

**The University of Leeds**  
**EXTERNAL EXAMINER'S REPORT**  
**ACADEMIC YEAR: 2010– 2011**

**PART A: GENERAL INFORMATION***Subject area and awards being examined:*

<b>School of:</b> <b>Faculty of</b> <b>Biological</b> <b>Sciences</b> <b>Programme(s) / Module(s):</b> Microbiology; Microbiology with Virology; Microbiology with Immunology; Medical Microbiology; Microbiology in Relation to Medicine	<b>Subject(s):</b> Microbiology  <b>awards: (e.g. BA/BSc/MSc etc.)</b> BSc
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The completed report should be attached to an e-mail and sent as soon as possible, and no later than 6 weeks after the relevant meeting of the Board of Examiners, to [exexadmin@leeds.ac.uk](mailto: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.*

1. All Year 3 exam scripts and project assessments should be double marked – this is common good practice in all the institutions I am familiar with. This is particularly necessary due to the introduction of a new course structure for Microbiology programmes. I found that some of the marks awarded to some questions were too low and did not reflect the length and depth of the answer nor did they often match the positive comments made by the assessor at the end of the question.

2. The Advanced Topics in Microbiology 1,2 and 3 mode of delivery for year 3 is a good way to deliver thought provoking subjects and allows for student centred learning. I think it is important to avoid the outcomes seen for MICR 3120, where there were 11 fails out of 77 students, by ensuring students are provided with guidelines as to what they will be examined on. This could be a bullet point list given at the end of the module highlighting the major themes they should address for the examination.

***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?*

Yes

***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.*

## Standards

### 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.*

This was the first year of a radically altered microbiology course with new modules delivered for all three years. It is clear that the new course has been largely a success with strong performances at all levels. The new course structure is certainly of a commensurate standard with other Russell Group Universities I am familiar with.

### 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 programmes provide an excellent vehicle for delivering high quality microbiology courses from years 1 to 3 and there is clear evidence of a measured approach by which year 1 material is enhanced by more difficult concepts in years 2 and 3 so that by the end of year 3, students have been brought up to the latest cutting edge concepts of the subject.

### 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.*

A range of teaching methods are used that provide the students with a stimulating course at all levels. It was particularly pleasing this year that results for students taking modules in years 1 and 2 yielded a significant number achieving first class marks. In my report for last year I had raised this as an issue whereby the achievements of students had not been commensurate with the type of good quality student intake that the University Leeds has.

As noted above, I believe that all year 3 exam scripts and project assessments should be double marked not just a selection as happens now. This would ensure a more rigorous assessment process and ensure fairness of treatment to all students.

Some of the marking below ca 50% was particularly fierce and there seemed to be a lot of very low marks given to year 3 exam answers. Some of the model answers I received seemed to be very rigid and if students failed to hit all the points they received low marks. Model answers may need to be less restrictive at year 3, particularly with the move this year to more student centred learning for the topics modules which will produce answers placing different emphasis on a subject depending on what a student has learnt and/or found interesting.

Year 1 and 2 module results were better this year but for some reason MICR 2221 and 2222 rated not as well as others with only 2 first class marks of 86 students for 2221 and 5 of 93 for 2222

### 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 performance at level three was good across most programmes although for the year 3 Microbiology with Virology cohort the final results were weighted towards the 2:2/3 end of the scale with only 2 students being awarded a 2:1 out of a class of 10 students. This might reflect the student intake to this programme but is something the course organisers should be aware of.

The results for the Microbiology in Relation to Medicine programme were outstanding with all 6 students on this programme being awarded a first class degree. This programme provides intercalating medical students with a course highly relevant to their discipline. Hopefully these results will encourage future medical students to intercalate and study this programme.

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

**6. 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.*

I think the staff have done an excellent job in re-vamping the Microbiology programmes and I think that they have produced a wide ranging course which uses a range of appropriate delivery and assessment methods. The year 3 Advanced Topics format is particularly praiseworthy and provides a mode of teaching that must be stimulating for both student and lecturer.

**7. 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 laboratory project dissertations I read this year were again excellent and reflected research done in well found laboratories that were pursuing high quality work. Overall I thought that this year the "dry" projects I saw were more challenging than last year and were therefore more commensurate with the possibly more time demanding laboratory ones.

## **The Examination Process**

8. **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.*

I received all the draft papers and information in a well ordered process that gave me sufficient time to review them and make comments.

9. **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?**

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

YES

10. **Was sufficient assessed/examination work made available to enable you to have confidence in your evaluation of the standard of student work?**

YES

11. **Were the administrative arrangements satisfactory for the whole process, including the operation of the Board of Examiners?**

YES

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

YES

## **For Examiners involved in Mentoring Arrangements**

*If you have acted as a mentor to a new external examiner or have received mentor support please comment here on the arrangements.*

## **Other Comments**

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

### **Student perception:**

***Included for reference although because of the low numbers of students I saw these views may not be representative:***

Year 1 students (I saw only 2) were extremely positive about the University and their courses.

Year 2 (3 students) Total satisfaction with the University and the staff with \*\*\*\* receiving particular praise. They feel that there is too much MCQ assessment and would like more essay type exercises for which they would like some direction and practice.

Year 3 (4 students) Felt strongly that some questions on the 3120 paper had been unfair by asking about topics that had not featured strongly in the lecture content.

Workload – wise would prefer to have had the Skills for Microbiologists course in semester 1.

Felt that marks for some of the continuously assessed work were variable and highly dependent on the staff member marking it. They also felt that there was variable supervision of the dry projects - especially the grant proposal in that some supervisors provided examples of proposals whilst others expected the students to get on with it.



External Examiner:

Programme Area: **BSc Microbiology**

Academic Year: **2010/11**

Date of Response: **15 July 2011**

As a Programme Leader and representing the staff involved in Microbiology teaching I would like to thank again in role as External Examiner, producing a thorough report and working with us in the design of the new Microbiology Degree programme, particularly with regard to examinations and managing student expectations. We are very pleased with his overall assessment of the degree and its implementation.

As stated in report, the degree has changed at all three levels in the 2010/2011 academic session, and we have integrated into the degree changes as a result of comments made in and the previous External Examiners' reports, particularly with regard to selection and delivery of third year projects.

We convened a Micro Programme meeting on the 20<sup>th</sup> July 2011 to discuss his report. Below are our responses to the points that are made in his report for the 2010/2011 academic session (in italics) and require a response.

### **Matters for Urgent Attention**

*Point 1 External Examiner's Comment: All Year 3 exam scripts and project assessments should be double marked – this is common good practice in all the institutions I am familiar with. This is particularly necessary due to the introduction of a new course structure for Microbiology programmes. I found that some of the marks awarded to some questions were too low and did not reflect the length and depth of the answer nor did they often match the positive comments made by the assessor at the end of the question.*

**Response:** We have considered the feasibility of double marking all third year exam transcripts and whilst we can see the merits of this, we think logistically this may not be feasible, especially given the plan to move all (1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> year) examinations to the same time. We also note that we are a unitary Faculty Undergraduate School and as such the same student experience has to be ensured for all students taking Micro modules. We note that all project assessments are already second marked. Concerning examinations, given comments this year and in previous years, we will recommend to second mark all failed papers and carry on second marking a proportion of papers at other levels. We are also seeking more guidance from the Undergraduate School in what to award for the 0 to 40 range. Additionally, we will be implementing pre-exam marking meetings to ensure that we are all aware of the marking criteria and correct annotation of scripts. We are also proposing that the second marking will be blind and will present a mark using grade criteria e.g. mid-2.1, high-1<sup>st</sup>. This reflects the reality that the primary marker is the expert in the field for the particular question.

*Point 2 External Examiner's Comment: The Advanced Topics in Microbiology 1, 2 and 3 mode of delivery for year 3 is a good way to deliver thought provoking subjects and allows for student centred learning. I think it is important to avoid the outcomes seen for MICR 3120, where there were 11 fails out of 77 students, by ensuring students are provided with guidelines as to what they will be examined on. This could be a bullet point list given at the end of the module highlighting the major themes they should address for the examination.*

**Response:** After the results for MICR3120 were made available and strategies discussed with in February 2011 we focused on managing student expectations for the other two Advanced Topic modules. The final results for these modules were higher than for MICR3120. We attribute this to both the students being more informed on the nature of the examination and perhaps student uptake on the sessions that were put on for practising questions and exam technique, which was very poor for MICR3120. For the academic session 2011/2012 we have put in place introductory lectures

for each of the Advanced Topics where students will be informed of the nature of the topic, the work required and the examination format etc. In terms of our internal examination processes we will ensure that the questions set are appropriate to the module content and in general will aim to set questions that represent two or more lectures of a given ATU.

### **Standards**

Point 3 We have worked hard to increase the standards at Year 1 and Year 2 by introducing 40 credits of microbiology specific skills modules in each year and removing in course assessments from taught modules. As noted above we will plan to second mark all scripts that are rated as fails. As discussed and in consultation with [redacted] at Level 2 we will move to a modified end of module exam format where students will have a compulsory MCQ (40% of the final exam mark) and a choice of one essay questions out of four or five (60% each). This will help increase student choice and allow them better opportunity to demonstrate their knowledge of the entire module, and provide further time to write a detailed essay.

With regard to the lower marks obtained for MICR2221 and MICR2222, molecular virology and medical immunology, respectively. These modules are compulsory for microbiology students and optional for others. For the next academic session we will make all students more aware of the necessity to do back ground reading, especially for non-micro students. For MICR2222, two possible causes were identified by the immunology team for the lower marks. First, the time to answer three rather complex immunological essay questions was very short (30 minutes rather than 40 minutes from the previous years). Second, students were OK in "reproducing" factual knowledge but there was clearly a lack of "understanding" with regard to the more complex immunological interactions. Therefore we plan more e-learning and example question "training" opportunities and "discussion" for the next module. Also, we hope that reorganising the examination format at Level 2 will also give a better opportunity for students to demonstrate their knowledge.

Point 4 The students doing Microbiology with Virology were generally of poorer intake and performance quality than the others. A number had done several resit examinations at Years 1 and 2, or the entire year. We are very pleased with the results of the students for Microbiology in Relation to Medicine and have recruited 15 students onto this for the 2011/2012 academic session. We feel that integration of the medical students into the degree cohort helps raise the academic expectations of the other students.

Point 7 We have taken special care in redesigning the third year project module with this being handled as a unitary Microbiology, Biological Sciences and Biochemistry module. We feel this has resulted in increasing the overall standard of a project and allows the students more choice in third year projects.

### **Other Comments**

In response to some students wanting the third year skills module in semester 1, this was moved to semester 2 in response to previous student feedback to allow them more time in semester 1 to focus on their dissertation projects. For this reason we will keep the skills module in semester 2.

Programme Leader

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**UNIVERSITY OF LEEDS**

26 September 2011

Dear

**EXTERNAL EXAMINER REPORT 2010/11: BSc Microbiology**

Many thanks for your efforts during the year and your constructive report on the programme. It is great to see the hard work of staff reflected in the positive comments you have made about the new programme.

Regarding your comments on double marking of examination scripts, as stated this would be difficult (from a workload perspective) to roll out across the entire Faculty. However, in the light of your comments we are changing our current procedures in several areas of assessment which will go some way to addressing your concerns. We are going to moderate/double mark at least 20% of all scripts including all failed scripts. We are also working on giving staff more guidance in assigning marks in the range below 40%. I hope to be able to keep you updated of these developments. I am glad that you found the research projects of high quality and that our efforts to make dry projects more equivalent have been successful.

I am very pleased you commented positively on the revamped structure of the Microbiology programme and the introduction of the Advanced Topic modules. This has involved a huge amount of work from dedicated staff who will be very encouraged by your comments.

I look forward to seeing you in April next year and if you have any queries, please let me know.

Yours sincerely,

Faculty Director of Undergraduate Student Education