

## **INSTITUTIONAL RESPONSE: EXTERNAL EXAMINER REPORT 2012-2013 - Pure Mathematics modules on undergraduate programmes**

Dear Professor Dales,

I am writing further to your External Examiner's report for the above programme(s). Your Report has been considered by the Cardiff School of Mathematics in accordance with our approved procedures. I am, therefore, now in a position to respond on behalf of the Vice-Chancellor to the main points you had raised.

### Issues Highlighted

Your Report raised issue(s) which have been referred for consideration by the School. The following response has been provided on behalf of the School.

*"We are very grateful to Professor Dales for his comments and constructive feedback. We would also like to take this opportunity to sincerely thank him for all the thoughtful feedback he has provided during his tenure as Pure External Examiner to the School of Mathematics and wish him well for the future.*

*The School responses to the points highlighted are given below.*

#### **1. [1 (second, third and fourth paras)] detailed suggested enhancements to the programme**

*The School appreciates the suggestion for enhancing its programmes, particularly in respect to the Algebra "stream" of modules. Some of the suggested changes are dependent on the resources and expertise available within the School and will be considered as part of the development of the department.*

*The "naïve set theory" has for the last 2 years been introduced in the first year as part of the Analysis I module, which is core for all single honours students. However, the School is currently investigating how the fundamentals of the subject are introduced and a working party has been set up to determine a more integrated approach to such topics. Very recently two "Fundamentals of Mathematics" modules have been agreed in principle and these are likely to include key concepts from Calculus, Algebra and Analysis, similar to the ones highlighted. It will also allow for a strengthening of the Algebra stream so that modules in latter years can build more substantially upon the material introduced.*

#### **2. [3 (second para)] the suggestion that "Some parts of some questions [at Level 3] should be more challenging" and related comments**

*Examination papers are designed to allow students to demonstrate more advanced knowledge in particular parts of each question, although it is appreciated that this might need to be introduced more consistently across modules. How this might be achieved will be referred to the School Learning and Teaching Committee. It is also hoped that examination boards in the near future will allow for further discussions relating to such matters to take place in more detail."*

Your comments [at 3 (final para)] regarding extenuating circumstances have been noted. The University requires the establishment of Extenuating Circumstances Groups to consider reports of Extenuating Circumstance prior to Examining Boards and that University provisions in this area will be strengthened further in 2013-2014 as a result of a University-wide consultation designed to increase the consistency of approach across the University.

### Positive Comments

The School and University are pleased to note your positive comments on the School's provision including:

- a. **[1, 2 and 3] your positive indications regarding the programme structure, academic standards and assessment process;**
- b. **[4] your indication "that the performance of the first cohort of students who entered the MMath programme"... "was excellent" and that the "initial standards of this new programme seem to be very comparable with those of longer-established programmes elsewhere".**

I hope that you will find this response satisfactory and thank you for your service as External Examiner.

In order to meet the expectations of the QAA Quality Code, both the External Examiner Annual Report and this Institutional Response will be published on Registry web pages and will be available publically.

The University's provision of the formal Institutional Response is not intended to constrain direct communication between schools and their External Examiners. Schools are encouraged to discuss with their External Examiners any matters of detail raised in their Reports and, more widely, any issues impacting on the quality and standards of awards, including possible changes to programmes.

We are most grateful for your comments and for your support in this matter.

Mrs Jill Bedford  
Director of Registry and Academic Services