Cookies on GOV.UK

We use some essential cookies to make this website work.

We'd like to set additional cookies to understand how you use GOV.UK, remember your settings and improve government services.

We also use cookies set by other sites to help us deliver content from their services.



> AS and A level subject content and requirements > GCE subject-level conditions for 2022



Regulation GCE subject-level conditions and requirements for geology (2022)

Published 11 November 2021

Contents

Introduction Subject Level Conditions Subject content requirements Introduction

Assessment requirements

Requirements in relation to practical assessments Certificate Requirements Assessment objectives

Print this page

About this document

This document is part of a suite of documents which sets out the regulatory requirements for awarding organisations offering reformed A levels and AS qualifications in 2022.

We have developed all our requirements for GCE qualifications with the intention that AS and A level qualifications should fulfil the purposes set out below.

For A levels:

- define and assess achievement of the knowledge, skills and understanding which will be needed by students planning to progress to undergraduate study at a UK higher education establishment, particularly (although not only) in the same subject area
- set out a robust and internationally comparable post-16 academic course of study to develop that knowledge, skills and understanding
- permit UK universities to accurately identify the level of attainment of students
- provide a basis for school and college accountability measures at age 18
- provide a benchmark of academic ability for employers

For AS qualifications:

- provide evidence of students' achievements in a robust and internationally comparable post-16 course of study that is a sub-set of A level content
- enable students to broaden the range of subjects they study

Requirements set out in this document

This document sets out the GCE Subject Level Conditions for Geology (2022). These conditions will come into effect at 09:30 on 12 November 2021 for the following qualifications:

- all GCE A levels in Geology
- all standalone GCE AS qualifications in Geology

for Learners completing the qualification in 2022, except where the General Qualifications Alternative Awarding Framework applies.

It also sets out our requirements in relation to:

- interpretation of the content document an awarding organisation must comply with these requirements under Condition GCE(Geology)1.1(c)
- assessment objectives awarding organisations must comply with these requirements under Condition GCE(Geology)1.2
- requirements in relation to practical skills assessments awarding organisations

must comply with these requirements under Condition GCE(Geology)4.2

 certificate requirements - awarding organisations must comply with these requirements under Condition GCE(Geology)6.3 and General Condition I3.1

With respect to the qualifications listed above, awarding organisations must also comply with:

- our <u>General Conditions of Recognition</u>, which apply to all awarding organisations and qualifications
- our <u>GCE Qualification Level Conditions and Requirements</u>
- all relevant Regulatory Documents

With respect to all other GCE qualifications in Geology, taken by Learners completing the qualification in 2023 and after, an awarding organisation must continue to comply with the <u>GCE Subject Level Conditions and Requirements for</u> <u>Geology</u>.

Subject Level Conditions

GCE Subject Level Conditions for Geology

Condition GCE(Geology) 1: Compliance with content requirements GCE(Geology)1.1

In respect of each GCE Qualification in Geology which it makes available, or proposes to make available, an awarding organisation must -

(a) comply with the requirements relating to that qualification set out in the document published by the Secretary of State entitled <u>'Geology GCE AS and A</u> <u>level subject content</u>', document reference DFE-00056-2016,

(b) have regard to any recommendations or guidelines relating to that qualification set out in that document, and

(c) interpret that document in accordance with any requirements, and having regard to any guidance, which may be published by Ofqual and revised from time to time.

GCE(Geology)1.2

In respect of each GCE Qualification in Geology which it makes available, or proposes to make available, an awarding organisation must comply with any requirements, and have regard to any guidance, relating to the objectives to be met by any assessment for that qualification which may be published by Ofqual and revised from time to time.

Condition GCE(Geology) 2: Assessment GCE(Geology)2.1

An awarding organisation must ensure that in respect of each assessment for a GCE Qualification in Geology which it makes available it complies with any requirements, and has regard to any guidance, which may be published by Ofqual and revised from time to time.

Condition GCE(Geology) 3: Practical skills GCE(Geology)3.1

In respect of each GCE A level qualification in Geology which it makes available, or proposes to make available, an awarding organisation must -

(a) require each Learner to complete at least 12 practical activities, and

(b) ensure that, taken together, those practical activities provide opportunities for each Learner to -

(i) develop all of the skills specified in appendix 1a to the content document, and

(b) use and be assessed in relation to all of the skills, apparatus and techniques specified in appendices 1b and 1c to the content document.

GCE(Geology)3.2

In respect of each GCE A level qualification in Geology which it makes available, or proposes to make available, an awarding organisation must -

(a) review the practical activities which it requires each Learner to complete following any revision by the Secretary of State to the specified skills, apparatus or techniques, and

(b) revise those practical activities if appropriate.

GCE(Geology)3.3

In respect of each GCE A level qualification in Geology which it makes available, or proposes to make available, an awarding organisation must -

(a) set out in the specification for that qualification -

(i) the practical activities which each Learner must complete, and

(ii) in particular, the skills and techniques which those practical activities must allow each Learner to develop or demonstrate, and the apparatus which those practical activities must allow each Learner to use, and

(b) promptly amend that specification when the awarding organisation makes any revision to those skills, techniques or apparatus, or those practical activities, and

(c) where such an amendment has been made to the specification, publish that specification as amended.

GCE(Geology)3.4

In respect of each assessment cycle for each GCE A level qualification in Geology which it makes available, an awarding organisation must -

(a) require each Centre to provide a practical skills statement to the awarding

organisation, and

(b) treat any failure by a Centre to provide a practical skills statement to the awarding organisation in a timely manner as malpractice and/or maladministration (under General Condition A8 (Malpractice and maladministration)).

GCE(Geology)3.5

For the purposes of this condition, the content document is the document specified in Condition GCE(Geology)1.1(a).

GCE(Geology)3.6

For the purposes of this condition, a 'practical skills statement' is a true and accurate written statement made by a Centre to an awarding organisation which confirms that it has taken reasonable steps to secure that each Learner to whom that Centre has delivered the assessments to be taken in a particular assessment cycle for each A level qualification in Geology which the awarding organisation makes available has -

(a) completed at least 12 practical activities as required by the awarding organisation, and

(b) made a contemporaneous record of the work which that Learner has undertaken during those practical activities.

Condition GCE(Geology) 4: Practical skills assessments GCE(Geology)4.1

In respect of each practical skills assessment for a GCE A level qualification in Geology that an awarding organisation makes available or proposes to make available -

- (a) Condition H2 does not apply,
- (b) Condition GCE4.1 does not apply, and
- (c) that assessment must not be an Assessment by Examination.

GCE(Geology)4.2

For the purposes of this condition, a 'practical skills assessment' is an assessment -

(a) of a Learner's competency in the skills outlined in appendix 1b, and the use of the apparatus and techniques outlined in the relevant portions of appendix 1c, to the document published by the Secretary of State entitled <u>'GCE AS and A level</u> subject content for geology', document reference DFE-00056-2016,

(b) as evidenced by the Learner's performance in at least 12 practical activities as required by the awarding organisation under Condition GCE(Geology)3.1.

Condition GCE(Geology) 5: [Not used] GCE(Geology)5.1

(a) [Not used] GCE(Geology)5.2 (a) [Not used]

Condition GCE(Geology) 6: Marking and results GCE(Geology)6.1

In respect of each GCE A level qualification in Geology which it makes available an awarding organisation must calculate and publish the following two separate results for each Learner -

(a) a result for the Assessments by Examination to be taken for that qualification, and

(b) a result for the practical skills assessment.

GCE(Geology)6.2

In respect of each GCE A level qualification in Geology which it makes available, an awarding organisation must ensure that an Assessor does not have any regard to a Learner's -

(a) result for the practical skills assessment in calculating that Learner's final mark and result for the Assessments by Examination, and/or

(b) final mark or result for the Assessments by Examination in determining that Learner's result for the practical skills assessment.

GCE(Geology)6.3

In respect of each practical skills assessment an awarding organisation must ensure that it complies with any Certificate Requirements in relation to that assessment which may be published by Ofqual and revised from time to time.

GCE(Geology)6.4

In respect of each GCE A level qualification in Geology which it makes available, an awarding organisation must ensure that -

(a) a Learner may use the result for a practical skills assessment which he or she has taken for a GCE A level qualification in Geology made available by the awarding organisation or another awarding organisation, and

(b) that Learner is not required to take a further practical skills assessment before being awarded the qualification.

GCE(Geology)6.5

For the purposes of this condition, a practical skills assessment has the same meaning as in Condition GCE(Geology)4.2.

Subject content requirements

Requirements in relation to subject content for GCE

Geology

The subject content for GCE Qualifications in Geology is set out in the Department for Education's <u>GCE AS and A level subject content</u>, document reference DFE-00056-2016 (the 'Content Document').

Condition GCE(Geology)1.1(c) requires awarding organisations to interpret the Content Document in line with any requirements, and having regard to any guidance, published by Ofqual.

We set out our requirements for the purposes of Condition GCE(Geology)1.1(c) below.

Practical activities

An awarding organisation must interpret the Content Document as if -

(a) the requirement for a Learner to complete fieldwork and 12 practical activities has been disapplied, and

(b) the Common Practical Assessment Criteria are assessed using the minimum number of practical activities required to demonstrate competence.

Assessment requirements

Assessment requirements - GCE Qualifications in Geology

Condition GCE(Geology)2.1 allows us to specify requirements in relation to assessments for GCE Qualifications in Geology.

We set out below our requirements for the purposes of Condition GCE(Geology)2.1. Awarding organisations must comply with these requirements in relation to all GCE Qualifications in Geology they make available.

Mathematical skills

The subject content for GCE Qualifications in Geology is set out in the document published by the Secretary of State entitled 'Geology GCE AS and A level subject content', document reference DFE-00056-2016 (the 'Content Document').

Appendix 2 to the Content Document specifies the mathematical knowledge, skills and understanding which Learners will be required to use and apply in GCE

Qualifications in Geology (the 'Mathematical Skills').

In designing and setting the Assessments by Examination for a GCE Qualification in Geology which it makes available, or proposes to make available, an awarding organisation must ensure that -

(a) questions and tasks rewarding the use of 'Mathematical Skills' assess those skills within the context of other areas of the subject content, and not in isolation,

(b) at least 10 per cent of the total marks for the qualification reward the use of Mathematical Skills at a Level of Demand which is not lower than that which is expected of Learners in assessments for the higher tier in a GCSE Qualification in Mathematics, and

(c) without prejudice to the above requirements and those outlined in the Content Document, in each set of assessments Mathematical Skills are assessed at a range of Levels of Demand which supports effective differentiation in relation to the qualification.

Assessment of Learners in relation to geological skills and techniques - indirect assessment

In designing and setting the Assessments by Examination for each GCE Qualification in Geology which it makes available, or proposes to make available, an awarding organisation must ensure that, taking those assessments together -

(a) Learners' knowledge, skills and understanding in relation to geological skills and techniques is assessed across assessment objectives AO1, AO2 and AO3,

(b) the number of marks used to credit such knowledge, skills and understanding is no less than 15 per cent of the total marks for the qualification,

(c) the questions and tasks which test Learners' knowledge, skills and understanding in relation to geological skills and techniques draw on, and combine as appropriate, the theoretical and technical aspects of those skills and techniques,

(d) for a GCE A level qualification, over the shortest period of time that is reasonably practicable, Learners are assessed in relation to all of the skills and techniques specified in appendix 1a to the Content Document, and

(e) for a GCE AS qualification, over the shortest period of time that is reasonably practicable, Learners are assessed in relation to all of the skills and techniques specified in appendices 1a and 1d to the Content Document, and to the relevant skills and techniques in appendix 1c to the Content Document.

Requirements in relation to practical assessments

Requirements in relation to practical skills assessments

Condition GCE(Geology)2.1 allows us to specify requirements and guidance in relation to assessments for GCE Geology Qualifications.

We set out our requirements in relation to practical skills assessments (as defined in Condition GCE(Geology)4.2) for GCE A level qualifications in Geology for the purposes of Condition GCE(Geology)2.1 below.

Form of the practical skills assessment

An awarding organisation must ensure that each practical skills assessment is designed and set in such a way as to allow a Learner who has demonstrated the competencies outlined in Table 1 below to reach a Pass.

Marking of practical skills assessments

Evidence generated by a Learner in a practical skills assessment may be marked

(a) by a Centre,

(b) by the awarding organisation or a person connected to the awarding organisation, or

(c) through a combination of (a) and (b).

In any event, the awarding organisation must demonstrate to Ofqual's satisfaction in its assessment strategy that -

(a) it has taken all reasonable steps to identify the risk of any Adverse Effect which may result from its approach to marking practical skills assessments, and

(b) where such a risk is identified, it has taken all reasonable steps to prevent that Adverse Effect or, where it cannot be prevented, to mitigate that Adverse Effect.

The specified level of attainment in practical skills assessments

In relation to each practical skills assessment, an awarding organisation must ensure that -

(a) the only specified level of attainment is a Pass,

(b) the criteria used by Assessors to determine whether each Learner will be awarded a Pass are those set out in Table 1 below, and

(c) a Learner who does not meet the criteria to be awarded a Pass, or who has not been exempted on grounds of disability from the assessment but who does not take that assessment, is issued a result of Not Classified.

Under Condition H1.1, an awarding organisation must have in place arrangements

to ensure that, as far as possible, the criteria set out in Table 1 are -

(a) understood by Assessors and accurately applied, and

(b) applied consistently by Assessors, regardless of the identity of the Assessor, Learner or Centre.

The criteria for a Pass

In order to be awarded a Pass a Learner must, by the end of the practical skills assessment, consistently and routinely meet the criteria in respect of each competency listed below. A Learner may demonstrate the competencies in any practical activity undertaken as part of that assessment throughout the course of study.

Learners may undertake practical activities in groups. However, the evidence generated by each Learner must demonstrate that he or she independently meets the criteria outlined below in respect of each competency. Such evidence -

(a) will comprise both the Learner's performance during each practical activity and his or her contemporaneous record of the work that he or she has undertaken during that activity, and

(b) must include evidence of independent application of investigative approaches and methods to practical work.

Competency	Assessment criteria		
1 – Follows written procedures	a) Correctly follows written instructions to carry out experimental techniques or procedures		
2 – Applies investigative approaches and methods when using instruments and equipment	a) Correctly uses appropriate instrumentation, apparatus and materials (including ICT) to carry out investigative activities, experimental techniques and procedures with minimal assistance or prompting.		
	 b) Carries out techniques or procedures methodically, in sequence and in combination, identifying practical issues and making adjustments where necessary. 		
	c) Identifies and controls significant quantitative variables where applicable, and plans approaches to take account of variables that cannot readily be controlled.		
	d) Selects appropriate equipment and measurement strategies in order to ensure suitably accurate results.		
3 – Safely uses a range of practical equipment and materials	a) Identifies hazards and assesses risks associated with those hazards, making safety adjustments as necessary, when carrying out experimental techniques and procedures in the lab or field.		
	b) Uses appropriate safety equipment and approaches to minimise risks with minimal prompting.		
4 – Makes and records observations			
	a) Makes accurate observations relevant to the experimental or investigative procedure.		

b) Obtains accurate, precise and sufficient data for experimental and investigative procedures and records this methodically using appropriate units and conventions.

5 – Researches, references and reports	a) Uses appropriate software and/or tools to process data, carry out research and report findings.
	b) Cites sources of information demonstrating that research has taken place, supporting planning and conclusions.

Monitoring of practical skills assessments

In respect of each GCE A level qualification in Geology which it makes available, an awarding organisation must have in place clear and effective arrangements to monitor the delivery and, where relevant, the marking of practical skills assessments by Centres.

As part of those arrangements, an awarding organisation must ensure that each Centre which delivers practical skills assessments receives a monitoring visit at least every 2 years (a 'Monitoring Visit').

An awarding organisation must ensure that each Monitoring Visit it conducts includes the following activities -

(a) Observation of one or more practical activities being undertaken.

(b) Steps to ensure that, where evidence generated by a Learner in the practical skills assessment is marked by the Centre, Teachers are applying the criteria outlined above accurately and consistently.

(c) Steps to ensure that Learners have been provided with opportunities to undertake practical activities.

(d) A review of samples of records of Learners' practical activities and Centres' documentation in relation to those activities to ensure that all relevant requirements in relation to the practical activities and practical skills assessments are being met.

(e) Where appropriate, the provision of advice and guidance to the Centre.

Where, during a Monitoring Visit, an awarding organisation identifies an Adverse Effect, or a risk of an Adverse Effect, relating to the delivery or marking of practical skills assessments, it must ensure that any other awarding organisations for whom that Centre delivers practical science assessments for GCE A level qualifications in Biology, Chemistry, Geology or Physics are informed.

An awarding organisation must set out its approach to monitoring, and in particular how it will meet the above requirements, in its assessment strategy.

An awarding organisation may carry out the Monitoring Visit remotely in 2021 to 2022.

Certificate Requirements

Condition GCE(Geology)6.3 allows us to specify Certificate Requirements in relation to the way in which a Learner's attainment in a practical skills assessment is reflected on that Learner's certificate for the qualification.

In addition, under Condition I3.1, an awarding organisation is required to ensure that the design of each certificate in relation to a qualification which it makes available complies with the Certificate Requirements which may be published by Ofqual and revised from time to time.

We set out our Certificate Requirements for the purposes of Condition GCE(Geology)6.3 and Condition I3.1 below.

These requirements must be followed together with the <u>Additional Certificate</u> <u>Requirements</u> which apply to all qualifications.

Certificate requirements for practical skills assessments

A certificate will only be issued for a GCE A level qualification in Geology where a Learner has been awarded a grade A^* - E in respect of the level of attainment he or she has demonstrated in the Assessments by Examination to be taken for that qualification.

Where a Learner has not been awarded a grade A* - E in respect of those Assessments by Examination, an awarding organisation must ensure that no certificate is issued in respect of that Learner's practical skills assessment, regardless of the result for that assessment.

For clarity, the result for that Learner's practical skills assessment must still be issued, together with the Learner's result in respect of the Assessments by Examination, under Condition H6.1.

Where a certificate will be issued to a Learner in respect of the Assessments by Examination, an awarding organisation must ensure that it meets the following requirements in recording the outcome of the practical skills assessment on that certificate -

(a) Where the Learner has been awarded a Pass, that outcome must be recorded on the certificate.

(b) Where the Learner -

(i) has taken the practical skills assessment but has not been awarded a Pass, or

(ii) has not been granted an exemption on grounds of disability from taking the practical skills assessment, but has not taken it,

the outcome reported on the certificate must be Not Classified.

(c) Where the Learner has been granted an exemption from taking the practical skills assessment on grounds of disability, the outcome reported on the certificate must be in line with any requirements which may be published by Ofqual and revised from time to time.

In all cases an awarding organisation must ensure that it is clear that the above outcomes are in relation to the practical skills assessment.

Assessment objectives

Assessment objectives - GCE Qualifications in Geology

Condition GCE(Geology)1.2 allows us to specify requirements relating to the objectives to be met by any assessment for GCE Qualifications in Geology.

The assessment objectives set out below constitute requirements for the purposes of Condition GCE(Geology)1.2. Awarding organisations must comply with these requirements in relation to all GCE Qualifications in Geology they make available.

Assessment objective	Description	A level weighting	AS weighting
AO1	Demonstrate knowledge and understanding of geological ideas, skills and techniques	30 to 35%	35 to 40%
AO2	Apply knowledge and understanding of geological ideas, skills and techniques	40 to 45%	40 to 45%
AO3	Analyse, interpret and evaluate geological ideas, information and evidence, to make judgements, draw conclusions, and develop and refine practical design and procedures.	25 to 30%	20 to 25%



Coronavirus (COVID-19)

Coronavirus (COVID-19): guidance and support

Services and information

<u>Benefits</u>

Births, deaths, marriages and care

Business and self-employed

Childcare and parenting

Citizenship and living in the UK

Crime, justice and the law

Disabled people

Driving and transport

Education and learning

Employing people

Environment and countryside

Housing and local services

Money and tax

Passports, travel and living abroad

Visas and immigration

Working, jobs and pensions

Brexit

Check what you need to do

Departments and policy

How government works

Departments

<u>Worldwide</u>

<u>Services</u>

Guidance and regulation

News and communications

Research and statistics

Policy papers and consultations

Transparency and freedom of information releases



Rhestr o Wasanaethau Cymraeg Government Digital Service

Help Privacy Cookies Accessibility statement Contact Terms and conditions

OGL All content is available under the <u>Open Government Licence v3.0</u>, except where otherwise stated

© Crown copyright