



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:	Prof. Emeritus Peter Ross		
Home Institution / Employer of External Examiner:	(now retired from Edinburgh Napier University)		
Programme and / or Subjects Covered by this Report	Computer Science <i>all COMSC BSc programmes (computer science modules)</i>		
Academic Year / Period Covered by this Report:	2015-16	Date of Report:	

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 structure and content of the programmes are of a very high standard. They cover both the necessary core topics and also a good selection of up-to-date topics and issues. Academic and practical aspects are both well addressed and, as before, it is clear that the industrial placements are very worthwhile for students that do them.

2. Academic Standards

Academic standards continue to be excellent, and compare very favourably with standards at the several other UK universities where I have been an undergraduate external examiner, and with national benchmark standards for the subject. Many of the final-year, 40-unit projects have been of very high quality.

Each draft piece of coursework and each draft exam, accompanied by sample solutions and notes, goes through an internal process of moderation to check the coverage of intended learning outcomes as well as correctness, clarity and appropriateness. The process is very well documented: comments by the moderator, responses by the module leader and any changes made are clearly recorded. The drafts and these associated documents are then sent to external examiners for them to check and to comment upon. I did comment on a number of items, but these were all minor, typically at the level of punctuation issues or questions about issues that were not fully clear to me. Any such questions and issues were properly dealt with.

3. The Assessment Process

Assessments are carefully designed, and very much with the intended learning outcomes in mind. The overall quantity, and the balance between coursework, project work and exams, are appropriate and in line with practices at other UK universities with which I am familiar.

The results of each assessment are carefully reviewed, to maintain reasonable comparability of standards and to consider any issues that may have arisen. The staff of the school take a lot of care over this and are very mindful of the need for fairness of treatment.

4. Year-on-Year Comments

Last year, I had no major issues to report.

This year, as usual, I visited the school in late June in order to evaluate the marking process, read project work and finally attend the exam boards. In addition to making all the materials available for me, the chairman of the exam boards had also prepared notes about each third-year module and relevant second-year module, in particular reporting any issues that had needed attention and any proposed actions. We discussed each of them in turn and dealt with the various minor issues.

There was a submission by some students on the Business Information Systems (BIS) programme regarding the third-year modules on Security and on Forensics. In 2014/15 there had been a single module covering both topics but in 2015/16 that was replaced, for final-year students, by the two separate units. In particular, there was student concern that the Security material had become too technical for those students, and concern about the level of consultation prior to the change. After discussion with staff and students and with Registry, the affected BIS students had been offered two options: to continue with the two separate modules, or to transfer to the joint unit so as to have the older Security teaching. The students were reported to be pleased to be given these options but very sensibly asked the exam board to consider several questions about the possible practical impact. The other external examiner and I both spent quite a while looking in detail at the scripts and marks and doing checks on comparability of performance relevant to each of the questions. As a result, I am satisfied that the school handled the matter in a way that did not disadvantage any affected subset of students, and that individual student performances were very much in line with their overall performances.

For three other modules, the average of overall marks had been lower than typical. For two of these, student performance on the exams had been low and for third it was performance on the coursework that had been low. In each case, although the average was low, the distribution around the average was reasonable and generally in line with each student's overall performance. It is not appropriate for an external examiner to attempt any kind of instant diagnosis of why marks might be low, but I was able to look at some of the online student/staff discussion that had taken place and it was evident that the students had been getting high-quality support. After discussion with the chair of the board and other staff involved, the suggested action of adjusting marks was agreed at the board.

This kind of marks-adjustment action is not uncommon in universities. It is important to maintain reasonable consistency between different years, and in the case of optional modules to ensure that students who opted for a module that turned out to have an atypically low average were not disadvantaged by their choice. Equally, modules with an atypically high average might disadvantage, in comparative terms, those who did not take it. The university might like to consider offering general guidance to schools and departments about all this.

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

(Not applicable).

6. Noteworthy Practice and Enhancement

For each module, in addition to all exam scripts and other supporting information, the school generates anonymized student performance data including:

- statistics about the exam and the coursework;
- plots showing correlation between exam performance and coursework performance, with unnamed unidentified dots representing individual students and colour-coded to show each individual's likely overall degree classification (subject to later ratification by the exam board);
- histograms of performance on the exam and on coursework and overall, all colour-coded in the same way;
- a two-dimensional plot that shows, for each (unnamed, unidentified) student, a dot at the point (yearAverageMark, moduleMark).

This information is a very useful aid for checking the results of individual modules and for detecting any anomalies that might need attention.

The school's PATS2 online system stashes student's final-year project work, together with the marks and comments by the supervisor, marks and comments by the moderator and the finally-agreed marks and comments. In addition to saving paper, it makes life significantly easier for external examiners!

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

(Not applicable)

8. Appointment Overview (for retiring External Examiners only)

I have enjoyed my time as an external examiner for the School of Computer Science and Informatics at Cardiff. The staff clearly care a lot about their students and work hard at looking after them. They have been very responsive to any comments I have made during my time as an external. Administrative arrangements have also been uniformly excellent.

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?	Y		
9.2	Were you asked to comment on any changes to the assessment of the Programme?		N	
Draft Examination Question Papers				
9.3	Were you asked to approve all examination papers contributing to the final award?	Y		
9.4	Were the nature, spread and level of the questions appropriate?	Y		
9.5	Were suitable arrangements made to consider your comments?	Y		
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?	Y		
9.7	Was the general standard and consistency of marking appropriate?	Y		
9.8	Were the scripts marked in such a way as to enable you to see the reasons for the award of given marks?	Y		
9.9	Were you satisfied with the standard and consistency of marking applied by the internal examiners?	Y		
9.10	In your judgement, did you have the opportunity to examine a sufficient cross-section of candidates' work contributing to the final assessment?	Y		
Coursework and Practical Assessments				
9.11	Was the choice of subjects for coursework and / or practical assessments appropriate?	Y		
9.12	Were you afforded access to an appropriate sample of coursework and / or practical assessments?	Y		
9.13	Was the method and general standard of assessment appropriate?	Y		
9.14	Is sufficient feedback provided to students on their assessed work?	Y		
Clinical Examinations (if applicable)				
9.15	Were satisfactory arrangements made for the conduct of clinical assessments?			N/A
Sampling of Work				
9.16	Were you afforded sufficient time to consider samples of assessed work?	Y		
Examining Board Meeting				

		Yes (Y)	No (N)	N/A (N/A)
9.17	Were you able to attend the Examining Board meeting?	Y		
9.18	Was the Examining Board conducted properly, in accordance with established procedures and to your satisfaction?	Y		
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?	Y		
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?	Y		
9.21	If so, were you made aware of the procedures and conventions for the award of Joint Honours degrees?	Y		
9.22	Was the Composite Examining Board conducted according to its rules?	Y		
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?			N/A
9.24	Was the sample in accordance with the University's sampling guidelines (guidelines provided below)?			N/A
9.25	Were you satisfied with the standard and consistency of marking applied by the Internal Examiners?			N/A
9.26	Were you able to attend the Master's Degree (Dissertation) Stage Examining Board?			N/A
9.27	If so, was the Examining Board conducted properly and in accordance with established procedures?			N/A
9.28	Were the schemes for marking and classification correctly applied?			N/A
9.29	Were the standards of the awards recommended appropriate?			N/A

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.