

The University of Leeds

EXTERNAL EXAMINER'S REPORT

ACADEMIC YEAR: 2012– 2013

Part A: General Information**Subject area and awards being examined**

Faculty / School of:	Biological Sciences
Subject(s):	<i>Biochemistry, Biological Sciences and Microbiology</i>
Programme(s) / Module(s):	Microbiology
Awards (e.g. BA/BSc/MSc etc):	BSc

Completed report

The completed report should be attached to an e-mail and sent as soon as possible, and no later than six weeks after the relevant meeting of the Board of Examiners, to exexadmin@leeds.ac.uk.

Alternatively you can post your report to: **Head of Academic Quality and Standards**
Academic Quality and Standards Team
Room 12:81, EC Stoner Building
The University of Leeds, Leeds LS2 9JT

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

None required.

Only applicable in first year of appointment

Were you provided with copies of previous relevant External Examiners' reports and the response of the School to these?

I did. I was also verbally told of some of the feedback from the previous external examiner, and of what the School had done to address those concerns where the School felt they had been justified, both at my visit to meet the students and at my visit around the exam board.

For Examiners completing their term of appointment

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

1. Please indicate the extent to which the programme Aims and Intended Learning Outcomes (ILOs) were commensurate with the level of the award

- *The appropriateness of the Intended Learning Outcomes for the programme(s)/modules and of the structure and content of the programme(s);*
- *The extent to which standards are appropriate for the award or award element under consideration.*

I am quite happy that the programme aims and ILOs are commensurate with the level of the award.

2. Did the Aims and ILOs meet the expectations of the national subject benchmark (where relevant)?

- *The comparability of the programme(s) with similar programme(s) at other institutions and against national benchmarks and the Framework for Higher Education Qualifications.*

The programme compares very favourably with similar programmes at my University and indeed is considerably more rigorous than some I am aware of elsewhere in the UK. This should be encouraged and acknowledged.

3. Please comment on the assessment methods and the appropriateness of these to the ILOs

- *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.*

The assessment methods were varied (MCQs, short answer and longer essay questions, skills modules (including giving a poster, writing abstracts from the figures of a genuine paper, etc.), dissertations, etc.) and gave all students a fair opportunity to show their level of learning. Modules were marked appropriately, with double marking of essays, dissertations and at least some of the skills module components (it may well be all, but I was not provided with full information on this (see later comment)). Student performance was overall very satisfactory (see next comment).

4. Were students given adequate opportunity to demonstrate their achievement of the Aims and ILOs?

- *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.*

The academic standards mirrored those I see in my own University and at the other University for which I am external examiner. On the whole, students scored higher marks in the skills modules and their dissertations than they did in the exams themselves, although as I would have predicted the better students did well in all forms of assessment and some of the poorer students had similarly level performances across the board. In other words, the academic standards demonstrated by the students are just what I would expect for a strong department in a leading university.

The final year was a very strong cohort of students, the majority (if my memory serves me) achieving first or upper second class degrees. The intercalating students were an even stronger cohort, all passing with either a first or an upper second class degree.

5. For Examiners responsible for programmes that include clinical practice components, please comment on the learning and assessment of practice components of the curriculum

N/a

6. Please comment on the nature and effectiveness of enhancements to the programme(s) and modules since the previous year

It would be particularly helpful if you could also identify areas of good practice which are worthy of wider dissemination.

Various components of the final year course were moved between semesters to account for feedback from the previous external examiner and previous years' students. When I met the students earlier in the year some of them complained about the changes, but those complaints did not seem to affect performance. I would leave things as they are for another year at least and then reassess. The previous examiner commented on a perceived lack of bacteriology but I feel comfortable with the balance between bacteriology and virology, although I will keep an eye on the amount of immunology taught in the course (no cause for concern at the moment, but the host must not be forgotten).

7. Please comment on the influence of research on the curriculum and learning and teaching

This may include examples of curriculum design informed by current research in the subject; practice informed by research; students undertaking research.

The Faculty teaches to its research strengths in the final year and this was commented favourably upon by the students, particularly with respect to some of the skills modules and the ATUs. This has been a long tradition in this department in Leeds, as I remember being taught in a similar way in genetics and Microbiology when I was a Leeds undergraduate. It was part of the reason I embarked on a research career, as I was enthused by lecturers in my final year who taught us the latest science "hot from the press" as it were. This is a strength that the course should continue.

I would also like to see more students undergoing a lab project for their dissertation (see later comments). I realise this is more expensive and more time-consuming for the Faculty members, but Leeds is a research-active university and I feel the students, on the whole, get more from this sort of dissertation than from a literature review. It also has implications for their future careers and employment prospects – if I have two equal candidates for an RA position or a PhD studentships,

I'll pick the one that has done a practical project rather than a literature review. I don't yet understand how dissertations are decided upon or how many lab projects are offered, or how the Faculty members decide who does what, and will be requesting that information before next year's exam board.

For Examiners involved in mentoring arrangements

8. If you have acted as a mentor to a new External Examiner or have received mentor support please comment here on the arrangements

N/a.

The Examination/Assessment Process

9. The University and its Schools provide guidance for External Examiners as to their roles, powers and responsibilities. Please indicate whether this material was sufficient for you to act effectively as an External Examiner.

- *Whether External Examiners have sufficient access to the material needed to make the required judgements and whether they are encouraged to request additional information.*

All clear and sufficient. I was encouraged to request additional information and in fact additional information was offered to me on occasion without it needing to be requested.

10. Did you receive appropriate documentation relating to the programmes and/or parts of programmes for which you have responsibility, e.g. programme specifications or module handbooks, marking criteria?

- *The coherence of the policies and procedures relating to External Examiners and whether they match the explicit roles they are asked to perform.*

All documentation received was appropriate and clear. That is, with the exception of the rather complicated marking system used by the University and the logic (and necessity) of the various transformation steps that are carried out on the initial marks. Far too complicated and also unnecessary in my opinion.

11. Were you provided with all draft examination papers/assessments? Was the nature and level of the questions appropriate? If not, were suitable arrangements made to consider your comments?

I was provided with all draft examination papers and model answers in a timely manner and my comments were taken on board. I did point out that for some of the model answers the marking schemes were not transparent, whereas for others they were very clear. Whilst I do not doubt that those questions in the former category were marked equitably and to the same standards as those in the latter, the Faculty might like to pay some attention to this so as to protect themselves from criticism if any dispute should arise with a student over the marking in the absence of such a clear scheme.

I struggle with MCQs as the sole or a large component of assessment of students, but I accept that with the numbers concerned, particularly in the first two years, that it is difficult to come up with a better system. I would request however that more care is taken with the phrasing of some of the MCQs. Best practice dictates that the root of the question should provide sufficient information for the question to be answered correctly. Some of the questions I saw fell short of this standard.

It would also be useful next year to be given more details of the various components of the skills module, and exemplars of the marking of these, especially as most of the students scored higher in this area than in some of the other assessments.

12. Was sufficient assessed / examined work made available to enable you to have confidence in your evaluation of the standard of student work? Were the scripts clearly marked/annotated?

Yes. I was provided with examples of typical scripts for each grade of degree, as well as those for the students for which I had to make a judgement. That task was made easier when I requested further comparator scripts of people who fell each side of the relevant grade boundaries; these were provided swiftly. On the whole I have great confidence in the evaluations. Most scripts were clearly annotated, though it must be said that some of the examiners' comments were harder to read than the writing of the students they were commenting on. A little more effort to make their comments more easily legible would help.

13. Was the choice of subjects for dissertations appropriate? Was the method and standard of assessment appropriate?

The choice of subjects for dissertations was appropriate, though I would like to see more practical projects undertaken rather than literature reviews. Even though the marks seemed fairly well split between the two forms of dissertation, I instinctively feel that lab projects are more difficult than literature reviews, and I did not get the chance to compare in depth overall – i.e. did a good student get a good mark across the board regardless of the type of dissertation they carried out, or were the less able students disadvantaged at all by choosing one form of dissertation over the other. The methods and standards of assessment were also appropriate and in most instances the different examiners were in close agreement as to the final mark.

14. Were the administrative arrangements satisfactory for the whole process, including the operation of the Board of Examiners? Were you able to attend the meeting? Were you satisfied with the recommendations of the Board?

They were. Everything was organised very well by the School, especially by the Programme Administrator, <>, the Exams Officer, <> and the Programme Leader, <>. I was able to attend the Board of Examiners meeting, which was very well attended; most people ventured their opinions when required. I concurred with all of the recommendations of the Board.

15. Were appropriate procedures in place to give due consideration to mitigating circumstances and medical evidence?

I was actually very impressed with the procedures in place to consider all mitigating circumstances and with the information given to me when such cases arose and had to form part of my considerations.

Other comments

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

External Examiner:

Programme Area: **BSc Microbiology**

Academic Year: **2012/13**

Date of Response: **21 August 2013**

As Programme Leader and on behalf of all of the staff who contribute to the teaching of Microbiology I would like to thank _____ in _____ role as external examiner for producing a thorough report. No Matters for Urgent Attention were raised, but _____ did raise a number of other points that I address below.

- (i) *The previous examiner commented on a perceived lack of bacteriology but I feel comfortable with the balance between bacteriology and virology, although I will keep an eye on the amount of immunology taught in the course (no cause for concern at the moment, but the host must not be forgotten).*

This comment may reflect a number of changes in level 3 of the Microbiology programme that were made in response to the previous external examiner, _____. In the 2012-13 academic year the incorporation of additional bacteriology content into level 3 has redressed the balance between bacteriology and virology. Moreover, the appointment of a new Lecturer in Bacteriology for the 2013-14 academic year will provide an opportunity to develop additional bacteriology content in the future.

- (ii) *I would also like to see more students undergoing a lab project for their dissertation (see later comments). I realise this is more expensive and more time-consuming for the Faculty members, but Leeds is a research-active university and I feel the students, on the whole, get more from this sort of dissertation than from a literature review. It also has implications for their future careers and employment prospects – if I have two equal candidates for an RA position or a PhD studentship, I'll pick the one that has done a practical project rather than a literature review. I don't yet understand how dissertations are decided upon or how many lab projects are offered, or how the Faculty members decide who does what, and will be requesting that information before next year's exam board.*

The choice of subjects for dissertations was appropriate, though I would like to see more practical projects undertaken rather than literature reviews.

We offer laboratory, computer and literature projects. Typically each research active member of academic staff will offer 3 laboratory projects, which cater for the vast majority, if not all, of students who wish to perform a laboratory project. Students are asked to rank projects in order of preference. Project allocation is then based in the student performance at level 2, with students obtaining the highest marks being allocated their first choice. Only in very rare occasions is a student allocated a literature project when his/her first preference is for a laboratory project. When this does occur this will only be for students who have the lowest level 2 marks. Moreover, whilst we agree that lab projects are important for students who wish to pursue a career in experimental science, many of our students do not want to work in a laboratory once they graduate and the choice of projects reflects this.

- (iii) *All documentation received was appropriate and clear. That is, with the exception of the rather complicated marking system used by the University and the logic (and necessity) of the various transformation steps that are carried out on the initial marks. Far too complicated and also unnecessary in my opinion.*

The use of transformation steps in the generation of examination marks is a University procedure and is not under control of the Microbiology programme.

- (iv) *I was provided with all draft examination papers and model answers in a timely manner and my comments were taken on board. I did point out that for some of the model answers the marking schemes were not transparent, whereas for others they were very clear.*

I agree that model answers should always be clear and I will raise this issue with the members of the Microbiology programme.

- (v) *I struggle with MCQs as the sole or a large component of assessment of students, but I accept that with the numbers concerned, particularly in the first two years, that it is difficult to come up with a better system. I would request however that more care is taken with the phrasing of some of the MCQs. Best practice dictates that the root of the question should provide sufficient information for the question to be answered correctly. Some of the questions I saw fell short of this standard.*

As the external examiner points out MRQ are used in part because of the large class sizes in level 1 and 2 modules. However, it is important to note that students also require time to develop essay and scientific writing skills. This is developed in the skills modules, which also ensures that the students encounter a range of different assessment types. With regards to the MRQ questions themselves I will ask that module teams to review the questions used to ensure that they are clear and unambiguous.

- (vi) *On the whole, I have great confidence in the evaluations. Most scripts were clearly annotated, though it must be said that some of the examiners' comments were harder to read than the writing of the students they were commenting on. A little more effort to make their comments more easily legible would help.*

I will request that all scripts are more clearly annotated with legible writing.

Best wishes,

Programme Leader