



EXTERNAL EXAMINER ANNUAL REPORT FORM

Guidance notes are available to support the completion of this Report via the Cardiff University Intranet [here](#) and from ExternalExaminers@cardiff.ac.uk.

	For completion by External Examiner:		
Name of External Examiner:	Prof Malcolm Coe		
Home Institution / Employer of External Examiner:	University of Southampton		
Programme and / or Modules Covered by this Report	MSc (Astrophysics)		
Academic Year / Period Covered by this Report:	2016-17	Date of Report:	12 July 2017

Please complete all information in the spaces provided and submit within **six weeks** of the Examining Board (the **taught stage** Examining Board in the case of **postgraduate Master's programmes**).

Please note this form will be published online and should not make any reference to any individual students or members of staff in accordance with the Data Protection Act (1998).

NB I have taken the liberty of using my own formatting of this report as I felt it better reflected my views and thoughts.

External Examiners Report on MSc(Astrophysics) 2016-17 by Prof Malcolm Coe

Reviewing the material and meeting students

I met with four of the eight students who are progressing on to the report stage on 4 July 2017. It was very clear from all of them that they greatly appreciated the support they had received specifically from [REDACTED] but also from [REDACTED]. It is clear that there had been several difficult moments in this second year of the programme (see below) and these two staff members had worked extremely hard to get the students through these issues.

I also spent some time reviewing the exam papers and looking at the performance of the students on all the courses they had taken. Combining their marks with their comments it is clear that sometimes the demands placed upon these students were much greater than average and it is a credit to the motivation of the students and the support of the MSc staff that they got through these challenging times.

Recommendations/comments

My specific comments and recommendations are:

1. Work loading – it is clear that the combination of courses taken by the students led to extremely high workload points, particularly in Week 8 of Semester 1. It is possible that the individual course coordinators remain unaware of the impact of all the continuous assessment work being set by other courses on the MSc students. Though it seems improved over the previous year I recommend that this is looked at once more.
2. Pre-requisites and expectations – the students felt that sometimes they had a poor idea what prior knowledge was expected of them for the programme overall and some courses in particular. Since most of the courses they took are part of the normal UG programme this issue does not arise for those students – lecturers know what courses those students have already taken and can assume that knowledge in their delivery. But MSc students “parachuting” in from outside maybe missing large chunks of some materials. So the knowledge expectations must be clearly laid out to incoming MSc students, preferably well in advance of the start of the course, so that they can try and fill those gaps in their knowledge before starting. Of course, these issues should also play a key role in the recruitment process.
3. Problems & inconsistencies in the system
 - The main one that the students raised was the removal of a lecturer midway through two key courses they were undertaking. It is commendable that the department responded so promptly to student concerns, but it was obviously disruptive to the education process.
 - On the other side of the coin, they all flagged “Physics of the Early Universe” as well taught but exceedingly difficult. The average mark for that course by the Masters students was a low 48% which, since the MSc pass mark is 50%. left half the class having to take referrals. I am unaware of what the average mark was for the whole class (UG + MSc) but its not impossible that since the pass mark for the UG students is only 40% this low average grade was acceptable. I suspect that this is another example of the tensions between UG and MSc students taking the same class not being adequately resolved.
 - The data analysis course clearly caused some upset amongst some students. They all stated that they were told at the start that it could be completely done using just Excel spreadsheets, only to discover part of the way through that programming was essential. For the few students with little or no prior programming skills this made progress very challenging indeed. So again, advance information of what is expected should be clear and unambiguous.
4. Academic content – on a positive note, last year the students also expressed the view that the amount of material presented in Astronomy Instrumentation courses was overwhelming. This year they did not raise this issue so I am pleased the matter has been resolved. But, like last year, they also noted that some of the options available were very much easier to score highly upon (eg Commercialising Innovation) than other courses. It was clear some students had inadvertently taken a much more demanding path through the options available than others. As I commented last year, this needs to be reviewed to provide consistency across the programme.

In summary, despite all the challenges thrown at the students, they feel the course is very worthwhile. They believe that the material presented has set them up extremely well for the next stages of their careers, several on PhD programmes,

8. Annual Report Checklist

Please include appropriate comments within Sections 1-7 above for any answer of 'No'.

		Yes (Y)	No (N)	N/A (N/A)
Programme/Course Information				
8.1	Did you receive sufficient information about the Programme and its contents, learning outcomes and assessments?	Y		
8.2	Were you asked to comment on any changes to the assessment of the Programme?	Y		
Draft Examination Question Papers				
8.3	Were you asked to approve all examination papers contributing to the final award?	Y		
8.4	Were the nature, spread and level of the questions appropriate?	Y		
8.5	Were suitable arrangements made to consider your comments?	Y		
Marking Examination Scripts				
8.6	Did you receive a sufficient number of scripts to be able to assess whether the internal marking and classifications were appropriate and consistent?	Y		
8.7	Was the general standard and consistency of marking appropriate?	Y		
8.8	Were the scripts marked in such a way as to enable you to see the reasons for the award of given marks?	Y		
8.9	Were you satisfied with the standard and consistency of marking applied by the internal examiners?	Y		
8.10	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				
8.11	Was the choice of subjects for coursework and / or practical assessments appropriate?	Y		
8.12	Were you afforded access to an appropriate sample of coursework and / or practical assessments?	Y		
8.13	Was the method and general standard of assessment appropriate?	Y		
8.14	Is sufficient feedback provided to students on their assessed work?	Y		
Clinical Examinations (if applicable)				
8.15	Were satisfactory arrangements made for the conduct of clinical assessments?			N/A
Sampling of Work				

8.16	Were you afforded sufficient time to consider samples of assessed work?	Y		
Examining Board Meeting				
8.17	Were you able to attend the Examining Board meeting?		N	
8.18	Was the Examining Board conducted properly, in accordance with established procedures and to your satisfaction?			
8.19	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)				
8.20	Did you attend a Composite Examining Board, i.e. one convened to consider the award of Joint Honours degrees?			
8.21	If so, were you made aware of the procedures and conventions for the award of Joint Honours degrees?			
8.22	Was the Composite Examining Board conducted according to its rules?			
Examination of Master's Dissertations (if applicable)				
8.23	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
8.24	Was the sample in accordance with the University's sampling guidelines (guidelines provided below)?			
8.25	Were you satisfied with the standard and consistency of marking applied by the Internal Examiners?			
8.26	Were you able to attend the Master's Degree (Dissertation) Stage Examining Board?			
8.27	If so, was the Examining Board conducted properly and in accordance with established procedures?			
8.28	Were the schemes for marking and classification correctly applied?			
8.29	Were the standards of the awards recommended appropriate?			
8.30	Comments on the Examination of Master's Dissertations. <i>Please provide any comments you may wish to make on the issues raised above.</i>			

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

externalexaminers@cardiff.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