The Open University

SCIENCE CURRICULUM CHANGES – UPDATE January 2010

I am delighted to announce that after an intensive period of planning and discussion, the Faculty of Science has developed a firm proposal for a science qualification which, with its innovative approaches to practical and laboratory work, we believe will provide improved opportunities for a greater number of students who wish to study with us to achieve a BSc. We will shortly be asking the University to approve a new 'Natural Sciences' degree, and our vision for this new qualification is as follows:

The Open University's new BSc (Hons) Natural Sciences degree will be a broad, interdisciplinary science award covering the full range of science relevant to modern society. The degree will provide students with essential scientific knowledge and understanding and will develop the generic skills increasingly demanded by employers. Practical science experience will be delivered through a choice of 'hands-on' laboratory and field work and an innovative suite of interactive and immersive 'virtual' experiments and field trips. This degree will be accessible to a wide student body, independent of country of residence or previous qualifications.

There will be a range of fully-supported pathways through the BSc (Hons) Natural Sciences degree allowing students to specialise in subjects including astronomy & planetary sciences, biology, chemistry, environmental science, geology, health sciences and physics. This new degree will provide excellent preparation for further study at Masters level – which in turn prepares students for Doctoral level research. It will be fully compliant with the Bologna Agreement for standardising higher education throughout Europe and will be recognised worldwide.

Those of you who are familiar with our existing Science qualifications will recognise that we already have a Natural Sciences named degree. The new version that we have started to develop will have a significantly enhanced remit, as summarised above. Subject specific pathways will be maintained, but fresh study opportunities will emerge from the new Natural Sciences named degree. We are aware that a significant number of our students are currently prevented from claiming a named science degree at the Open University because of restrictions on their ability to attend the present suite of residential schools. As well as retaining opportunities for field and laboratory practical work, the new qualification will incorporate modules that will teach practical science using new computer immersive technologies, without the need to attend a residential school.

To make way for this new award, existing named degrees will be phased out in a way that should give students sufficient time to complete their current degree studies if they so wish.

Although this review was initiated in response to the Government's decision (through the English Funding Council) to withdraw tuition funding for students studying for equivalent or lower qualifications, we believe we have used this opportunity to create a completely new qualifications framework fit for the 21st Century. As summarised above, this framework will provide new opportunities for students to study science with the OU and simultaneously provides the Faculty with the exciting prospect of developing new approaches of teaching practical science in a way that will retain traditional field and laboratory practical experience.

These proposals will now be put to the University for institutional evaluation through its curriculum governance committees.

We are committed to ensuring that all our students are fully informed of our thinking in redesigning the science curriculum. In response to previous announcements, we have received a number of communications from students, many of which have very been helpful in drawing attention to areas of concern. May I then address some of the specific issues that have most frequently been raised?

- We have already given notice that Level 2 residential schools will be last • presented in 2011 and Level 3 residential schools in 2012. We are now committed to developing a replacement 30 point course S288 Level 2 Practical Science (working title). This course will be presented for the first time in 2012 and will provide study options that will include site specific field, site specific laboratory and non-site specific practical experience. A course team is being assembled to undertake the detailed design of this course, which will also include a home-based study pathway. At Level 3 we are developing clearer options to allow students to undertake practical work to contribute to the project course S390, within the framework of enabling students to develop their skills of independent study. There are some exciting new ideas about the way students who particularly want to develop further their practical skills might be given the opportunity to participate in research field trips or laboratory research projects to gather a portfolio of results to support their S390 project. These proposals will complement the existing opportunities for S390 students to undertake a project based on a literature review.
- Many students have expressed concern because they have made a choice of an existing named degree and are keen that they should have sufficient opportunity to complete their studies to claim this qualification. We are sensitive to the need to give students as much warning as possible of planned changes – hence notice of the phased withdrawal of residential schools in 2011 (Level 2) and 2012 (Level 3). We expect that existing named degrees will be available until at least the end of 2013 and will make a further announcement about this soon. We anticipate that students will take seriously the opportunity to transfer their qualification choice to the new Natural Sciences degree.
- A significant number of responses from our students drew attention to the importance of a subject designation in the name of the science degree, not least because of the perceived advantage this would offer in job applications.

The existing subject pathways (physics, chemistry etc.) will be available within the new degree. Students will be able to draw attention in any job applications to the scientific subjects included in their degrees as all courses taken are recorded on the degree transcript.

I hope this is helpful in bringing you up to date with our thinking on curriculum development, and will post further announcements in the coming months.

With my best wishes for the rest of 2010,

Professor Phil Potts Dean of Science January 2010