

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

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

Faculty of Biological Sciences Programme(s) / Module(s): Biology, Biology (International), Biology (Industrial)	Subject(s): Biology awards: (e.g. BA/BSc/MSc etc.) 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.

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.

I understand that the average load per member of academic staff for supervision of the 40 credit Level 3 projects is expected to be 8 students or greater in the next session. I think it is very likely that this heavy load will diminish the student experience. This effect will vary among staff members depending on factors like the size of their research group, area of research and their other duties and so may have inequitable effects on students. This issue needs to be considered urgently.

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.

N/A

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.*

I consider the ILOs for the programme and the standards applied to be appropriate for a BSc in Biology in a research-led University.

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.*

Yes, although the range of the subject is not as well covered as it has been in the past.

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.*

Assessment methods are varied and appropriate. Variation in module marks was less than in previous years but is still associated with the type of assessment used. This should be addressed either by scaling of marks or by adjusting expectations of markers to suit the demands of the assessments used. See below for further discussion.

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.*

Yes, the range and number of assessments provides good opportunities for students to demonstrate their individual skills. The best students in this cohort were outstanding by any standard. There was a significant 'tail' of under-achieving students but this was less marked than in the previous year.

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.

See below for some specific changes in assessment procedures. I am not aware of significant enhancements to the programme since the previous year.

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.

There is clearly a close connection between research and teaching. This is most evident in the project module where many students undertake genuine research tasks and the better students achieve publishable results. However, it is clear that research thinking permeates all courses.

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.*

The time available during my visit was not sufficient for me to discharge my responsibilities to my own satisfaction (see below). The exam papers and scripts, and student projects, were provided but the external examiners were not provided with other important information during the visit, such as marking criteria and course structure, unless specifically requested. This was exacerbated by the online learning system being unavailable due to maintenance.

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.*

See (8).

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

Yes, but the time available was an issue, as noted under (8).

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

Yes, in general. The Board meeting was conducted in a very professional way. Having more information available on arrival would have helped preparation for the Board meeting.

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

Yes. The Mitigating Circumstances system works very effectively.

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.

N/A

Other Comments

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

A significant proportion of the time available during my visit this year was spent in considering written complaints from six students about the supervision they received during their Level 3 project work. I met one of the students in person. With the Zoology and Genetics External Examiners, I met with the supervisor concerned to discuss their view of the cases made by the students. It was clear that the heavy demands of other duties were a major cause of the problems experienced. I came to the conclusion, supported by the other external examiners, that the cases made by the students were somewhat over-stated but that there was, nevertheless, good reason to believe that they had been placed at a disadvantage relative to other students and that the quality of their experience as honours year students had been diminished. There was no evidence that there had been a detrimental effect on their marks in other modules. The Examination Board approved my recommendation to adjust the project marks of these students. It is very difficult to know whether the adjustment made was appropriate or whether it was equitable to adjust all six marks in the same way. Some lessons need to be learned from this experience:

1. My impression was that the seriousness of the complaints had not been fully appreciated in advance of my arrival. As a result, there had been no investigation of the circumstances, or of possible impacts on marks, and there was uncertainty about the possible responses. Should similar complaints be made in future, I would recommend that they

are fully investigated, perhaps by the Mitigating Circumstances committee, in advance of the External Examiner's arrival. This would save time for other duties (see below) and help to ensure that an equitable response can be recommended to the Examination Board.

2. Proper supervision of 40 credit projects (lab or literature based) is time consuming and these projects are very important for the students because they are a high proportion of the credits and a major part of the learning experience. Overloading staff with project supervision responsibilities risks generating further problems in the future. Solutions to this problem are not simple: access to 40 credit projects could be restricted to a subset of students or the credit rating, and corresponding expectations, could be reduced for all students. Careful consideration of these and other options is needed in the light of expected future staff:student ratios.
3. Adding an early assessment point, as I suggested last year, would help to prevent problems from growing to the point where they become difficult to resolve.
4. Providing extensions for submission of the project report may not be an appropriate compensation for difficulties during the project, because of interference between project writing and other deadlines. Extensions should not be given by the module manager without prior consultation with the supervisor.

Last year, I suggested that the Examination Board should be moved to Wednesday to allow me sufficient time to carry out all of the required tasks during my visit. The extra time would have been particularly valuable this year, given the time taken in dealing with complaints. The later board meeting would allow external examiners with smaller cohorts to assess to arrive later.

Unfortunately, industrial action caused the planned meeting with undergraduates to be cancelled this year and so I did not receive direct feedback. I would have been particularly interested to know whether the students felt there had been improvements in exam feedback, an area of concern raised in the previous year's meeting.

As highlighted last year, some modules had unusually high or low marks. I was asked to consider BLGY3241 in particular because of its low mean but it was actually no more of an outlier than some other modules. I found no issues with the assessment of BLGY3241: the exam format was good, questions were fair and marking was consistent, if a little harsh. In such circumstances, ad hoc adjustments to module marks are not appropriate. However, I do recommend that careful consideration be given to scaling of marks after cohort analysis. I was given access to an effective cohort analysis this year, in which individual student and mean marks for each module were compared with marks for other modules at the same level taken by the student cohort registered for the focal module. A more easily accessible digest of the analysis results would have been helpful at the start of my visit. This analysis could be used to highlight outlier modules and to make systematic adjustments of marks. This would remove the current temptation for students to select modules according to their perceived 'difficulty'. Exam format (or in some cases the absence of an exam) clearly influences module mean marks. I consider that mark scaling is the best way to deal with this problem because the variety of assessment methods is, generally, a good feature.

Some enhancements to the Level 3 project process and assessment are to be commended. Meeting record forms are very useful when used reliably. Pressure on students to maintain these records should be increased. The highlighting of marking discrepancies between first and second markers and the new 'resolution form' are valuable innovations. The performance mark is a good feature of assessment but efforts need to be made to achieve homogeneity of expectations and marking criteria across supervisors. The module handbook for the project might usefully have more extensive and explicit sections on the responsibilities of the student and the supervisor in place of the rather vague current section on 'What to expect of your supervisor'.

Statistics advice can be an issue for project students and for those working on field course reports. Many institutions have statistical advice drop-in centres but I was surprised to learn that Leeds does not have such a service.

Last year I suggested that the Faculty should approach the University to consider a system where marks for modules influenced by mitigating circumstances could be excluded from the calculation of classification averages. I would be interested to know the University's response to this suggestion because it remains difficult to reflect the performance of students with mitigating circumstances in their final results.

I did not have the time that I would have liked to discuss the future of the Biology programme with staff or to consider changes that have been made or are planned. The concerns I felt last year about the reduced breadth of the Biology programme remain serious concerns for the future.

I am very grateful to the exams officer, programme leaders and support staff for the excellent hospitality while I was in Leeds. While there is still room for improvement in the information provided to external examiners, it was clear that the system was working more smoothly this year and, as always, that all staff involved are dedicated to providing high-quality teaching and assessment.



RESPONSE TO EXTERNAL EXAMINER'S REPORT
Faculty of Biological Sciences | Undergraduate School

External Examiner:

Programme Area: **BSc Biology**

Academic Year: **2010/11**

Date of Response: **29th July 2011**

Dear

Thank you very much for your efforts as our External Examiner and for your report. The ideas and suggestions contained within the report will be very useful for our continuing efforts to improve the degree programme. Our responses to your recommendations are detailed below.

Yours sincerely,

Programme Leader

Matters for Urgent Attention

1. Comment: I understand that the average load per member of academic staff for supervision of the 40 credit Level 3 projects is expected to be 8 students or greater in the next session. I think it is very likely that this heavy load will diminish the student experience. This effect will vary among staff members depending on factors like the size of their research group, area of research and their other duties and so may have inequitable effects on students. This issue needs to be considered urgently.

...Proper supervision of 40 credit projects (lab or literature based) is time consuming and these projects are very important for the students because they are a high proportion of the credits and a major part of the learning experience. Overloading staff with project supervision responsibilities risks generating further problems in the future. So solutions to this problem are not simple: access to 40 credit projects could be restricted to a subset of students or the credit rating, and corresponding expectations, could be reduced for all students. Careful consideration of these and other options is needed in the light of expected future staff:student ratios.

Response: We share the External Examiner's concern, though the average undergraduate load is not expected to be as high as 8. Due to staff losses during the restructuring period, the number of full-time teaching staff on the IICB teaching programmes has reduced from ~40 to 28. As a result, the average third-year project load per staff member has potentially increased from 4.5 to 6.5. Since some projects are supervised by retired staff or staff in other Institutes, the actual average undergraduate project load in 2011/12 will be 6.1 students.

Action: We have taken three steps to ameliorate this problem. (1) For next year, we have reintroduced a 20 credit final year project module, so students will have a choice of 20 or 40 credit projects. We have also modified the timing of this module so that 20 credit projects will be completed in semester 1. Supervision of 20 credit projects will thus require a significantly lower input of staff time. It is expected that 1/4 to 1/3 of students will undertake a 20 credit project; (2) the range of projects that can be offered has been expanded, to include group projects, 20 credit experimental projects etc, as well as the 'traditional' 20 credit literature and 40 credit experimental projects, and (3) the project allocation system has been refined to ensure a more even spread of project students across staff. The maximum undergraduate project load has been capped at 8, with a range of 4-8 students per staff member. Supervision of MSc projects has been taken into account in determining undergraduate project loads. This has been achieved while still ensuring that the vast majority of students will receive one of their top 3 choices of project supervisor. Nevertheless, we do share the concerns of the external examiner about the project student load with the current staff-student ratio.

Assessment methods

- 2. Comment:** Assessment methods are varied and appropriate. Variation in module marks was less than in previous years but is still associated with the type of assessment used. This should be addressed either by scaling of marks or by adjusting expectations of markers to suit the demands of the assessments used.

...I do recommend that careful consideration be given to scaling of marks after cohort analysis. I was given access to an effective cohort analysis this year, in which individual student and mean marks for each module were compared with marks for other modules at the same level taken by the student cohort registered for the focal module. A more easily accessible digest of the analysis results would have been helpful at the start of my visit. This analysis could be used to highlight outlier modules and to make systematic adjustments of marks. This would remove the current temptation for students to select modules according to their perceived 'difficulty'. Exam format (or in some cases the absence of an exam) clearly influences module mean marks. I consider that mark scaling is the best way to deal with this problem because the variety of assessment methods is, generally, a good feature.

Response: We are glad that the cohort analysis provided this year was useful, and will improve the 'digestibility' of this analysis for next year. We agree that variation in module marks is still higher than ideal; as the examiner notes, continuously assessed modules tend to have higher marks than examined modules.

Action: *A digest of the analysis will be circulated to all staff, highlighting the variation in module marks. Staff will be encouraged to look at assessment methods and to adjust marker expectations in order to further reduce the variation in module marks. We prefer to avoid scaling where possible, since this will potentially lead to dissatisfaction among students who will have already been notified of some marks e.g. for semester 1 modules and continuous assessment. The situation will be monitored through the year, and, if appropriate, scaling will be considered.*

Complaints from project students

- 3. Comment:** A significant proportion of the time available during my visit this year was spent in considering written complaints from six students about the supervision they received during their Level 3 project work. I met one of the students in person. With the Zoology and Genetics External Examiners, I met with the supervisor concerned to discuss their view of the cases made by the students. It was clear that the heavy demands of other duties were a major cause of the problems experienced. I came to the conclusion, supported by the other external examiners, that the cases made by the students were somewhat overstated but that there was, nevertheless, good reason to believe that they had been placed at a disadvantage relative to other students and that the quality of their experience as honours year students had been diminished. There was no evidence that there had been a detrimental effect on their marks in other modules. The Examination Board approved my recommendation to adjust the project marks of these students. It is very difficult to know whether the adjustment made was appropriate or whether it was equitable to adjust all six marks in the same way. Some lessons need to be learned from this experience:

- My impression was that the seriousness of the complaints had not been fully appreciated in advance of my arrival. As a result, there had been no investigation of the circumstances, or of possible impacts on marks, and there was uncertainty about the possible responses. Should similar complaints be made in future, I would recommend that they are fully investigated, perhaps by the Mitigating Circumstances committee, in advance of the External Examiner's arrival. This would save time for other duties (see below) and help to ensure that an equitable response can be recommended to the Examination Board.
- Adding an early assessment point, as I suggested last year, would help to prevent problems from growing to the point where they become difficult to resolve.
- Providing extensions for submission of the project report may not be an appropriate compensation for difficulties during the project, because of interference between project writing and other deadlines. Extensions should not be given by the module manager without prior consultation with the supervisor.

Response from the Examinations Officer: With regard to the issue of the student complaints, this was an ongoing issue in Semester two that was considered by the module manager, the supervisor and the Institute Director for Undergraduate Studies. As the matter had not been resolved to the satisfaction of the

students, a complaint was lodged by them with the Examinations Officer in late May. The students were then asked to provide written statements and these were passed on to the External Examiner in the first week of June. The decision was taken by the Examinations Officer that, on the basis of transparency and fairness, the External Examiner should be asked to review the evidence and reach an independent conclusion. Opportunities to meet the module manager, the supervisor and the Faculty Director of Undergraduate Learning and Teaching (who had experience of previous similar cases) were also provided. The issue was difficult to resolve but the decision made by the External Examiner was fair and has not been contested by any of the parties involved. However, the Examination Officer accepts that the information regarding this case should have been presented in a more accessible way and more information provided ahead of time. We feel that it was important that the decision was seen to be made by the External Examiner as an independent third party. In future we will follow his suggestion that the Mitigating Circumstances provides a recommended course of action for consideration by the External. This would help alleviate the time constraints encountered in this year's visit.

Response from PL: Last year it was felt that, rather than an early single assessment point (which would not identify problems occurring after this point, e.g. this year's complaint), increased emphasis on the importance of continual student-supervisor interactions and meeting record forms would allow us to identify problems. In the light of the problems with this group of students, we will emphasise to students the importance of contacting the module manager immediately if they feel there are supervisory issues. We will also discuss again with programme staff the desirability of an early assessment point. It is current policy that project extensions are discussed with the supervisor, and whilst this policy will be maintained, care will be taken in the award of extensions to coursework given the impact these can have on other modules.

Timing of examiners meeting

- 4. Comment:** The time available during my visit was not sufficient for me to discharge my responsibilities to my own satisfaction (see below). The exam papers and scripts, and student projects, were provided but the external examiners were not provided with other important information during the visit, such as marking criteria and course structure, unless specifically requested. This was exacerbated by the online learning system being unavailable due to maintenance.

Last year, I suggested that the Examination Board should be moved to Wednesday to allow me sufficient time to carry out all of the required tasks during my visit. The extra time would have been particularly valuable this year, given the time taken in dealing with complaints. The later board meeting would allow external examiners with smaller cohorts to assess to arrive later.

Response: We regret that the time available was not sufficient this year. It was unfortunate that the decision was taken to upgrade the VLE during the period of external examiners visits.

Action: *Next year the exam board will be moved to Wednesday. The additional information requested will be provided, and we will ask the University to ensure that the VLE is available at this time of year during future upgrades.*

Other concerns

- 5. Comment:** Unfortunately, industrial action caused the planned meeting with undergraduates to be cancelled this year and so I did not receive direct feedback. I would have been particularly interested to know whether the students felt there had been improvements in exam feedback, an area of concern raised in the previous year's meeting.

Response: We agree. This problem is unlikely to recur, but if so, efforts will be made to reschedule the meeting.

- 6. Comment:** Some enhancements to the Level 3 project process and assessment are to be commended. Meeting record forms are very useful when used reliably. Pressure on students to maintain these records should be increased. The highlighting of marking discrepancies between first and second markers and the new 'resolution form' are valuable innovations. The performance mark is a good feature of assessment but efforts need to be made to achieve homogeneity of expectations and marking criteria across supervisors. The module handbook for the project might usefully have more extensive and explicit sections on the

responsibilities of the student and the supervisor in place of the rather vague current section on 'What to expect of your supervisor'.

Response: We agree.

Action: *The importance of Meeting record forms will be further highlighted to both students and staff at the start of the academic year. The relevant sections of the module handbook will be revised in discussion with the module manager and other programme leaders. We will discuss criteria and expectations for the performance mark with staff.*

7. Comment: Statistics advice can be an issue for project students and for those working on field course reports. Many institutions have statistical advice drop-in centres but I was surprised to learn that Leeds does not have such a service.

Response: We agree that such a facility would be useful. Statistics advice is an important part of the project supervision process, but staff do not always have the relevant expertise in this area – in such cases, supervisors typically advise their students to seek guidance from other staff. We are not aware of specific concerns from this cohort of students.

Action: *The desirability of central provision of statistical advice will be discussed, initially at Faculty level.*

8. Comment: Last year I suggested that the Faculty should approach the University to consider a system where marks for modules influenced by mitigating circumstances could be excluded from the calculation of classification averages. I would be interested to know the University's response to this suggestion because it remains difficult to reflect the performance of students with mitigating circumstances in their final results.

Response: We thank the external for his suggestion. The response from the University is that removing modules from the calculation of averages is possible, though the marks will still be recorded on the transcript. We will clarify the circumstances under which this is considered appropriate.

9. Comment: I did not have the time that I would have liked to discuss the future of the Biology programme with staff or to consider changes that have been made or are planned. The concerns I felt last year about the reduced breadth of the Biology programme remain serious concerns for the future.

Response: We note that the external is satisfied that the programme meets the expectations of the national subject benchmark, but share his concerns about the future breadth of the programme. The restructuring process has concentrated research into a limited number of areas and this, coupled with the unexpected loss of two staff members, has reduced the breadth of expertise within the Institute. Despite this, we have endeavoured to maintain breadth of teaching, and only a very few modules have been lost. We remain concerned about future threats to the breadth of coverage that could result due to the retirement of key staff or any additional staff losses.

Action: *We are committed, as far as possible, to maintaining programme breadth. It is to be hoped that subject-specific teaching requirements will be considered for any new staff appointments. Moving the exam board to Wednesday will allow more time for discussions with programme staff. Additionally, we propose that the External Examiners' dinner be restricted to Institute staff and examiners, to allow more time for discussion of Institute-specific issues.*

10. Comment: I am very grateful to the exams officer, programme leaders and support staff for the excellent hospitality while I was in Leeds. While there is still room for improvement in the information provided to external examiners, it was clear that the system was working more smoothly this year and, as always, that all staff involved are dedicated to providing high-quality teaching and assessment.

Response: We thank the external for these comments, and will endeavour to continue to improve the process.



26 September 2011

Dear

EXTERNAL EXAMINER REPORT 2010/11: BSc Biology

Many thanks for your efforts during the year and your thorough and constructive report on the programme. This has been a challenging time for the Biology programme area but there is a great desire amongst staff to maintain the breadth of the programme and enhance the student experience. I was pleased to see your comments that a research ethos permeates all courses. It is great to see the hard work of staff reflected in the positive comments you have regarding the programme.

In his response to the issues you raised in your report, Rupert has raised a number of action points which I support. Regarding final year project supervision, loads have risen across the Faculty but with further investment in staff planned in the future we hope to reverse this trend and the reintroduction of a 20 credit project variant will also help. In addition, I hope the suggestions proposed by Rupert for your next visit meet with your approval.

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

With best wishes,

Faculty Director of Undergraduate Student Education