

## The University of Leeds

## EXTERNAL EXAMINER'S REPORT

ACADEMIC YEAR: 2014– 2015

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

Faculty / School of: Biological Sciences

Subject(s): *Genetics*

Programme(s) / Module(s):

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

**Name and home Institution / affiliation of Examiner****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](mailto:exexadmin@leeds.ac.uk).

Alternatively you can post your report to: **Head of Quality Assurance**  
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

**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*

The course structure and content have largely remained the same. With respect to assessment there have been some minor changes to the exam length and the and numbers of questions of specific types. In the case of the final year exams the 10 credit modules have been reduced/normalised to 90 min and the 20 credit modules to 3 hours. I do not fully support this and would propose that no exam is shorter than 2 h in the final year, giving the students time to collect themselves and not be rushed. The arrangement of questions within the exams remains very varied between with no clear rational for the number and distribution of questions or where continues assessment/course work is included. This variability is something I and the other external examiners have criticised and the student have noted as confusing. This should be addressed. Talking to the undergraduates each year they have been consistently positive about the course, the commitment and professionalism of the staff, the quality of teaching, the opportunities offered etc. However, two related concerns are raised each year. Firstly, that the clinical/human genetics is only a minor component of the course, particularly early on and the predominance of plant sciences. Secondly that the students feel disadvantaged regarding the molecular aspects of genetics, as people on other courses (microbiology/biochemistry) are perceived to have a wider range of relevant laboratory based projects available to them due to the practical classes they take in the first two years. In both instances the underlying problem is largely associated with the division of academic staff (and students) across the campus and not expertise within the university. I am assured that this has been discussed and attempts are being made to address the problem but little has changed over the last four years. At a purely academic level this is not a major problem as the Genetics and related biological sciences they are presented with are broad ranging and appropriate. However, in relation to student experience it is an issue and in fairness to

the students should be addressed.

The provision of data, exam scripts etc has improved, being now more thorough and comprehensive. The final examiners meeting has also become more organised with clearer criteria for determining degree class and dealing with extenuating circumstance. In large part this is due to a robust profiling system being in place and applied effectively.

## 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.*

The stated aims and ILOs are fully consistent with the programmes delivered and student achievement. The Genetics BSc programme is well balanced, with clear evidence of high quality teaching and students developing a good level of understanding and knowledge. The students are gaining an appropriate level of training and experience in both theoretical and practical aspects of the subject. The four years MBiol is an effective extension, providing the opportunity for a major research project as well as some taught modules, which are assessed by continuous assessment. Based on the written reports it is apparent that the projects involve substantial novel research and are suitably challenging. The level of understanding and knowledge demonstrated by the various components of coursework are fully consistent with a masters level qualification.

### 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.*

Based primarily on a review of module descriptions, reading a sample of 3rd examination scripts and assessing a selection of project reports and dissertations, I am satisfied that the aims and ILOs are being achieved by the majority of students. The student performance is fully consistent with those in similar research led universities.

### 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 broad range of assessment methods are employed, including MCQ, short answers questions, essays, practical reports, posters, talks and various course work exercises. The breadth of assessment and both the quality and level of questions is commendable. However, as stated in previous years there is significant variation in assessment between modules which is unnecessary and potentially confusing to the students. Although the length of exams has now been rationalised (see above) short answerer question may or may not be included and the numbers vary significantly, inevitably making it difficult for the students to appreciate what is expected. As with last year there was significant discussion about the appropriateness of short answer questions in third year exams. As I stated previously I personally do not have any problem with them as they provide an opportunity for different types of question. However, most short answer questions tend towards a default essay style and, based on written comments, some examiners appear to expect too much regarding content, considering the time allowed. I suspect that a significant driver is to try and examine across the full curriculum and avoid question spotting. Though understandable, good questions can require integration of information for different sources and lectures.

At the examiners meeting we discussed whether students are being over examined and the inevitability of this when there are 10 credit modules. These modules offer flexibility for the students and I am not in favour of removing this. One possible solution would be to examine a number of 10 credit modules with a single exam containing appropriate sections for each module. It is also important that the best students have an opportunity to fully express their ideas and knowledge and not constrained by time. Therefore fewer questions, with a longer time to write each essay would be beneficial - I would certainly recommend that, at level 3, they have only one essay per hour.

Reviewing the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> year modules the range of final marks was reasonably consistent across modules and the marks given appropriate. In two cases I was concerned that the exam component had relatively low average marks, which were rescued by the course work marks. However, the course work and exam scripts I reviewed had been appropriately marked. The key issue in one case (3232) was that no additional reading had been apparent in any of the essays - although many of the answers were thorough, detailed and accurate.

The marking, second marking and moderation was almost without exception fully transparent with good annotation of scripts and clear indication of marks given.

### 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.*

An extensive range of assessments are employed, allowing for a broad range of skills and knowledge to be appropriately rewarded. The marking was rigorous but fair and I was happy that the level of achievement for the students was consistent with the skill and knowledge they demonstrated. The majority of the students obtained a 2:1 or 1<sup>st</sup> class degree consistent with them having received excellent training and tuition. .

### 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.*

No significant changes were apparent to me and none were highlighted for review.

**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.*

Research is embedded in the full program; it obviously influences the curriculum, is reflected in the taught modules, particularly in the 3<sup>rd</sup> year and is predominant in the projects which are of a very high standard.

**8. Where the programme forms part of an Integrated PhD, please comment on the appropriateness of the programme as training for a PhD**

N/A

**For Examiners involved in mentoring arrangements**

**9. 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**

**10. 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 guidance was fully appropriate and helpful. The documentation provided was extensive and well organised. The staff were very helpful in providing additional material on request. This made reviewing the whole process very efficient and informative.

**11. 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.*

Yes I was provided with all the information and documentation I required. I noted in my report to the examiners meeting that it would be useful to have feedback from the students both on the modules but more importantly from 3<sup>rd</sup> year student on their perceptions of the whole program. There are issues of timing and low numbers of returns preventing this at the moment and these should be addressed.

**12. 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?**

Yes I was provided with all the papers and assessments and these included model answers. I feel that the exams were appropriately rigorous and the minor corrections and suggestions I made were adopted.

**13. 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, this included 2<sup>nd</sup> and 3<sup>rd</sup> year scripts, exam papers with module answers, projects and samples of coursework along with various spreadsheets and statistical analysis for each module and the full program. This was sufficient and appropriate.

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

The extended writing was associated with projects - I felt range of topics was very good as generally was the work undertaken and the write up. The assessment was rigorous and appropriate. I was particularly pleased that a significant proportion of marks are awarded by the supervisor for performance in the project. A danger is that too many marks towards writing skills.

**15. 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?**

Yes. The Board of Examiners was well attended, effectively run and giving opportunity for discussion where appropriate.

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

Yes. Where necessary specific issues had been discussed with the external examiners prior to the final meeting. In all cases where mitigating circumstances applied these were highlighted. The process of dealing with these, the rational for making an adjustment etc., was fully transparent and appropriate.

**Other comments**

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

As this is my final year I can say that I have enjoyed the experience of acting as the external for the Genetics program at Leeds. I am fully satisfied that the program is strong, recruiting good students and providing a high standard of education. My primary concern relates to over assessment and a lack of consistency in exam structure which seems unnecessary. I have observed a wide range of excellent ideas and approaches showcasing excellent practice. I have certainly been able to take back some good ideas to Liverpool and I hope I have provided some useful comments over the last four year.

**Faculty of Biological Sciences**  
**Student Education Service**

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University of Leeds  
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**UNIVERSITY OF LEEDS**

26 October 2015

Dear

Many thanks for acting as our External Examiner the past four years. We very much appreciate the time and effort you have put into this and the recommendations that you have made to assist us in improving our programme.

Each year, we have endeavoured to incorporate your suggestions, sometimes successfully, sometimes not. Where our attempts to introduce changes have foundered, it has usually been on the rock of Faculty and/or School standard practice, agreed at a level beyond that of the individual degree programme, and with which we are required to comply.

You have suggested that, in the final year, 10-credit modules should be examined in a two-hour, rather than a 1.5 hour examination. This is something that has now been agreed on a School-wide basis (this is also standard practice across the Faculty). The two-hour exam length is in recognition of the fact that one hour is an appropriate length of time for an essay question, as remarked upon by all the Examiners, and accounts for the time required to adequately consider and understand questions. Additionally, we will consider whether a standard 2hr/3hr exam template might be useful for staff.

Cross-Faculty collaboration is a tricky issue at the best of times, and also impacts on another of the points that you make, concerning the range of experimental project options available: we would very much like our students to have as wide a range of molecular biology-based projects as possible, and in previous years we have endeavoured to do this through enabling students to be supervised by members of other Schools in the Faculty. This year, a decision was made by the School of Molecular and Cellular Biology (MCB) to offer MCB projects only to students within their own School and hence this limited the number of molecular biology-based projects available to Genetics students. However, we are revisiting this discussion with our colleagues in MCB. On the positive side, as we work towards a closer relationship in our teaching activities with the Faculty of Medicine & Health, we anticipate this will result in a greater component of our programme devoted to human and medical genetics at both Levels 2 and 3. This is an objective we have sought since the closure of our Human Genetics programme during the Faculty restructure, some years ago.

You noted that our students felt that our programme lacked sufficient input in the area of human genetics, and that the course overemphasised plant genetics in the first two years of the programme. This, I believe is a misperception: in the first year Genetics module, there are 6 lectures dedicated to human genetics (out of 32, that provide a general introduction to all of genetics, including Mendelian inheritance, the molecular basis of genetic information transfer, genetic engineering practice, gene regulation in bacteria and in eukaryotes and the genetic analysis of developmental processes). Among the compulsory modules in the 2nd year there is an entire 10-credit module ("Human Genetics") devoted to the genetics of this single species, as opposed to a 10-credit module ("How Plants Work") devoted to the entire Plant Kingdom. Incidentally, this latter is the **only** module badged as a "plant module" required to be studied in the entire 3-year Genetics programme. This contrasts with the 30 compulsory credits that specifically address Human Genetics (L2: Human Genetics; L3: Advanced Topics in Human Genetics), as well as the optional "Cancer Biology" module

(L3: 10cr) that many of our students take. As you yourself note, "*The Genetics BSc programme is well balanced*".

I was particularly interested to note your comments – together with those of the other Examiners – concerning the problems of over-examination as a consequence of the number of 10-credit modules. I very much agree that some modules could be grouped for the purposes of examination, although implementing such a policy might prove logistically challenging given the wide choice of modules taken by some students (especially in the Biology degree programme). I shall certainly be arguing that we examine this proposal more closely with the aim of achieving a more synoptic style of examination. In addition, we are currently going through an extensive process of assessment auditing for all our programmes, which will enable us to examine module/programme-level assessment (both volume and type) and potentially modifying as appropriate. In light of recent staff losses and replacements we are also examining programme content and delivery, which may lead to a change in assessment type and consolidation of module credits.

Once again, my thanks for your efforts over the past years. Changes are being made, although often not as rapidly as we might wish!

Best wishes,

Programme Leader

Tel:

Email: