

**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>LIFE SCIENCES</b>	<b>Subject(s):</b>	<b>Bioscience</b>
<b>Programme(s) / Module(s):</b>	<b>General, Plant Science, Biotechnology</b>	<b>awards: (e.g. BA/BSc/MSc etc.)</b>	<b>M.Sc.</b>

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.*

***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?*

n.a.

***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.*

Although not all the Examiners would agree on this, my cohort of students in general seemed more content with each passing year, reflecting a great deal of conscientious effort on the part of the course organisers. Overall I think this course offers an exciting intellectual menu for the students to choose from. The problems, where they arise, are mainly organisational. Other issues reflect, in part, the very diverse backgrounds of the student intake. Nothing can be perfect, and things can go wrong for all sorts of random reasons – illness, new staff etc., but in general I feel the Leeds staff have been very sensitive to the issues and receptive to our comments.

## 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.*

Aims and outcomes are entirely appropriate for a taught M.Sc. and achieve a remarkably high standard in the departing graduates. Their project presentations and their ability to talk about their work were impressive.

### 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.*
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As an Irish academic I cannot claim to be fully conversant with current UK benchmarks, although I am aware of the many hoops that UK colleagues have to jump through these days. Overall, however, I consider this programme to be of a high standard that would do credit to any major university in Ireland, Britain or elsewhere.

### 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 personal hate: I am highly suspicious of 'marking criteria' and 'descriptors', which appear quite widely in the assessment. They make good sense and work only at the extremes – i.e. excellent or appalling, where by definition either all the boxes or none are ticked. In between there are so many ways to be 'average' that the descriptors become a straitjacket. The system works a bit better for project marking, because the headings are much more fully differentiated, but even here there is overlap – e.g. on one set of comments under Technical Ability 'Technically gifted, high level of independence' and then under Initiative 'Excellent level of initiative'.

If blanket descriptors are used it is also unhelpful in feedback to the students unless, as <<>> does, the teacher underlines the particular attribute that is being singled out for comment. Overall, though, descriptors are a 'fad' and one of the less helpful additions to assessment practice in my opinion.

One detail: MCQ for 5205M uses 'True/False'. It is important in my view that both question paper and answer sheet should be explicit about what is required rather than assuming that any fool can surely see what is required. This was not spelt out in this case in either place.

All the External Examiners, I think, were somewhat suspicious of the Peer Assessment component. We could see that it is a very useful experience for the students, but whether it is robust enough to be part of a fair relative assessment and part of a final mark is another matter.

More generally, the School tries to use a broad range of methods. The only problem might be that which methods you encounter (and whether they suit your learning style) will vary according to which modules you choose. Also, of course, the assessment process should have two main outcomes: 1. that the School can tell how its students are doing and finally how they have done, but also 2. that the students themselves can keep track of their performance. In this context, one major complain from the students themselves was about the very variable level of feedback on written work – e.g. 'crosses in the margin with no comment not very helpful'.

### 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.*

In my view the project poster presentations represented a culmination of their achievement on the course and gave the students an excellent incentive and an excellent opportunity to show what they had learnt. They were all very enthusiastic about their projects, the facilities and the help received but wished the projects could have been longer - even at the expense of a couple of the special options.

### 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. 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.*

No particular comment this year. The School has clearly had to cope with and adjust to some significant changes in staffing in the genetics area which is clearly highly relevant to this course.

**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.*

This is a very research-active School, and the nature and breadth of choice in both the taught material and the practical project work reflects this, providing the students with inspiration and good example. For most of these students the encounter with their teaching staff in the real-science context of the project was a source of excitement and enthusiasm and if the intention is, as it should be, to light a flame, the School succeeds.

***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.*

Yes

**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.*

Some specific issues were raised by the students when I met them in September:

1. The Biotechnology students complained bitterly about the Drugs module in 1<sup>st</sup> Semester. They were, I gather, thrown in with 3<sup>rd</sup> Year Pharm/ChemEng students who were presumably better prepared for what they were about to receive. Quotes: 'It was ridiculous' 'They didn't tell us anything that was going on' 'Assignments didn't come back'. The Department running this module needs to be more aware of the particular needs of the M. Sc. students joining their course.
2. The Biotechnology students also complained that they had no lab.work in Semester 2, that it was just 'dry' classes. As a teacher I am very well aware of the value of dry practicals, but in this case it obviously affects the students' perception of the overall complexion and feel of their course.
3. The overseas students felt they needed more introductory guidance about what is needed/expected for the literature reviews, research proposals etc. A recurrent theme in every year relates to the degree of culture shock these students experience on entering a much less spoon-fed environment than they are used to. They evidently feel they adjust after a while but that this problem means they are slow off the starting blocks.
4. Core Skills 3 attracted a lot of criticism with complaints about staff not turning up or being late. 'Needs organising', they say. They were also very unhappy about having an exam in the middle of their project, with a viva on the same day for some.

**Faculty of Biological Sciences**  
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**UNIVERSITY OF LEEDS**

8 February 2012

Dear

**EXTERNAL EXAMINER REPORT 2010/11:**

***MSc Bioscience***

***MSc Bioscience (Biotechnology)***

***MSc Bioscience (Plant Science)***

Thank you for your report on the above programmes. We are pleased to hear that you consider our programmes to be of a high standard and that the project work we provide inspires and enthuses students.

In response to the points you raise:

**BIOL5244M Drugs, Processes, Products and People:** The School of Engineering teaches this module and the teaching (i.e. the lecture component) is delivered collectively to the Masters students (Engineering and Biological Sciences) as well as to their level 3 students. Engineering are currently attempting to address the students' concerns by separating teaching for masters students from that for the 3rd Year Pharm/ChemEng students for the academic year 2012-13. In addition, we've asked Engineering to modify the assessments for the Biological Sciences students to remove the more chemical aspects and replace these with pharmacological type questions that are better suited to their background, and they have done this. In addition, for this year (2011-12), the credit weighting of the Drugs module has been reduced from 20 credits to 10 credits and a new 10 credit module introduced called Biosensors and Molecular Diagnostics. The latter module is taught within Biological Sciences with input from external speakers coming from a range of diagnostic companies.

**Overseas students and introductory guidance:** Over the past few years, we've introduced a range of activities to support the transition of international students onto our MSc Bioscience course. This includes a series of induction activities covering referencing and plagiarism, information seeking and retrieval skills and introductory practical skills. Within our core transferable skills module, there is a set of lectures on writing in particular formats (e.g. literature reviews, and research paper critiques). This year, we have introduced an additional tutorial session following the submission of their first assignment early in Semester 1 to provide greater clarity and guidance on the expectations associated with MSc level work. In this session, tutors give feedback on a literature review that the students have produced, and discuss what is expected in this type of work. During our welcome reception at the end of the induction week, we also invited International students from previous MSc cohorts who were still in Leeds to attend so that the current intake could meet with them and hear about their experiences. It is likely there will always be an element of "culture-shock" amongst our international students but with these additional activities in place, the transition should be improved.

**The students wished that the projects could have been longer and the biotechnology students complained that they had no lab work in Semester 2:** During 2010-11, we delayed the start date of the project slightly to start after the Easter vacation; instead of week 7 of semester 2 (2 weeks preceding the Easter holidays). The reasoning for this was to prevent overlap between undergraduate and postgraduate students within research laboratories, which was leading to space issues, and to ensure that the taught elements of the MSc were complete and hence students could focus exclusively on their research. During the current academic year, students will receive 2 additional weeks as part of their research project work due to an earlier (and changing) Easter vacation start and finish dates. In the coming years, we aim to standardise the start date of the research project as part of a bigger re-structure of the academic year that the University is proposing, and we should be able to continue with an earlier project start date.

**BIOL5205M Core Skills 3:** We have comprehensively reviewed our Core Skills 3 module for 2011-12. This includes a more thematic approach to teaching the list of techniques covered. In addition, the test date has been brought forward so that it does not coincide with the viva period. We have also discussed organisation of the module with the module manager. For the MCQ True/False test, we will ask the member of staff who sets the work to ensure that what is expected in both the questions and the answer sheet is made explicit.

**Variable level of written feedback on assessed work:** All assessed work is sent out with copies of our assessment criteria and a covering letter asking staff to underline the descriptors that apply to the students work and provide some general comments in the feedback box at the bottom of the criteria sheet. This sheet is returned to the students appended to their work. We will strengthen our instructions to assessors this academic year with increased emphasis on underlining as you indicate.

We have made a number of changes to assessment and feedback activities and procedures for 2011-12. These include a complete review of the number and types of assessments across our programmes. Following on from this review, we have reduced the overall number of summative assessments students complete and incorporated additional opportunities for students to receive formative feedback on their work. In addition, we ensure that the distribution of assessment types through the modules is such (through the use of an assessment matrix) that each student is likely to encounter a range of assessment types and this is likely to be similar for each student irrespective of the modules selected.

Furthermore, as part of the University Partnership Agreement, we are actively engaging students in discussions around assessment and feedback through staff-student fora and personal tutorials so there is better information and engagement with the process.

**BIOL5100M Peer assessment component:** We will review this to see whether we can improve the fairness of the procedure or combine/replace with an alternative approach that could present a more accurate assessment of individual contribution to group work. There are some academic staff in the Faculty who are using Wikis to assess individual contribution and this is one approach that we could investigate further.

We look forward to your visit again and we thank you once more for your help in developing the programme. As always, your comments are valuable to us in continuing to improve the programme for future cohorts of students.

Yours sincerely,

Director of Taught Graduate Student Education