

EXTERNAL EXAMINER ANNUAL REPORT FORM

Guidance notes are available to support the completion of this Report and are available at <http://learning.cf.ac.uk/quality/review/external-examiners/reports/>.

	For completion by External Examiner:		
Name of External Examiner:	Professor Helen Fielding		
Home Institution / Employer of External Examiner:	University College London		
Programme and / or Subjects Covered by this Report	Chemistry BSc, MChem <i>Physical Chemistry modules on undergraduate programmes</i>		
Academic Year / Period Covered by this Report:	2015-16	Date of Report:	6/7/16

For completion by External Examiner in the spaces provided. Please extend spaces where necessary. **Please note this Form will be published online and should not make any reference to any individual students or members of staff.**

1. Programme Structure

The course covers a range of physical and theoretical chemistry, with slightly less emphasis on theoretical chemistry than at UCL, but this probably just reflects the research interests of the physical chemistry staff.

2. Academic Standards

The proportion of Class I and II.1 degrees is high for the MChem graduating class, as would be expected for an MChem cohort and it is in line with other institutions. The proportion of Class I and II.2 was low for the BSc graduating class, as would be expected since the majority of top students in this cohort elected to stay for the MChem.

3. The Assessment Process

The examination process was organised very efficiently by the Director of Learning and Teaching, and the Examination Coordinator. I received draft papers and model answers for written examinations in November and March and was given plenty of time to read them and prepare comments. I received responses to my comments, from which it was clear that the internal examiners had considered my suggestions carefully. In one case where quite extensive changes were necessary, I was sent the revised question for further comment.

The external examiners' meeting commenced after lunch Monday 20 June. We were provided with class lists and a clear oral summary of the examinations. The scripts and project reports were laid out carefully so it was easy to find those belonging to candidates whose marks or projects we chose to look at more carefully.

We paid particular attention to the candidates at the borderline. All candidates above grade boundaries were awarded the degree appropriate to their mark and those falling 2% below a

grade boundary were considered for the higher degree if they had sufficient marks at the higher level. Since the examiners work with whole numbers, this means that candidates 2.5% below a grade boundary are considered under this rule, which, as I commented last year, is quite a long way below a grade boundary; at UCL, we only consider candidates 1% below a grade boundary. We looked at the projects and marks for some candidates at boundaries. One candidate had a mid II.2 mark for their project but all their written papers were 1st class marks; however, the project seemed to have been fairly marked and the marks were very well justified by the comments that accompanied the project marks and we determined that the assessment of this project had been carried out very diligently and fairly.

We looked through some written exam scripts of students at the top, middle and bottom of the class. I found the 3406 Molecular Modelling scripts had been marked carefully and the marking appeared consistent. It was very helpful to have the mark distributions and the historical mark averages for each course. We found a rather curious class distribution for 3410 Advanced Magnetic Resonance Spectroscopy and remarkably 1/3 of the class had an average 80-90%. It is possible that the course is self-selecting to some extent and that these students were the top students in the year; however, it would have been useful to have some understanding of whether this distribution had been considered internally and what the justification was. Perhaps each questions needs to have a few more marks allocated for more challenging work. At UCL, the course organisers prepare summaries for each course, both for the course as a whole (including some response to course questionnaires) and the final mark distribution. This can be extremely valuable and I would encourage the Cardiff Chemistry department to adopt a similar practice.

On Tuesday 21 June, we met with final year MChem and BSc students. My overall impression was that the students enjoyed their degree programmes and their time in Cardiff. The fact that so many students turned up was extremely positive. The MChem project was the highlight of the MChem degree programme. As well as positive comments (the value of tutorials, organisation, degree structure, staff-student feedback) there were some constructive suggestions for improvement (making the organic chemistry more challenging early on and improved lecture videos, skype tutorials and support in general for those studying abroad or in industry).

4. Year-on-Year Comments

Positives:

Last year, we had some concerns about a project mark which, upon investigation, revealed some discrepancy between the mark and written comments (this was investigated further and dealt with appropriately). This year we found a big improvement and there was excellent agreement between the written comments and the marks awarded and our own perceptions of the project reports.

Still requiring improvement:

The study abroad or in industry students made similar comments this year to last year, so it would be helpful to understand what improvements have been made in response to the 2014/15 feedback.

I made some comments on how some of the material in CH3204 Symmetry, Spectroscopy and Quantum Mechanics was taught last year and was a little surprised that I needed to make similar comments again this year. However, I was

reassured to learn at the meeting on 21 June that these changes will be implemented in the coming year.

5. Preparation / Induction Activity (for new External Examiners only)

N/A

6. Noteworthy Practice and Enhancement.

MSci and BSc projects are notoriously difficult to mark, but we felt that the procedures in place in Cardiff worked very well and appeared very fair.

7. Comments on the Examination of Master's Dissertations (External Examiners for postgraduate Master's Programmes only, see also 9.23-9.29 below)

N/A

8. Appointment Overview (for retiring External Examiners only)

9. Annual Report Checklist

Please include appropriate comments within Sections 1-8 above for any answer of 'No'.

		Yes (Y)	No (N)	N/A (N/A)
Programme/Course Information				
9.1	Did you receive sufficient information about the Programme and its contents, learning outcomes and assessments?	X		
9.2	Were you asked to comment on any changes to the assessment of the Programme?		X	
Draft Examination Question Papers				
9.3	Were you asked to approve all examination papers contributing to the final award?	X		
9.4	Were the nature, spread and level of the questions appropriate?	X		
9.5	Were suitable arrangements made to consider your comments?	X		
Marking Examination Scripts				
9.6	Did you receive a sufficient number of scripts to be able to assess whether the internal marking and classifications were appropriate and consistent?	X		
9.7	Was the general standard and consistency of marking appropriate?	X		
9.8	Were the scripts marked in such a way as to enable you to see the reasons for the award of given marks?	X		
9.9	Were you satisfied with the standard and consistency of marking applied by the internal examiners?	X		
9.10	In your judgement, did you have the opportunity to examine a sufficient cross-section of candidates' work contributing to the final assessment?	X		
Coursework and Practical Assessments				
9.11	Was the choice of subjects for coursework and / or practical assessments appropriate?	X		
9.12	Were you afforded access to an appropriate sample of coursework and / or practical assessments?	X		
9.13	Was the method and general standard of assessment appropriate?	X		
9.14	Is sufficient feedback provided to students on their assessed work?	X		
Clinical Examinations (if applicable)				
9.15	Were satisfactory arrangements made for the conduct of clinical assessments?			X
Sampling of Work				
9.16	Were you afforded sufficient time to consider samples of assessed work?	X		
Examining Board Meeting				

		Yes (Y)	No (N)	N/A (N/A)
9.17	Were you able to attend the Examining Board meeting?	X		
9.18	Was the Examining Board conducted properly, in accordance with established procedures and to your satisfaction?	X		
9.19	Cardiff University recognises the productive contribution of External Examiners to the assessment process and, in particular, to the work of the Examining Board. Have you had adequate opportunities to discuss the Programme and any outstanding concerns with the Examining Board or its officers?	X		
Joint Examining Board Meeting (if applicable)				
9.20	Did you attend a Composite Examining Board, i.e. one convened to consider the award of Joint Honours degrees?			X
9.21	If so, were you made aware of the procedures and conventions for the award of Joint Honours degrees?			X
9.22	Was the Composite Examining Board conducted according to its rules?			X
Examination of Master's Dissertations (if applicable)				
9.23	Did you receive a sufficient number of Dissertations to be able to assess whether the internal marking and classifications were appropriate and consistent?			X
9.24	Was the sample in accordance with the University's sampling guidelines (guidelines provided below)?			X
9.25	Were you satisfied with the standard and consistency of marking applied by the Internal Examiners?			X
9.26	Were you able to attend the Master's Degree (Dissertation) Stage Examining Board?			X
9.27	If so, was the Examining Board conducted properly and in accordance with established procedures?			X
9.28	Were the schemes for marking and classification correctly applied?			X
9.29	Were the standards of the awards recommended appropriate?			X

Please return this Report, preferably in a Microsoft Word format, by email to:

ExternalExaminers@cf.ac.uk

Your fee and expenses claim form and receipts, should be sent electronically to the above email address or in hard copy to:

External Examiners, Registry, Cardiff University, McKenzie House, 30-36 Newport Road, Cardiff, CF24 0DE

SAMPLING OF TAUGHT MASTER'S DISSERTATIONS BY EXTERNAL EXAMINERS

External Examiners shall be expected to see prescribed numbers and ranges of Dissertations, but not to mark them, on the following basis:

At least 10% of Dissertations for a postgraduate taught Master's Programme, or a minimum of 10 (whichever is the higher figure) must be seen by the External Examiner(s). Where the total number is less than 10, all Dissertations must be seen by the External Examiner(s) #.

Dissertations seen by External Examiners should include examples from across the whole range of achievement (i.e. Pass with Distinction, Pass, Fail).

External Examiners will retain the right to see other Dissertations at random.

Where more than one External Examiner is appointed on a Programme, at least 10% of Dissertations, or a minimum of 10 (whichever is the higher figure), should be seen collectively by the External Examiners.