 Premium Student/Teacher speech recognition software helps you reach your full potential. A valuable resource for Teachers and Administrators. Larger classes, more paperwork, fewer

resources. Teachers and Administrators use Dragon to get more done with less in their classrooms.



NOW ONLY: £79.99 RRP: £149.99 You Save 40%

Find these and many other offers at our website www.studentexpressware.co.uk



phone: 01453 827899 email: sales@studentexpressware.co.uk