

# The University of Leeds

## EXTERNAL EXAMINER'S REPORT

ACADEMIC YEAR: 2017-18    QAT Received 28/11/2018

### Part A: General Information

#### Subject area and awards being examined

*Title and Name of Examiner:*

*Faculty / School of:*

Mathematics

*Subject(s):*

*Statistics*

*Programme(s) / Module(s):*

MSc Statistics  
MSc Statistics with Applications to Finance  
MSc Medical Statistics  
MSc Data Science and Analytics

*Awards (e.g. BA/BSc/MSc etc):*

MSc

### Part B: Comments for the Institution on the Examination Process and Standards

#### Points of innovation and/or good practice

*Please highlight areas of innovation or good practice within the programmes or processes you have been involved with in this box.*  
Staff are generally efficient and helpful. The procedures for providing exam papers and solutions works well. The approach to student complaints about examinations is one I have recommended to other universities and departments.

#### Enhancements made from the previous year

*Please highlight any enhancements made to the programme(s) or processes over the past year in this box.*  
There have been responses to suggestions about checking of the marking of examination scripts. The organisation and timing of attending meetings at Leeds has been adjusted in consultation with all four external examiners. It is good to see some increase in real world data used in modules.

#### Matters for Urgent Attention

*If there are any areas which you think require urgent attention before the programme is offered again please note them in this box*  
I think there remains a challenge to ensure the standards of statistical methods and modelling are adequate in the Data Science degree.

#### For Examiners in the first year of appointment

1.	Were you provided with an External Examiner Handbook?	Y / N
2.	Were you provided with copies of previous External Examiners' reports and the School's responses to these?	Y / N
3.	Were you provided with a External Examiner Mentor?	Y / N

#### For Examiners completing their term of appointment

4.	Have you observed improvements in the programme(s) over the period of your appointment?	Y / N
5.	Has the school responded to comments and recommendations you have made?	Y / N
6.	Where recommendations have not been implemented, did the school provide clear reasons for this?	Y / N
7.	Have you acted as an External Examiner Mentor?	Y / N

Please comment on your experience of the programme(s) over the period of your appointment, remarking in particular on changes from year to year and the progressive development and enhancement of the learning and teaching provision, on standards achieved, on marking and assessment and the procedures of the School

## Standards

8.	Is the overall programme structure coherent and appropriate for the level of study?	Y
9.	Does the programme structure allow the programme aims and intended learning outcomes to be met?	Y
10.	Are the programme aims and intended learning outcomes commensurate with the level of award?	Y
11.	Did the Aims and ILOs meet the expectations of the national subject benchmark (where relevant)?	Y
12.	Is the programme(s) comparable with similar programmes at other institutions?	Y
<p>Please use this box to explain your overall impression of the programme structure, design, aims and intended learning outcomes.</p> <p>The overall programmes are sensible, and relate well to the integrated masters programmes.</p>		
13.	Is the influence of research on the curriculum and learning and teaching clear?	Y
<p>Please explain how this is/could be achieved (examples might include: curriculum design informed by current research in the subject; practice informed by research; students undertaking research)</p> <p>The modules allow staff to reflect the research interests of staff. Dissertations are informed by research interests</p>		
14.	Does the programme form part of an Integrated PhD?	N
<p>Please comment on the appropriateness of the programme as training for a PhD:</p>		
15.	Does the programme include clinical practice components?	N
<p>Please comment on the learning and assessment of practice components of the curriculum here:</p>		
16.	Is the programme accredited by a Professional or Statutory Regulatory Body (PSRB)?	
<p>Please comment on the value of, and the programme's ability to meet, PSRB requirements here:</p> <p>I am not aware of accreditation by Royal Statistical Society</p>		

## Assessment and Feedback

17.	Does the programme design clearly align intended learning outcomes with assessment?	Y
<p>Please comment on the assessment methods and the appropriateness of these to the ILOs, in particular: the design and structure of the assessment methods, and the arrangements for the marking of modules and the classification of awards; the quality of teaching, learning and assessment methods that may be indicated by student performance.</p> <p>The range of assessment methods overall is sensible, allows different achievements to be recorded, and marking and classification is fair.</p>		
18.	Is the design and structure of the assessment methods appropriate to the level of award?	Y

19.	Were students given adequate opportunity to demonstrate their achievement of the programme aims and intended learning outcomes?	Y
<p><i>Please comment on the academic standards demonstrated by the students and, where possible, their performance in relation to students on comparable courses; the strengths and weaknesses of the students as a cohort:</i></p> <p>There is a wide range of abilities, as seen on mathematics courses elsewhere. The average standard is as can be expected in a discipline in which the best students are many times more able than the weakest, and in which there is selective entry to universities.</p>		
<p><i>Please use this box to provide any additional comments you would like to make in relation to assessment and feedback.</i></p> <p>I note that dissertations are considered by two examiners, but are not independently and fully marked by both examiners. This is different from the practice at other universities.</p>		

### The Progression and Awards Process

20.	Were you provided with guidance relating to the External Examiner's role, powers and responsibilities in the examination process?	Y
21.	Was the progression and award guidance provided sufficient for you to act effectively as an External Examiner?	Y
22.	Did you receive appropriate programme documentation for your area(s) of responsibility?	Y
23.	Did you receive appropriate module documentation for your area(s) of responsibility?	Y
24.	Did you receive full details of marking criteria applicable to your area(s) of responsibility?	Y
25.	Were you provided with all draft examination papers/assessments?	Y
26.	Was the nature and level of the assessment questions appropriate?	Y / N
27.	Were suitable arrangements made to consider your comments on assessment questions?	Y
28.	Was sufficient assessed work made available to enable you to have confidence in your evaluation of the standard of student work?	Y
29.	Were the examination scripts clearly marked/annotated?	Y
30.	Was the choice of subjects for final year projects and/or dissertations appropriate?	Y
31.	Was the method and standard of assessment appropriate for the final year projects and/or dissertations?	Y
32.	Were the administrative arrangements satisfactory for the whole process, including the operation of the Progression and Awards Board?	Y
33.	Were you able to attend the Progression and Awards Board meeting?	Y / N
34.	Were you satisfied with the recommendations of the Progression and Awards Board?	Y
35.	Were you satisfied with the way decisions from the School Special Circumstances meeting were communicated to the Progression and Awards Board?	Y
<p><i>Please use this box to provide any additional comments you would like to make on the questions above:</i> The standard of teaching, learning and examining of MATH5741M should be carefully monitored.</p>		

### Other comments

Please use this box if you wish to make any further comments not covered elsewhere on the form

**Name of School and Head of School (or nominee)**

Title and Name of Examiner:

Subject(s):

*Statistics*

Programme(s) / Module(s):

MSc Statistics  
MSc Statistics with Applications to Finance  
MSc Medical Statistics  
MSc Data Science and Analytics

Awards (e.g. BA/BSc/MSc etc):

MSc

Title and Name of Responder:

Position\*:

Head of School

Faculty / School of:

*Mathematics*

Address for communication:

School of Mathematics, University of Leeds, Leeds LS2 9JT

Email:

Telephone:

\*If the individual responding to the report is not the Head of School please state their position within the School.

**Completing the School response**

The completed School response (including the full original report) should be attached to an e-mail and sent to the Pro-Dean for Student Education in the relevant Faculty. Following approval by the Pro-Dean for Student Education, the School must send the response (including the full original report) directly to the External Examiner. A copy must also be emailed to the Quality Assurance Team at [gat@leeds.ac.uk](mailto:gat@leeds.ac.uk). External Examiners should receive a formal response no later than six weeks after receipt of the original report.

**Response to Points of innovation and/or good practice**

We are pleased to here                      favourable opinion of our complaints procedure, and that                      is recommending its adoption at other institutions.

**Response to Enhancements made from the previous year**

We are glad to hear that changes to our arrangements for examiners' meetings, checking of marking of exam scripts, and use of real world data in statistics modules are to                      satisfaction. As noted below, it is too late to make adjustments to this module this year, but                      comments will be taken account of in preparation for next year.

**Response to Matters for Urgent Attention**

If any areas have been identified for urgent attention before the programme is offered again please provide a specific response to them here:

                    raises concerns about our Data Science MSc. These concerns were raised and discussed at the meeting of the Taught Student Education Committee on 9<sup>th</sup> January 2019.

**Response to questions 1-7 (and related comments)**

Schools may provide a general response; however, where Examiners raise specific points these must be addressed individually:

N/A

**Standards**

**Response to questions 8 to 16 (and related comments)**

*Schools may provide a general response; however, where Examiners raise specific points these must be addressed individually:*

We are pleased that \_\_\_\_\_ is satisfied with the standards of our statistics modules.

**Assessment and Feedback**

**Response to questions 17 to 19 (and related comments)**

*Schools may provide a general response; however, where Examiners raise specific points these must be addressed individually:*

\_\_\_\_\_ is broadly satisfied with our assessment methods, but makes one suggestion about the marking of dissertations. \_\_\_\_\_ recommends that the two independent examiners should complete initial reports separately, before meeting to write a joint report.

Our current practice (for example in the module MATH5003M) is that the two independent markers fill out a marksheet, assigning numerical scores to the dissertation in various categories. Following the student's presentation, they discuss the marks with the module coordinator (for overall consistency) and agree on final marks for the dissertation and presentation. Both the initial independent marks and the final agreed mark are kept on record. It appears that our practice already complies with \_\_\_\_\_ suggestion. However, we would welcome any clarification as to where we can improve further, or information about cases where the above practice has not been followed.

**The Progression and Awards Process**

**Response to questions 20-35 (and related comments)**

*Schools may provide a general response; however, where Examiners raise specific points these must be addressed individually:*

\_\_\_\_\_ made a particular request for the module MATH5741M to be monitored. The comment was forwarded to the current module leader, and to a senior academic who is monitoring this module. \_\_\_\_\_ concerns were also raised and discussed at the meeting of the Taught Student Education Committee on 9<sup>th</sup> January 2019.

**Other comments**

**Response to items included in the 'Other Comments' section of the report**

\_\_\_\_\_