

Decisions on Conditions and guidance for AS and A level geology



In March 2016 we published a consultation about the rules and guidance we proposed to put in place for new AS and A levels in geology.

This consultation set out draft Subject Level Conditions, requirements and guidance which would apply to all new AS and A levels in these subjects.

We have reviewed the responses to the consultation and are now announcing our decisions. We are also publishing a more detailed analysis of the responses alongside this document.¹

AS and A level geology

Compliance with content requirements

We proposed that all reformed AS and A levels in geology should comply with the subject content requirements published by the Department for Education,² and with our assessment objectives.

All the respondents who commented on this proposal supported it, noting that it would help ensure comparability between different specifications. No respondents raised any concerns with this aspect of our proposals.

We have therefore decided to confirm our proposals in this area.

Assessment of mathematical skills and geological skills and techniques within exam assessments

The subject content requirements for AS and A level geology includes mathematical skills that students should know and understand. It also includes geological skills and techniques that should be developed by students. In our consultation we proposed introducing a number of rules to ensure that a consistent approach is taken to the assessment of mathematical skills and geological skills and techniques across exam boards.

¹ <https://www.gov.uk/government/consultations/as-and-a-level-reform-regulations-for-geology>

² <https://www.gov.uk/government/publications/gce-as-and-a-level-geology>

In relation to the assessment of mathematical skills, we proposed rules which would require exam boards to:

- assess mathematical skills in the context of other areas of the subject content, and not in isolation;
- allocate 10 per cent of the marks for the qualification to reward use of mathematical skills at a level of demand which is at least equivalent to higher tier GCSE mathematics; and
- assess mathematical skills across a range of levels of demand which supports effective differentiation between candidates.

In relation to the assessment of geological skills and techniques, we proposed rules which would require exam boards to ensure that:

- students' knowledge, skills and understanding of geological skills and techniques are assessed across all of the assessment objectives;
- the number of marks that reward students' knowledge, skills and understanding of geological skills and techniques is at least 15 per cent of the total marks for the qualification;
- questions on these aspects draw on and combine theoretical and technical aspects of these skills and techniques; and
- exam boards cover the relevant skills from the subject content over the shortest period of time that is reasonably practical.

Respondents were largely in favour of our proposals in relation to the assessment of mathematical and practical skills within exam assessments. We have therefore decided to adopt our proposals in this area unchanged, save for the correction of two errors which appeared in our draft requirements:

- there was a typographical error in the heading of the '*Assessment of Learners in relation to geological skills and techniques*' section of the assessment requirements which incorrectly referred to direct rather than to indirect assessment, and
- within the same section we have now included a reference to Appendix 1c within paragraph (e) which relates to AS qualifications – this change ensures that our requirements line up with the subject content expectations in relation to the assessment of geological skills and techniques at AS level.

Direct assessment of practical skills at A level

The subject content requires that at A level, students should complete at least 12 practical activities throughout their course of study. We proposed to follow a similar approach to regulating this aspect of the subject content, to that we have taken for the assessment of science practicals in A level science subjects.³

To do this we proposed to put in place rules that require an exam board to:

- require that at A level, each student completes at least 12 practical activities which cover the requirements set out in the subject content;
- set out clearly in its specification the practical activities that students must complete;
- require centres to provide a practical skills statement confirming that the student has completed the practical activities;
- require students to keep a record of the practical activities they have undertaken; and
- treat any failure by a centre not to complete and return the practical skills statement as malpractice and/or maladministration.

All respondents agreed with this approach, and we have therefore decided to adopt these proposals unchanged.

At A level, in relation to the practical skills that are directly assessed, we proposed that instead of receiving a mark which would contribute to a single overall grade, students' certificates would instead separately indicate whether they had met the required standard for the practical assessments. Students that meet the required standard would be awarded a 'Pass'. This was in line with the approach taken for A level science subjects.

We also proposed that marking and monitoring arrangements would be similar to those in place for A level science subjects:

- in order to be awarded a 'Pass', students would be required to consistently and routinely demonstrate all of the competencies set out in our assessment criteria;
- marking would, in the main, be conducted by teachers; and

³ See: <https://www.gov.uk/government/publications/gce-subject-level-conditions-and-requirements-for-science>

- teacher marking would be subjected to a tailored monitoring regime conducted by exam boards.

There was, however, a slight difference proposed to the approach taken in other A level science subjects. In biology, chemistry and physics, our rules permit all three subjects to be included within the same monitoring arrangements, while we proposed that for geology there should be a separate set of monitoring arrangements in place.

While all respondents expressed overall agreement with our proposed approach, one respondent commented that geology should be included within the same monitoring arrangements as biology, chemistry and physics, and one other respondent questioned why issues identified in the monitoring process for A level geology should be reported to exam boards offering science subjects within the same centre.

We have considered the different views expressed by respondents, but we remain of the view that we should adopt the proposed approach. Within centres, geology teaching and resources may be more closely aligned to geography departments than to science departments. This could lead to different approaches being taken to the assessment of practical skills within a single centre, which means that the outcomes of the monitoring in biology, chemistry or physics within a centre may not be applicable to geology.

We have however noted that while we have a requirement in geology that exam boards should report any issues identified during their visits to exam board offering A levels in biology, chemistry or physics to the same centre, there is no requirement for exam boards offering these science subject to do the same where a different exam board offers geology to the same centre. This requirement was not included because the A level science requirements were drafted in an earlier year of reform. We will consider including such a requirement in the A level science requirements in due course.

Certificate requirements for A level geology practical skills assessments

We proposed to introduce certificate requirements which would ensure that:

- students will only get a certificate if they achieve at least a grade E in the examined part of the qualification;
- the result of the practical skills assessment will be reported on certificates, as either 'Pass' or 'Not Classified'; and
- if a disabled student is exempt from the practical skills assessment, the information on his or her certificate will be presented in line with our approach to

exemptions in other qualifications (which is set out in our Specifications in Relation to the Reasonable Adjustment of General Qualifications)⁴.

Respondents agreed with our proposed approach, and so we have decided to adopt the approach and proposed requirements in full.

Fieldwork in AS and A level geology

The subject content requirements for AS and A level geology set out that students must undertake fieldwork, and that awarding organisations must require evidence of this fieldwork in the form of a written statement from centres. In order to meet this requirement of the subject content, we proposed introducing rules on awarding organisations to:

- require schools to provide a fieldwork statement to their awarding organisation confirming that it had provided each student with reasonable opportunities to complete the required geological fieldwork; and
- treat any failure to provide the fieldwork statement as malpractice or maladministration.

Those who responded to this question agreed with the proposed approach, and we have decided to adopt the approach and proposed requirements in full.

Conditions and requirements

None of the respondents provided any separate comments in relation to the wording of our proposed Conditions and requirements, and so we propose to adopt them in full, save for the amendments to typographical and other errors identified above.

Guidance

We proposed to introduce guidance clarifying the interpretation of our assessment objectives. Respondents did not raise any concerns related to the introduction of such guidance, and raised no comments in relation to the wording of the guidance proposed.

We remain of the view that the guidance is appropriate, and we have decided to adopt it in full.

⁴ www.gov.uk/government/publications/specifications-in-relation-to-the-reasonable-adjustment-of-general-qualifications

Next steps

We have published the following documents which formally introduce our rules and guidance for AS and A level geology:

- *GCE Subject Level Conditions for Geology*⁵
- *GCE Subject Level Guidance for Geology*⁶

⁵ www.gov.uk/government/publications/gce-subject-level-conditions-and-requirements-for-geology

⁶ www.gov.uk/government/publications/gce-subject-level-guidance-for-geology