

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:

Earth and Environment

Subject(s):

Too many

Programme(s) / Module(s):

BSc Environmental Science
 BSc Environmental Conservation
 BSc Meteorology & Atmospheric Science
 MSc Meteorology & Atmospheric Science (Int).
 BSc Earth Systems Science
 BSc Environmental Science (Int)
 MEnv Meteorology and Atmospheric Science (Int)
 MEnv Environmental Science (Int)

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

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 identified.

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?

NA

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

NA

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.*

Module booklets/manuals are very detailed with clearly identified and entirely appropriate aims and learning outcomes for each degree programme. Material is taught at the right level for all the degree programmes examined and it was pleasing to see some 4th year (MEnv) students performing well in Level 5 modules.

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.*

Absolutely; at least comparable to my own institution. There is still the occasional student who feels that some material is not taught at the right level and this year, the 3-year BSc Meteorology and Atmospheric Science students appeared to be particularly unhappy.

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.*

I like the mix of coursework and exam based assessment and the quality of teaching and/or supervision associated with each assessment is manifestly excellent based on student experience. There is a mixture of open marking as well as those based on proforma with, where necessary good moderation. In general students seem to do better on modules assessed by coursework and there is circumstantial evidence that most opt for courses that are assessed entirely by coursework but also noted that they felt under pressure of deadlines all the time as a result. This may be an issue of making sure deadlines are staggered.

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 variety of assessments and the methods used does offer students opportunities to demonstrate different skill sets, although feedback linked to the Portfolio also suggested that late feedback meant that they were sometimes not able to learn from past mistakes to improve on subsequent assignments.

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

NA

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.

It was pleasing to note that most issues raised in last year's report were addressed. Specifically, students appreciated the changes to staffing on Dynamics of Weather Systems and felt that having staff teaching to their core specialisations made the learning much more enjoyable. Dissertations remain an on-going problem in that this year, students' use of statistics in data analysis was substantially lacking, akin to problems when I started 3 years ago. I am aware that <> has left Leeds but students still do get a module on statistics in the second year. The problem appears to be that this might be too early in their dissertation timetable or at least that a refresher course once they start collecting their data might be helpful. Students from Science background particularly appear to lack skills for designing questionnaire-based surveys that generate quantitative data.

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 clearly key to teaching and as demonstrated by the comment in (6) about staffing of Dynamics of Weather Systems, students also appreciate being taught by expert researchers. A key collaborating comment from students this year was that the School needed to employ more staff specialising in "Water" as a significant number are interested in this type of research but with one only staff member, can lead to unintended pressure on supervision.

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

NA

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.*

The guidelines are very clear. We have online access to the handbook and procedures and expectations are clearly explained.

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.*

Yes.

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?

All scheduled examination papers were sent to me to check before they were taken by students. My comments and feedback were taken on board.

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. In most cases, scripts were adequately annotated but there differences in the level of feedback (see comment on portfolio later).

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

Broadly yes. However (see 6 above), there may grounds to "discourage" science students from carrying out dissertations based entirely on questionnaire surveys unless appropriate training can be given in designing these.

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?

Yes. I attended the meeting and was able to contribute to discussion in cases where specific issues had been highlighted beforehand. The recommendations were in line with the marks.

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

Yes, I was particularly pleased with how effectively the Mitigating Circumstances policy is implemented. There is a tendency now for students to use these to improve their attainment but the Leeds procedures are open and applied consistently.

Other comments

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

As usual, I will use this section to highlight feedback from students. It is more general and covers all programs (including BA) represented at our meeting with students. Please note that often, these represent the views of just one student.

General view

Fantastic school
Brilliant staff
Excellent institution
Good continuity with Alumni
Would choose Leeds all over again.

Portfolio

Good in concept but provides no clear advantage.
May be more useful for first years
Some coursework not annotated
Some stuff comments were not constructive and hence not helpful
If late, please provide concrete dates to <> team

Fieldwork

Excellent way to learn and one a year not enough!
Third year fieldtrip would increase take up if free or reduced student contribution
Some organisational problems with Edinburgh (RSE) trip clearly linked to inadequate resources
No such problems in Environmental Science programs.

Career advice

Highly focussed on careers and employability from years 1 and 2
Excellent advisers within school
Shouldn't be taught as a module

More general comments

Increase dyslexia support for overseas students?
Increase staff with water and Oceanography expertise
Statistics should be revisited when doing dissertations.

Programme-specific comments

Earth System Science:

Last year of provision
Useful course, wide variety of modules
Staff approachable
Course choices in later years restricted and in some cases students did not have correct pre-requisites

BA Environmental Management:

Excellent information post-offer to make informed choice
Students like inter-disciplinary nature of the course
Really like VLE platform

BA Environmental Management (Industrial):

Program provides good mix of skills sets
Crystallised choice between Geography and EM
Good advice/tutor/mentor for industrial placement
Likes choice of classwork versus exam based assessment

MGeol International:

Excellent course
Modules at McMaster well linked to home program
Pathways system prepared <> well for year abroad – providing right pre-requisites, including maths and programming

Meteorology & Climate Science:

5/30 modules are actually meteorology (1 in first, 1 in 2nd and 2 in 3rd) is not enough
Student didn't feel they learned enough Met and hence opting for a Masters

BA Sustainability:

Enjoyed the course but felt electives outside School were discouraged
This reduced interdisciplinarity, the basis of why they chose program
Students in inter-disciplinary programs lack support
Happy to work hard to gain the grades and would appreciate encouragement and support structure rather than being discouraged

BSc Environmental Science International:

Good range of subjects/modules is best thing about program
Chose atmospheric pathway but felt not enough courses for deeper understanding of subject
Year abroad was better but had difficulty adjusting back with a different cohort – can anything be done to provide support for returning students?
Somewhat surprised that choice of dissertation on coral reefs was discouraged for lack of expertise in school only to find subsequent year had 2 students working on coral reefs

<>
27th June 2013.

<>

20th September 2013

Dear <>,

Re: Response to External Examiner's Report (BSc/MEnv Environment programmes), 2012/13

I would like to thank you for examining our BSc Environment programmes for the last academic session. Once again we are very grateful for your valuable contribution in maintaining, and further improving, the high academic standards of our programmes.

I am pleased that you are satisfied with the overall standards of our degrees and that our students are receiving a good, coherent and rigorous course. It is always good to hear that our students would choose to come to Leeds again, and would recommend us to their friends. We are also pleased to hear that you recognised the improvements made in response to your comments, and feedback from students, in the last year.

In response to your specific comments:

- We aim for a mixture of assessments across our modules (and pathways) to ensure that all students are assessed in a variety of skills and techniques. We are aware that there are still some pathways in environmental science where the balance of coursework and exams is not right and we are looking to improve this. We also have an on-going drive to ensure a better spread of coursework deadlines. We have made significant progress in this respect. Most of the issues in the last year or so have been related to external modules, or where deadlines have had to be moved due to unforeseen circumstances. There is perhaps less we can do about the latter, but we are now trying to collect information on assessment deadlines from key modules in other schools to improve our deadline planning.
- We acknowledge that student perception of the portfolios is not as positive as we would hope. This is only the second year we have trialled the portfolios, and there still appear to be some issues to resolve. In particular we are working to ensure that all staff return feedback in a timely manner, while also giving useful constructive comments. Where this is not possible then we will work to ensure students are kept fully informed of when they can expect to receive feedback. From your comments and our own experience this seems to be the key issue that students have with the current scheme. Alongside this we still want to do more work with students to ensure they fully use the detailed feedback that many staff do provide in order to improve their performance in future. We are also trying to integrate the portfolios into the personal tutorial system so students will bring their portfolios to personal tutor meetings at the end of year to discuss their overall work and how they can improve going forward. Hopefully this will increase the relevance of the portfolios for students.

In the longer term we envisage that the portfolio system will gradually be phased out over the coming years in favour of electronic submissions and feedback. Whilst students entering their second and third year will continue to use portfolios, they will not be used by incoming first years. University regulations require us to retain copies of annotated student work, and the increasing trend towards electronic submission and marking will allow us to retain annotated work and to return a copy to students.

- We are pleased that students appreciate the research-led teaching that we offer. In particular we have been moving towards team teaching in a number of modules to allow staff to teach to their research interests, particularly at level 3 / 5. For these higher level modules this can offer benefits to staff as well as engaging students in current research.
- We are aware that choice of dissertation supervisors in topics in the “water” pathway is more limited than in some other areas. This is not an area that the school historically has strong research interests in. We have brought a number of staff on board with links in related areas of water geochemistry and oceanography, including a newly appointed academic fellowship and we hope this will broaden the choices in this area. The new academic fellow will be taking on teaching of some of the oceanography at levels 2 and 3. We are also investigating whether we can make better use of links to Geography which has a strong hydrology group; however they are unlikely to have capacity to supervise many additional dissertation projects.
- We are interested to hear your comments on Env Sci students undertaking dissertations based entirely on questionnaire surveys. This is something that students are already strongly discouraged from doing. Over the last 2 years we have tried to be much stricter in ensuring science students do a natural science based dissertation. This may have an element of social science in it, but should not be predominantly social science. This reflects the emphasis of the course, and also the research training skills the students are equipped with. Despite this some students have written dissertations which do not adhere to these rules. On the whole these have been marked down, both because of inadequacies in the research methods, and also because they do not follow the rules for an Env Sci dissertation. We will continue to enforce this, and work to ensure that all supervisors are aware of our requirements for a BSc dissertation, and adhere to these rules.
- The use and misuse of statistics in dissertations has been an issue raised in the past. This is an area which it is difficult to inspire students in. As you mention, <> was excellent in this respect. The material <> taught has not changed significantly since <> left, however we have had several different members of staff teaching it and this has not been as effective. We have already identified this as an area where we need to look again at both the content and staffing to ensure that this works. Students are already offered drop-in sessions on data analysis during semester 2 of their final year. Uptake of these is low though. We will look at the possibility of extending these to semester 1 as well. Supervisors also have an important role to play here and we will emphasize to all dissertation supervisors the requirement for appropriate statistical analysis. This is one of the reasons we try to avoid students taking social science dissertation topics for which they do not have the right background, and which are often outside their supervisor's field of expertise.
- In general we discourage students from studying dissertation topics which are not related to the interests of their supervisor. From our experience this generally results in less well-formulated and executed dissertations since staff are less able to offer advice and guidance and usually leads to the students receiving lower marks. Clearly this is not in the best interest of the student. This is explained to students in detail when they are selecting topics. Students are told that we are not able to support all topics and that they should try to align their project with the interests of a member of staff. If a student can convince a member of staff to supervise their project however, and that project is a suitable topic for an Environmental Science degree we will not stop them from undertaking the project. Supervisors may be willing to take on projects which are outside their area of expertise if the student has a very clear and suitable project proposal in mind. In the specific case you mentioned of a student wanting to study coral reefs the student concerned has spent some time in Australia and wanted to do something related to this. While this is understandable, the student did not have a clear enough idea to convince a supervisor that it was a suitable and achievable project. This is not an area in which there is much research expertise within the school and so there were not staff offering related projects. In other cases the dissertation topics available may vary from year to year due to staffing changes or specific staff being unavailable to due e.g. research sabbaticals.

- We are glad that (as usual) students have highlighted fieldwork as an excellent and valuable part of the course. With the new fees regime the 3rd year field trips will be free for all students and this will alleviate some of the issues regarding costs over the last couple of years.
- The school (and Leeds generally) has focused considerable effort on ensuring employability is completely embedded in our courses, and also that we offer a wide range of extra-curricular opportunities. Given the importance of this we feel that having a compulsory careers component in the degrees is important. Many students don't value this at the time, but often say to us in their final or after graduation that with hindsight it was extremely valuable and they were glad they did it. Having said that we have reviewed the compulsory careers component this year to ensure it is providing the most appropriate and valuable careers preparation for our students. The new content and structure from next year will be simpler to teach and will hopefully be more engaging for students.
- Students with any special support requirements, including dyslexia, are treated equally by the University in terms of allowances made to them (for example marking coursework for content only, extensions for exams). Unfortunately the funding for additional support for students with support requirements is a government benefit and therefore only available for UK students. This means international students cannot always get additional support (e.g. note takers) even if they are diagnosed as needing that support. The School does all it can to support such international students but unfortunately we are not in a position to change the government funding policy in this respect.
- We were somewhat surprised by the comments on the lack of meteorology content in the Met and Climate Science degree. The module count takes a very narrow definition of meteorology. There are a number of other modules with significant meteorology content (2nd and 3rd year field trips, dissertations). Meteorology also only makes up a part of this degree and there are a large number of other modules on other aspects of atmospheric and climate science at levels 2 and 3, as well as the more generic skills and research modules shared with other degree programmes. These skills are an equally important part of a degree course. For students with a meteorological interest there are always plenty of interesting dissertation topics, and this makes up a large part of the final year. Our 1st year is relatively broad by design, and largely shared with the Environmental Science programme. This is important though in allowing students to place their detailed knowledge of the atmosphere in a wider context, and is a distinctive feature of this programme compared to other courses.
- It is also interesting to hear that some Environmental Science (International) students did not find the atmospheric pathway sufficiently challenging. Given the diversity of interests and backgrounds of the Environmental Science programme it is difficult to please everyone, and our experience is rather the opposite that many students consider the atmospheric pathway to be a hard option. For excellent Environmental Science students with the right maths and physics background (particularly those on the MEnv programme) we have made exceptions and allowed them to take modules normally only open to the Meteorology students and this offers a way of stretching them in this respect. More generally as part of the Curriculum Enhancement Project the School will be reviewing the curriculum throughout the programme. In this way we can look at provision throughout the programme and identify areas to stretch students. Overall our quality of intake of student is increasing meaning that the cohort as a whole will be capable of being stretched that little bit more than we currently do.
- Adjusting back from year abroad can be a tricky transition. For many MEnv students they come straight back to go on a field course. This can be an excellent way to integrate into a new peer group, but can also cause some logistic issues. We are reviewing tutorial provision for students abroad and on industrial placements this year to ensure that we keep in better contact with them while they are away and hope that this will help to smooth the

transition back to Leeds. We do also organise specific debrief events early in the final year for students returning from abroad.

Once again we would like to thank you for your detailed and constructive comments. It is pleasing to know that we are doing well and that overall our students are satisfied. We are however always looking to improve and as always your independent perspective is a valuable part of the review and development process.

Yours sincerely

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Head of School of Earth and Environment