

**The University of Leeds**  
**EXTERNAL EXAMINER'S REPORT**

ACADEMIC YEAR: 2016-17

**Part A: General Information**

**Subject area and awards being examined**

Faculty / School of:	Earth and Environment
Subject(s):	<i>Geological Sciences</i>
Programme(s) / Module(s):	Geological Sciences
Awards (e.g. BA/BSc/MSc etc):	BSc, MGeol(Ind), MGeol(Int)

**Part B: Comments for the Institution on the Examination Process and Standards**

**Points of innovation and/or good practice**

*Please highlight areas of innovation or good practice within the programmes or processes you have been involved with in this box.*

As in previous years, the programme Aims and Intended Learning Outcomes (ILOs) were commensurate with the level of the BSc and MGeol awards. The teaching and learning at SEE continues to be of an excellent standard, inspiring confidence that the students attain knowledge and skills that are broad and deep enough to be competitive in the jobs market and to succeed in postgraduate education. This is undoubtedly helped by the large amounts of laboratory- and field-based practical work, and the wide range of topics covered in the curriculum. A key indicator is the students' perception; they clearly love their course, and they particularly flagged their enthusiastic and engaging lecturers this year. The TEF gold award for Leeds University is a true reflection of the quality of teaching in the BSc and MGeol courses.

Specific examples of points of innovation and good practice:

1. Complete moderation forms and detailed module handouts (with few exceptions, see below).
2. Detailed feedback from two (sometimes three) markers on mapping projects.
3. Students praised the staff-student committee led by
4. Innovative teaching methods, such as flipped learning, pre-lecture slides, and lecture capture.
5. The weekly publication of the careers bulletin.
6. 24-hour accessibility to computing facilities.
7. Innovative, well-designed, new MGeol(Int) programme.
8. Assessment methods are well-designed, varied, challenging but fair, and highly relevant.
9. Good student participation to module surveys of 35% on average.

**Enhancements made from the previous year**

*Please highlight any enhancements made to the programme(s) or processes over the past year in this box.*

Actions 1, 4, 6, 7, 11, 12, 13, and 17, as proposed in 2016, have been fully addressed:

- a. Action 1. There is now better communication to MGeol(Ind) students about the reasons for paying reduced tuition fees during their year out. There were no significant negative feelings this year, when asked during our meeting with students in March.
- b. Action 4. A 'making group work work' initiative has started, already resulting in examples of good practice.
- c. Action 6. The concerns about overlap between modules SOEE2145 and SOEE1570 have been addressed satisfactorily.
- d. Action 7. The introductory lecture to SOEE3040 (Easter Field Class) has been given earlier.
- e. Action 11. The meeting with the students did not bring up any further issues with lecture capture. The students seem happy with the way lecture capture is used (or not) across the GS and MGeol programme.
- f. Action 12. The module leader has given a detailed and satisfactory explanation of the use of Tempest/Eclipse in SOEE2560/3670.
- g. Action 13. The average mark for SOEE3480 was 60% in 2016-17, up from 53% last year.
- h. Action 17. The students we spoke to in March were happy with access to facilities in 2016-17.

Actions 3, 10, 16 and 19 have been partly addressed, but some concerns and recommendations remain:

- i. Action 3. The careers fair in 2016 catered for a wide range of degree courses. Four out of c. 25 companies were directly or indirectly linked to the hydrocarbon industry. There is scope for improvement in this regard. **ACTION 01**
- j. Action 10. There is still some dissatisfaction amongst students about the discussion boards in SOEE3630, e.g. "discussion boards are not that effective at enhancing our knowledge". I have no information on what has been done to take away last year's concerns. **ACTION 02**
- k. Action 16. Feedback provision has improved significantly in SOEE3135. Feedback on SOEE3630 was marginally better in 2016-17, but a random pick of exam scripts showed that some have no feedback at all, just a mark, which does not help the external examiner. **ACTION 03**
- l. Action 16. There were inconsistencies between staff in the use of a 1-5 marking scheme in SOEE2510-2600. This was discussed with the relevant teaching staff, and a promise was made to look into this. **ACTION 04.**
- m. Action 19. According to the 2016 NSS, the promptness of feedback score for BSc students is on the rise, but still only 44%, with a stationary overall average feedback score of 58%, which is 10% lower than in 2013-14. Focus has to remain on improving feedback and informing students what feedback entails, despite clear evidence for increased amounts of feedback provided in the last three years. In our conversation with the BSc/MGeol students, the following issues were raised: (1) inconsistent amount and depth of feedback; (2) too much focus on negative feedback; (3) need for more feed-forward; and (4) 15 days turnaround time may be too short for some staff. **ACTION 05**
- n. Action 19. GS(Int) students who completed the NSS were very unhappy in 2016-17, with low scores in a lot of categories, culminating in very low scores for feedback, and with an overall low satisfaction of 64%. This needs to be investigated. **ACTION 06**

### 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*

Across the school, there is a tendency of undermarking at the top end of the scale. I fully support observations and proposed solutions, and refer to report where the marking of mapping projects is concerned. In my opinion, however, undermarking is not limited to the mapping project. In general, SEE staff should be encouraged to give the best students 80%+ marks. They certainly deserve it, based on the work I have seen. Such students may well be at a disadvantage when applying for jobs and masters/PhD studentships, and winning UK-wide UG awards. An **detailed action plan** is needed, and I am looking forward to seeing innovative solutions to this problem before the end of the calendar year, i.e. in time for the bulk of 2<sup>nd</sup>, 3<sup>rd</sup> and 5<sup>th</sup> year marking. **ACTION 07**

### For Examiners in the first year of appointment

1.	Were you provided with an External Examiners Handbook?	Y
2.	Were you provided with copies of previous relevant External Examiners' reports and the response of the School to these?	Y
3.	Were you provided with a External Examiner Mentor?	N

### For Examiners completing their term of appointment

4.	Have you observed improvements in the programme(s) over the period of your appointment?	Y
5.	Has the school responded to comments and recommendations you have made?	Y
6.	Where recommendations have not been implemented, did the school provide clear reasons for this?	Mostly
7.	Have you acted as a External Examiner Mentor?	Y

*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*

No issues to report

### Standards

8.	Is the overall programme structure coherent and appropriate for the level of study?	Y
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9.	Does the programme structure allow the programme aims and intended learning outcomes to be met?	Y
10.	Are the programme aims and intended learning outcomes commensurate with the level of award?	Y
11.	Did the Aims and ILOs meet the expectations of the national subject benchmark (where relevant)?	Y
12.	Is the programme(s) comparable with similar programmes at other institutions?	Y
<p><i>Please use this box to explain your overall impression of the programme structure, design, aims and intended learning outcomes.</i></p> <p>I have not found major issues with the programme structure, design, and intended learning outcomes. The quality of Teaching &amp; Learning in the BSc and MGeol programme remains very high and on par with similar courses elsewhere.</p>		
13.	Is the influence of research on the curriculum and learning and teaching clear?	Y
<p><i>Please explain how this is/could be achieved (examples might include: curriculum design informed by current research in the subject; practice informed by research; students undertaking research)</i></p> <p>State-of-the-art research is embedded well in the curriculum. Year 3 and 5 students benefit most from this. The new MGeol programme has been designed to further enhance this.</p>		
14.	Does the programme form part of an Integrated PhD?	N
<p><i>Please comment on the appropriateness of the programme as training for a PhD:</i></p> <p>n/a</p>		
15.	Does the programme include clinical practice components?	N
<p><i>Please comment on the learning and assessment of practice components of the curriculum here:</i></p> <p>n/a</p>		
16.	Is the programme accredited by a Professional or Statutory Regulatory Body (PSRB)?	Y
<p><i>Please comment on the value of, and the programme's ability to meet, PSRB requirements here:</i></p> <p>SEE has accreditation from the Geological Society of London, and deservedly so. GSL accreditation is an established benchmark for the quality of geoscience teaching in the UK. From the GSL website: "Accredited status provides added assurance to prospective students that a department's teaching is of the highest quality, and has been approved by an independent body of academics and industrialists".</p>		

## Assessment and Feedback

17.	Does the programme design clearly align intended learning outcomes with assessment?	Y																												
<p><i>Please comment on the assessment methods and the appropriateness of these to the ILOs, in particular: 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></p> <p>The overall performance of the Geology students showed an expected spread that corresponds reasonably well with that at . However, more first-class degrees could have been awarded, if the full 0-100% would have been used. See Action 7 above.</p> <table border="0"> <tr> <td>BSc Geological Sciences</td> <td>1<sup>st</sup>: 2</td> <td>2.i: 31</td> <td>2.ii: 11</td> <td>3<sup>rd</sup>: 0</td> <td>Fail: 2</td> <td>Delayed awards: 2</td> </tr> <tr> <td>BSc Geological Sciences (Industrial)</td> <td>1<sup>st</sup>: 2</td> <td>2.i: 6</td> <td>2.ii: 2</td> <td>3<sup>rd</sup>: 0</td> <td>Fail: 0</td> <td></td> </tr> <tr> <td>MGeol Geological Sciences (International)</td> <td>1<sup>st</sup>: 0</td> <td>2.i: 1</td> <td>2.ii: 1</td> <td>3<sup>rd</sup>: 0</td> <td>Fail: 0</td> <td></td> </tr> <tr> <td>MGLS Geological Sciences (International)</td> <td>1<sup>st</sup>: 6</td> <td>2.i: 9</td> <td>2.ii: 0</td> <td>3<sup>rd</sup>: 0</td> <td>Fail: 0</td> <td></td> </tr> </table>			BSc Geological Sciences	1 <sup>st</sup> : 2	2.i: 31	2.ii: 11	3 <sup>rd</sup> : 0	Fail: 2	Delayed awards: 2	BSc Geological Sciences (Industrial)	1 <sup>st</sup> : 2	2.i: 6	2.ii: 2	3 <sup>rd</sup> : 0	Fail: 0		MGeol Geological Sciences (International)	1 <sup>st</sup> : 0	2.i: 1	2.ii: 1	3 <sup>rd</sup> : 0	Fail: 0		MGLS Geological Sciences (International)	1 <sup>st</sup> : 6	2.i: 9	2.ii: 0	3 <sup>rd</sup> : 0	Fail: 0	
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18.	Is the design and structure of the assessment methods appropriate to the level of award?	Y																												

19.	Were students given adequate opportunity to demonstrate their achievement of the programme aims and intended learning outcomes?	Y
<p><i>Please comment on 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:</i></p> <p>See ACTION 07 under <i>Matters for Urgent Attention</i>.</p>		
<p><i>Please use this box to provide any additional comments you would like to make in relation to assessment and feedback:</i></p> <p>See under <i>Enhancements Made From the Previous Year</i>, item (m).</p>		

### The Progression and Awards Process

20.	Were you provided with guidance relating to the External Examiners role, powers and responsibilities in the examination process?	Y
21.	Was the progression and award guidance provided sufficient for you to act effectively as an External Examiner?	Y
22.	Did you receive appropriate programme documentation for your area(s) of responsibility?	Y
23.	Did you receive appropriate module documentation for your area(s) of responsibility?	Y
24.	Did you receive full details of marking criteria applicable to your area(s) of responsibility?	Y
25.	Were you provided with all draft examination papers/assessments?	Y
26.	Was the nature and level of the assessment questions appropriate?	Y
27.	Were suitable arrangements made to consider your comments on assessment questions?	Y
28.	Was sufficient assessed work made available to enable you to have confidence in your evaluation of the standard of student work?	Y
29.	Were the examination scripts clearly marked/annotated?	Mostly
30.	Was the choice of subjects for final year projects and/or dissertations appropriate?	Y
31.	Was the method and standard of assessment appropriate for the final year projects and/or dissertations?	Y
32.	Were the administrative arrangements satisfactory for the whole process, including the operation of the Progression and Awards Board?	Y
33.	Were you able to attend the Progression and Awards Board meeting?	Y
34.	Were you satisfied with the recommendations of the Progression and Awards Board?	Y
35.	Were you satisfied with the way decisions from the School Special Circumstances meeting were communicated to the Progression and Awards Board?	Y
<p><i>Please use this box to provide any additional comments you would like to make on the questions above:</i></p> <p>n/a</p>		

### Other comments

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

Actions 2, 5, 8, 9, 14, 15, and 18, proposed in 2016, have not been addressed sufficiently well yet:

1. Action 2. The 0-100% scale is still not used for the mapping projects. See ACTION 07 under *Matters for Urgent Attention*.
2. Action 5. It is unclear to me if the questions about MCQs has been acted upon. **ACTION 08**
3. Action 8. There are still multiple issues with the team practical of SOEE3500/5650M, according to the module surveys. The students have strong opinions: chaotic, rushed, minimal guidance, no demonstrators ... **ACTION 09**
4. Action 9. The response rate in the module survey for SOEE3521 has improved slightly, but it is still only 3 out of 18. **ACTION 10**
5. Action 14. There is still no module handbook for SOEE3040. See ACTION 15 below.
6. Action 15. Only SOEE3091/5625M have acted upon the need for information on feedback provision in the module handbook, which is somewhat disappointing. **ACTION 11**
7. Action 18. There is still no indication that the amount of course work has increased in SOEE3480. **ACTION 12**

I was asked to comment on the new 4<sup>th</sup> year MGeol (Int) programme. I am genuinely excited about the new structure of this programme. I am confident that the students on this course will have the best possible experience, and will be prepared well for life after University, based in large part on the extended Independent Research Project. Fifty credits allow for proper research, permitting the students to take ownership of their work, and some of them will indeed produce publishable work. Although I think the structure of the new programme is excellent already, I have some comments and suggestions that I would like to take into consideration (**ACTION 13**):

- o. How will a 'truncated' field mapping project work in practice?
- p. The aim to produce publishable work as part of SOEE-5308M is ambitious and challenging, but fully justifiable. Why then not aim for a final report in the form of a scientific paper instead of a 12,000 word dissertation? In , our 4<sup>th</sup> year MSci students produce a 20-30 page manuscript for Marine Geology, which works well for both students and staff. The present output at SEE in the form of a Geology manuscript is probably not suitable for a 50 credit module, but a scientific manuscript for publication in a journal that accepts longer manuscripts should be considered. I would make the case that increasing from 20 credits to 50 credits does not necessary require a bulky dissertation. Quality should go before quantity, and the students are rightly expected to hand their full dataset, so data not included in the manuscript would still be available to their supervisor.
- q. A discussion between supervisors and students on available project titles is planned for the summer months. How will this be structured? On an one-to-one basis or will a 'project fair' be organised, giving the staff the opportunity to 'sell' their projects to the students? Will the students have to come back to Leeds for this discussion?
- r. Submitting a project proposal in week 3, after the final selection of projects in week 1, seems rather short. Would it be possible to allocate projects before the start of the semester?
- s. The credits for the project proposal and the oral presentation are very small compared to the dissertation. Should this be increased in order to encourage students to put enough time into these tasks?
- t. Should the project proposal include risk assessments, contingencies, and limitations?

The BSc/MGeol students explicitly mentioned the excellent support from teaching staff both within Leeds and during field activities, but they would also like to see more consistent post-fieldwork support (particularly associated with the mapping project). Apparently, some staff members provide more support than other after the students have returned to Leeds. **ACTION 14**

I have not been able to find module handbooks for SOEE3040/5605 (Easter Field Class) and SOEE3560 (Petroleum Reservoir Fieldtrip). All modules should have handbooks, including field-based ones. SOEE3560 also did not appear to have a module survey, or at least I did not have straightforward access to it. **ACTION 15**

In the module survey, the students were uncharacteristically negative about SOEE3281 (Phys & Chem Hydrogeology), using words like 'dull'. This needs to be looked into by the module organiser. **ACTION 16**

**Part C: School Response to External Examiner Report****Name of School and Head of School (or nominee)**

Title and Name of Responder:

Position\*:

Faculty / School of:

Address for communication:

Email:

Telephone:

Head of School	
<i>Faculty of Environment / School of Earth and Environment</i>	
School of Earth and Environment Maths/Earth and Environment Building The University of Leeds Leeds. LS2 9JT United Kingdom	

\*If the individual responding to the report is not the Head of School please state their position within the School.

**Completing the School response**

The completed School response (including the full original report) should be attached to an e-mail and sent to the Pro-Dean for Student Education in the relevant Faculty. Following approval by the Pro-Dean for Student Education, the School must send the response (including the full original report) directly to the External Examiner. A copy must also be emailed to the Quality Assurance Team at [qat@leeds.ac.uk](mailto:qat@leeds.ac.uk). External Examiners should receive a formal response no later than six weeks after receipt of the original report.

**Response to Points of innovation and/or good practice**

We will pass on these points to the relevant staff members

**Response to Enhancements made from the previous year**

**Reviewer's action point 1.** The programme team will work in partnership with our Professional Development Team to have a greater representation from the hydrocarbon industry at the careers fair. This year the careers fair is in collaboration with engineering as part of a STEM event, which would hopefully mean more hydrocarbon industry partnership.

**Action 2.** The module leader responds: It's true that some students don't like the boards. The module uses a variety of techniques to assess the performance of students and there are no plans at present to change the assessments.

**Action 3.** The module leader responds: I disagree that feedback on SOEE3630 was only marginally better. We made substantial efforts to provide improved feedback on all the assessed coursework and it's a pity that this has not been recognised by the external examiner. Around 90% of exam scripts had feedback written on them. One marker failed to provide written comments and will be encouraged to do so next year.

**Action 4.** This issue has been passed on to the module leader for consideration.

**Action 5.** In the 2017 NSS the value for the promptness of feedback rose to 56%, with the assessment and feedback score rising to 67%. These numbers are not what we would like, but at least are moving in the right direction. Further emphasis is being placed on promptness of feedback for this academic year and was raised as an action point in the beginning of year teaching briefing, given to all teaching staff.

**Action 6.** Although not specifically identified in the 2017 NSS, our polling of this cohort of students shows the issues raised by a few finalist students in the 2016-17 session have not reoccurred and we have made specific efforts to inform this cohort of what their student fees are used for during their year in industry, as well increased support transition from year in industry students back into university education.

**Response to Matters for Urgent Attention**

If any areas have been identified for urgent attention before the programme is offered again please provide a specific response to them here:

**Action 7.** The issue of undermarking at the top end of the scale has been raised as a whole-School issue and was identified as an action point for all teaching staff in the beginning of year teaching briefing. Some new grading criteria for categorical marking have been developed that better identify how marks above the 70s can be justified. These have been added to the School Code of practice for Assessment document. The school is considering other means to ensure that fair marks are given at the top end, such as modifying moderation forms to ensure that particular attention is given to the top marks, and these will be discussed and developed as appropriate.

**Response to questions 1-7 (and related comments)**

Schools may provide a general response; however, where Examiners raise specific points these must be addressed individually:

None.

## Standards

### **Response to questions 8 to 16 (and related comments)**

*Schools may provide a general response; however, where Examiners raise specific points these must be addressed individually:*

None.

## Assessment and Feedback

### **Response to questions 17 to 19 (and related comments)**

*Schools may provide a general response; however, where Examiners raise specific points these must be addressed individually:*

See response to action point 7 above.

## The Progression and Awards Process

### **Response to questions 20-35 (and related comments)**

*Schools may provide a general response; however, where Examiners raise specific points these must be addressed individually:*

None.

## Other comments

### **Response to items included in the 'Other Comments' section of the report**

**Action 9.** This issue has been raised with the module leader.

**Action 10.** The module leader responds: I did make strenuous efforts to increase return rate from 15/16 with only limited success. In order to try and address this issue for the coming year more formal sessions are to be scheduled in the second semester timed once the online feedback system has gone live. This should hopefully allow me to address the need to complete the survey and improve the return rate.

**Action 11.** The new module handbook proforma has a section explicitly on feedback. All module leaders are required to fill this in.

**Action 12.** This issue has been raised with the module leader.

**Action 13.** Many points are raised by the external examiner, which have been passed on to the module leader for the new MGeol projects for consideration. As this is the first year that these have run we want to see how our originally proposed scheme works, which we will review as the first cohort goes through the process.

**Action 14.** There is a new module leader for the Geological Mapping Dissertation module for 2017-18 and he has made a number of modifications designed to foster a better equality of experience and support for students across a range of projects. These are very detailed, so will be passed to the examiner as a separate document.

**Action 15.** All modules must have a module handbook. This issue has been raised with the module leaders identified.

**Action 16.** This issue has been raised with the module leader.

**The University of Leeds**  
**EXTERNAL EXAMINER'S REPORT**

ACADEMIC YEAR: 2016-17

**Part A: General Information**

**Subject area and awards being examined**

Faculty / School of:	Earth and Environment
Subject(s):	<i>Geological Sciences</i>
Programme(s) / Module(s):	Geological Sciences
Awards (e.g. BA/BSc/MSc etc):	BSc, MGeol

**Part B: Comments for the Institution on the Examination Process and Standards**

**Points of innovation and/or good practice**

*Please highlight areas of innovation or good practice within the programmes or processes you have been involved with in this box.*

1) The students highlighted the use of Pre-Lecture materials by some staff as being really useful ESPECIALLY for the really talented and motivated students. The use of practical session debriefs online was also praised as being very helpful. I would suggest that a cohort of Leeds staff are in the leading vanguard nationally in terms of developing innovative teaching and learning approaches – this should be encouraged and spread more widely through the School and University.

2) The fieldwork materials handed-in by the students related to the Geological Mapping Dissertations are really impressive in both depth and detail, with fieldslips (often at more than one scale), stereonets, logs, stratum contour sheets used in areas of poor exposure, cross sections, air photos, safety documentation etc. This is very striking and can be found even in the less good projects. It suggests a rigorous and excellent field training programme where good practice has clearly been drilled into students of all abilities. I congratulate the staff concerned with the fieldwork training.

3) Staff-Student Committee: This process seems to work very well with the students giving specific praise for the manner in which it works and the fact that once issues are raised, they tend to get sorted out quickly and effectively. The attitude of \_\_\_\_\_ was especially appreciated. Having an effective SSC in place is a key way to improve and maintain good NSS scores – don't mess with it.

**Enhancements made from the previous year**

*Please highlight any enhancements made to the programme(s) or processes over the past year in this box.*

I am pleased to report that some of the urgent changes requested last year have been addressed. Specifically:

1) Additional teaching and/or coursework material is now provided for Masters students in order for this cohort to attain a higher level of learning compared to the Bachelors programmes in co-badged modules.

2) High workload modules now have a more robust staffing to ensure that the sudden departure of a key staff member does not cause problems to the teaching, learning and assessment processes in session.

**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*

**Failure to appropriately identify and reward excellent scholarship.** The School needs to ensure that marks are awarded consistently across the full marking range. I have no issues with standards at the lower end of the marking



scale – problems arise at the top end. The relative paucity of first class scores (>70%) is striking for both major dissertation projects, many examinations and, inevitably, for the final overall set of marks.

I understand and appreciate that the School has repeatedly reminded staff about this issue and that the Marking Criteria have been modified in order to define what truly outstanding work (>80%) should look like. But these measures are clearly NOT working – there is little change from last year and suggestions that this year is a less good cohort rather misses the point. These shortcomings are affecting a relatively small number of students – but they are your most talented. They are the ones most likely to be competing for PhD and Masters places – so things like their dissertation scores are key performance indicators that will be used during shortlisting and final selection. By scoring them low you are putting them at a disadvantage.

There are likely many reasons why this situation exists. It may reflect an unwillingness of individual markers to give really high scores and/or be a consequence of the mark resolution process. It may be related to an awareness of the University's mean score rule. In the case of the Mapping Dissertations, it may be embedded in the marking scheme used. For example, on a number of occasions, I felt like students were sometimes being marked down twice (or more times) when errors made in the field propagate through into their reports, section and clean copy maps. Having marked the fieldwork materials you then have to assign a mark to what follows on how well they have done based on what they started with. You cannot and should not penalise them repeatedly for an error made during fieldwork. It was also clear that for each category to be assessed, many markers think 'OK this is a mid-to low- 2.1 piece of work' and then tend to err on the less generous side giving say a 62 rather than a 64. Repeat this three or four times for the main categories and you can be chopping up to 8% of the final score!

Finally there will always be some first-time markers every year and these folk almost always err on the harsh side when marking – this may have contributed as well in some cases, especially for 'high value items such as Mapping Dissertations. The simplest way to address this is to mentor all first time dissertation markers perhaps by automatically assigning a third marker/moderator to all projects marked by them. Obviously this needs to be done in a constructive and supportive manner – marking dissertations fairly is not an easy skill and takes time to acquire.

***I think that the time has come for the School to have a detailed discussion of this complex issue and to put measures in place to fix it. Simply reminding staff to mark right across the range isn't working – you need to do more. I appreciate that this may not be easy, but the issue needs to be addressed as a matter of urgency given that it has been repeatedly flagged by External Examiners over a number of years.***

#### **For Examiners in the first year of appointment**

1.	Were you provided with an External Examiners Handbook?	Y / N
2.	Were you provided with copies of previous relevant External Examiners' reports and the response of the School to these?	Y / N
3.	Were you provided with a External Examiner Mentor?	Y / N

#### **For Examiners completing their term of appointment**

4.	Have you observed improvements in the programme(s) over the period of your appointment?	Y / N
5.	Has the school responded to comments and recommendations you have made?	Y / N
6.	Where recommendations have not been implemented, did the school provide clear reasons for this?	Y / N
7.	Have you acted as a External Examiner Mentor?	Y / N

*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**

8.	Is the overall programme structure coherent and appropriate for the level of study?	Y
9.	Does the programme structure allow the programme aims and intended learning outcomes to be met?	Y
10.	Are the programme aims and intended learning outcomes commensurate with the level of award?	Y

11.	Did the Aims and ILOs meet the expectations of the national subject benchmark (where relevant)?	Y
12.	Is the programme(s) comparable with similar programmes at other institutions?	Y
<p><i>Please use this box to explain your overall impression of the programme structure, design, aims and intended learning outcomes.</i></p> <p>The structure of the degree programme and the range of material offered in core and option classes are excellent.</p>		
13.	Is the influence of research on the curriculum and learning and teaching clear?	Y
<p><i>Please explain how this is/could be achieved (examples might include: curriculum design informed by current research in the subject; practice informed by research; students undertaking research)</i></p> <p>Research appears throughout the curriculum, especially during Year 3 and 5. The final year research projects for the MGeol students (5308) are good examples of the integration with current research in the teaching programme.</p>		
14.	Does the programme form part of an Integrated PhD?	N
<p><i>Please comment on the appropriateness of the programme as training for a PhD:</i></p> <p>n/a</p>		
15.	Does the programme include clinical practice components?	N
<p><i>Please comment on the learning and assessment of practice components of the curriculum here:</i></p> <p>n/a</p>		
16.	Is the programme accredited by a Professional or Statutory Regulatory Body (PSRB)?	Y
<p><i>Please comment on the value of, and the programme's ability to meet, PSRB requirements here:</i></p> <p>As far as I am aware, the School has Accreditation for its degree programmes in Geological Sciences from the Geological Society of London, the UK body responsible for such matters. An Accredited degree programme is important for students seeking employment in several professional fields of the geosciences, most notably in the geotechnical industry.</p>		

## Assessment and Feedback

17.	Does the programme design clearly align intended learning outcomes with assessment?	Y
<p><i>Please comment on the assessment methods and the appropriateness of these to the ILOs, in particular: 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></p> <p>The structure of the Geological Sciences degree programmes and the range of material offered in all classes are excellent and the learning outcomes are appropriate. In general standards in Leeds are equivalent to, or in some areas better than, those that exist in equivalent UK University departments. The fieldwork programme is particularly effective.</p> <p>The assessment methods used are for the most part very well designed and are executed in an imaginative and effective way right across the programme and the links to the Learning Outcomes are generally very clear.</p>		
18.	Is the design and structure of the assessment methods appropriate to the level of award?	Y
19.	Were students given adequate opportunity to demonstrate their achievement of the programme aims and intended learning outcomes?	Y
<p><i>Please comment on 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:</i></p> <p>Please see my comments under 'Matters for Urgent Attention'</p>		

Please use this box to provide any additional comments you would like to make in relation to assessment and feedback:

*a) Cohort analysis of module marks:* It would be useful if individual module performance could be compared directly to overall programme performance. This could take the form of a series of x-y plots of individual student score in the module against their overall score and would be an effective way of monitoring module performance (much better than simple means and standard deviations). I appreciate that lack of time during the examination period means it may not be possible to do this prior to the final exam meeting, but it could be done later in the year as part of your assessment review process – and perhaps the results of that retrospective analysis could be shared with Externals either at the time or the following year? Just a suggestion.

*b) Feedback:* Predictably the students continue to complain about feedback despite significant and very visible efforts on the part of the School to improve this. It is clear from the examples of work and exams looked at that lots of feedback is indeed given at considerable time expense to the staff concerned. This is actually a matter for concern since staff are spending a lot of time doing this

Students complain that: 1) feedback given can be inconsistent in detail and depth; 2) that it tends to focus too much on the negative; 3) that insufficient 'feed-forward' is given indicating how improvements could be made; 4) that the 15 day deadline isn't always stuck to and 5) that different staff give difference levels of feedback in terms of detail and depth.

This suggests to me that despite sterling efforts on the part of the School, the feedback process isn't perceived by the students as working very effectively. The key here may be that this is a perception. Are there other ways to approach this issue? The students said that they really like getting verbal feedback and maybe use of pre-lecture podcasts and the like might be a good way to give feedback more effectively. Perhaps this could be integrated with the Lecture Capture process. Sorry I don't really have a simple solution, but I do wonder of the Use of LC and the VLE may be the most effective way forwards.

*c) Marking pens:* The School appear to have no policy wrt the type of pen/pencil used by examiners marking examination questions. I noticed that there were a lot of rubbed out marks made in pencil. Is the School really happy with this? Some Universities stipulate that marking should be done using a standard coloured pen which is handed out with each set of scripts. This is often in an unusual colour like green. This way it is not possible to rub out marks/comments and also the marker comments are very distinctive and easy to recognise. At the very least I think that you should outlaw use of pencils for marking and perhaps also stipulate that any changes should be clearly shown using crossing-out. It is important that the assessment process is transparent and unambiguous – and also that it is easy to separate examiner comments/changes from those made by students!

## The Progression and Awards Process

20.	Were you provided with guidance relating to the External Examiners role, powers and responsibilities in the examination process?	Y
21.	Was the progression and award guidance provided sufficient for you to act effectively as an External Examiner?	Y
22.	Did you receive appropriate programme documentation for your area(s) of responsibility?	Y
23.	Did you receive appropriate module documentation for your area(s) of responsibility?	Y
24.	Did you receive full details of marking criteria applicable to your area(s) of responsibility?	Y
25.	Were you provided with all draft examination papers/assessments?	Y
26.	Was the nature and level of the assessment questions appropriate?	Y
27.	Were suitable arrangements made to consider your comments on assessment questions?	Y
28.	Was sufficient assessed work made available to enable you to have confidence in your evaluation of the standard of student work?	Y
29.	Were the examination scripts clearly marked/annotated?	Y (mostly)
30.	Was the choice of subjects for final year projects and/or dissertations appropriate?	Y

31.	Was the method and standard of assessment appropriate for the final year projects and/or dissertations?	Y
32.	Were the administrative arrangements satisfactory for the whole process, including the operation of the Progression and Awards Board?	Y
33.	Were you able to attend the Progression and Awards Board meeting?	Y
34.	Were you satisfied with the recommendations of the Progression and Awards Board?	Y
35.	Were you satisfied with the way decisions from the School Special Circumstances meeting were communicated to the Progression and Awards Board?	Y
<p><i>Please use this box to provide any additional comments you would like to make on the questions above:</i></p> <p>Please note that due to a family commitment, I was not able to attend the final Progression and Awards Board meeting, so my answers are in response to what I saw during 2016.</p>		

#### Other comments

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

##### Specific comments

These are only provided where substantive issues exist or where it is traditional for Externals to comment.

##### SOEE2010

There was an issue with the Semester 1 SOEE2010 Chemistry of the Earth exam paper. In Q 4 in Section B on page 5, the flux values were missing preventing students from being able to answer part of the question and this was spotted by several students during the exam. It was not possible to correct this error on the day and so the marks were amended during the moderation process for the students that were affected by the error. As External I was asked to review and approve this process and the final set of marks. This I did in February. I felt that the method of moderation suggested by the moderator was indeed appropriate as it used the students own performance elsewhere in the paper to adjust the marks and was not arbitrary. I checked to make sure that none of the highlighted students had a final mark that was REDUCED compared to the raw mark prior to moderation. Had this happened, I would have recommended that those students should be given their raw mark. In the event, this was not the case and so I am content with the process.

##### **SOEE3073/5306M - Mapping dissertations**

Fieldslips: the overall impression is very good across all ranges of abilities. Inevitably there are some issues, some of which I have raised last year: 1) at times the use on more than one set of slips at different scales (1:10,000, 1:5,000) can be a little confusing and seemingly a bit arbitrary. I have no objection to students doing this, but it needs to be a little more clearly structured. 2) The amount of drift mapping in areas where this would be appropriate is VERY variable – do you want your students to do drift mapping or not? Perhaps some clearer guidance is needed? 3) Very few maps are sufficiently annotated – there is a lot of blank space even on some of the best maps. 4) There is some evidence of feature mapping, but this could still be better – especially simple things like marking gully features where dykes or faults can then be inferred.

Cross-sections: It is excellent that pretty much all students draw their cross-sections in the field. The usual range of qualities and abilities are on show and the sections are sometimes rather rudimentary and lacking in detail. The use of form lines within mapped units is fairly rare.

Notebooks: The very best student notebooks are quite outstanding and even those of the weaker students have positive qualities which once again suggests good training. This year for the first time there were some odd features – detailed rock descriptions not appearing until rather late on in the field programme; long sections where a tabular approach to localities with little detail was used during periods focussed seemingly on boundary mapping.

Written reports: These are generally well put together, are quite densely illustrated (rather than just being text) and are generally very easy to read. I felt that in some cases they are rather thin on depth and detail, but I think that the overall standard is comparable to somewhat better than those produced in other Universities. A serious negative issue is the quite widespread use of scans from notebooks – I know that they are discouraged from doing this but this needs to be enforced more strongly – it looks terrible. Several students significantly spoiled their reports by too much use of such scans in my opinion.

Clean copy maps and sections: These were also generally good and the widespread use of GoogleEarth 3d images with geology map drapes is good, although I would like to see more commentary from the students as to what these actually show about how geology and topography are related.

Marking: The marking process for dissertations is both detailed and transparent – the extensive comments of the markers and the directly linking to the marking criteria are mostly excellent and illuminating. They also seem to be being used widely and consistently for all the projects that I looked at.

One small request: please could the excel spreadsheets for the Mapping Dissertations also show the student mapping areas? This means when we are asked to look at a particular set of student reports – like say Anglesey - then they are easier to find. OK I can do this with the sort function in some cases but still...

My general opinion is that your mapping dissertation marking is **still** too harsh and once again that you are not marking across the full scale range at the higher end. Year 3 scores lie in the range 48-77%, year 5 58-75%. I am content that there are very few projects scoring below 50% and I think that this is accurate and reflects the quality of your fieldwork training. But it is towards the top end - where I am a lot less happy - I would have scored some of your best dissertations 5 to 12% higher – well into the 80s and one or two towards 90%. See my General comments above.

Anglesey projects: I was asked to look at these as students have complained that their projects were marked too harshly compared to those of their peers. I have looked at all of the projects and marker comments and scores. Whilst my assessments were not always identical I did not consistently give higher scores and my overall feeling was that the marks are fair and no harsher compared to the rest of the cohort. Since the highest mark here was 61%, my general comments about harsh marking don't really apply here, but I would highlight that one member of staff was a first-time marker and the students may have perceived that this put them at a disadvantage. If the third marker/moderator scheme I suggested above in such cases were put in place, this might eliminate such complaints.

SOEE3470/5645

A poorer than normal performance in the Practical exam was attributed to a lack of demonstrators! Why were none provided? If this analysis is correct then this needs to be sorted out next year to make sure that PGD help is provided. Students also commented extensively on this issue in the Module questionnaire.

SOEE3660/5840M

Clearly the additional learning support provided to students this year paid off – there has been a marked improvement in marks overall.

### **SOEE5308M M GEOL Independent Projects**

This is the last year in which this project will run as a 20 Credit Module and it will return next year as a 50 Credit module, a change which I think is commendable and more in line with what other Universities in the UK do in the MSci year.

However, the module still suffers from a lack of rigor in the way it is marked and given its increasing importance next year, these issues **MUST** be sorted out for next year.

Specific issues are:

1) I am pleased to see that the Lab books are now integrated as part of the assessment but it is clear that this did not work very well as neither some students or supervisors have carried out this part of the project consistently (or at all in some cases). This is not acceptable – several students and supervisors did an excellent job with the lab books and supervision – please make sure that this approach is shared with all so that all can follow this scheme properly next year!

2) I requested a standardised marking scheme but there still seems to be some variation here. In some cases, markers have a fairly detailed scheme whilst others make comments and then pick an overall mark. This is **NOT ACCEPTABLE** for a 50 credit module! Once again any such scheme will need to be cross-referenced with a set of marking criteria – as some markers have done. Given that this has now been largely implemented successfully with the Mapping projects I see no reason why it shouldn't happen here too.

3) I still feel that the marking is too harsh at the top end – several reports were scattered with 'excellents' and 'very goods' that seem to be at odds with the final marks given by between 5-10%.

4) A minority of marker comments are **STILL** lacking in any detail. This is not acceptable.

A further issue is highlighted by the Module Leader – if the Mapping report is downgraded from next year, there is a risk that students will have to write these independent reports with even less previous practice of scientific writing...how will you fill this learning gap?

A related issue is that the changes to this Module will mean that a GEOLOGY'-style article will be replaced by a more traditional written report. I think that this is a bit of a shame.

Finally, the spread of topics here is really rather limited with a strong focus on geochemical projects. This is a shame – why?? There are no structural or palaeontological projects for example...

**Name of School and Head of School (or nominee)**

Title and Name of Responder:

Position\*:

Faculty / School of:

Address for communication:

Email:

Telephone:

Head of School

*Faculty of Environment / School of Earth and Environment*School of Earth and Environment  
Maths/Earth and Environment Building  
The University of Leeds  
Leeds. LS2 9JT  
United Kingdom*\*If the individual responding to the report is not the Head of School please state their position within the School.***Completing the School response**

The completed School response (including the full original report) should be attached to an e-mail and sent to the Pro-Dean for Student Education in the relevant Faculty. Following approval by the Pro-Dean for Student Education, the School must send the response (including the full original report) directly to the External Examiner. A copy must also be emailed to the Quality Assurance Team at [qat@leeds.ac.uk](mailto:qat@leeds.ac.uk). External Examiners should receive a formal response no later than six weeks after receipt of the original report.

**Response to Points of innovation and/or good practice**

We thank the examiner for the positive comments. The school does encourage the spread of good practice through the annual teaching away day, through a member of staff with responsibilities for spreading good pedagogical practice, and through the university's annual student education conference. We will encourage full staff engagement in this.

**Response to Enhancements made from the previous year**

Thank you for these comments.

**Response to Matters for Urgent Attention**

*If any areas have been identified for urgent attention before the programme is offered again please provide a specific response to them here:*

The issue of undermarking at the top end of the scale has been raised as a whole-School issue and was identified as an action point for all teaching staff in the beginning of year teaching briefing and staff meetings. Some new grading criteria for categorical marking have been developed that better identify how marks above the 70s can be justified. These have been added to the School CoPA document. The school is considering other means to ensure that fair marks are given at the top end, such as modifying moderation forms to ensure that particular attention is given to the top marks, and these will be discussed and developed as appropriate.

**Response to questions 1-7 (and related comments)**

*Schools may provide a general response; however, where Examiners raise specific points these must be addressed individually:*

None.

**Standards****Response to questions 8 to 16 (and related comments)**

*Schools may provide a general response; however, where Examiners raise specific points these must be addressed individually:*

All the Geological Sciences undergraduate degrees are accredited by the Geological Society of London.

**Assessment and Feedback**

**Response to questions 17 to 19 (and related comments)**

*Schools may provide a general response; however, where Examiners raise specific points these must be addressed individually:*

See response to Matters for Urgent Attention about marking.

Cohort analysis. This suggestion has been passed on the Academic Assessment lead for consideration.

Feedback. In the 2017 NSS the value for the promptness of feedback rose to 56%, with the assessment and feedback score rising to 67%. These numbers are not what we would like, but at least are moving in the right direction. Further emphasis is being placed on feedback that benefits student learning experiences, on promptness of feedback from staff for this academic year and was raised as an action point in the beginning of year teaching briefing, given to all teaching staff. We welcome the thoughts of how to improve feedback given by the external.

Marking pens. This issue has been passed on the Academic Assessment lead for consideration.

**The Progression and Awards Process**

**Response to questions 20-35 (and related comments)**

*Schools may provide a general response; however, where Examiners raise specific points these must be addressed individually:*

None.

**Other comments**

**Response to items included in the 'Other Comments' section of the report**

Mapping dissertations. These detailed comments have been passed on to the new module leader for the Geological Mapping Dissertation module for 2017-18. We note that the new leader has made a number of modifications designed to foster a better equality of experience and support for students across a range of projects. These are very detailed, so will be passed to the examiner as a separate document.

SOEE3470/5645. This issue has been raised for consideration by the module leader.

SOEE3470/5645. The detailed comments have been passed on to the new module leader for consideration. We note that the new structure and credit weighting for the MGeol projects allows us to also revise some of the marking issues raised by external examiner. Also see the response to the issue of undermarking at the top end for all modules.

For the final point raised the previous module leader, who says that there was a wide range of topics available (more than twice as many topics as the number of students) and most students got their first choice. These just happened to be mostly of a geochemical nature. Structural and palaeontological topics were offered.