

Confirmed assessment arrangements for reformed GCSE, AS and A level qualifications for first teaching in 2017

Covering:

GCSEs

Astronomy

Business

Economics

Engineering

Geology

Psychology

Sociology

AS and A level qualifications

Design & technology

Environmental science

History of Art

Music technology

Philosophy



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Contents

Overview.....	3
Decisions on Assessment arrangements	4
Tiering	4
Balance of exam and non-exam assessment	4
Assessment Objectives	7
Assessment arrangements for GCSE astronomy	9
Tiering	9
Non Exam assessment	9
Assessment Objectives	9
Assessment arrangements for GCSE business	10
Tiering	10
Non Exam assessment	10
Assessment Objectives	10
Assessment arrangements for GCSE economics	11
Tiering	11
Non Exam assessment	11
Assessment Objectives	11
Assessment arrangements for GCSE engineering	12
Tiering	12
Non Exam assessment	12
Assessment Objectives	12
Assessment arrangements for GCSE geology	13
Tiering	13
Non Exam assessment	13
Assessment Objectives	13
Assessment arrangements for GCSE psychology	14
Tiering	14
Non Exam assessment	14
Assessment Objectives	14
Assessment arrangements for GCSE sociology	15
Assessment arrangements for AS and A level design & technology	16

*Confirmed assessment arrangements for reformed GCSE,
AS and A level qualifications for first teaching in 2017*

Tiering	16
Non Exam assessment	16
Assessment Objectives	16
Assessment arrangements for AS and A level environmental science	17
Tiering	17
Non Exam assessment	17
Assessment Objectives	17
Assessment arrangements for AS and A level history of art	18
Tiering	18
Non Exam assessment	18
Assessment Objectives	18
Assessment arrangements for AS and A level music technology	19
Tiering	19
Non Exam assessment	19
Assessment Objectives	19
Assessment arrangements for AS and A level philosophy	20
Tiering	20
Non Exam assessment	20
Assessment Objectives	20

Overview

From 16th July to 24th September 2015 we consulted on proposed assessment arrangements for a number of the remaining reformed subjects that are planned for first teaching in September 2017. The Department for Education (DfE) consulted in parallel on proposed content requirements for the same subjects.

Our consultation covered proposed assessment arrangements for:

GCSEs in:

- Astronomy
- Business
- Economics
- Engineering
- Geology
- Psychology
- Sociology

AS qualifications and A levels in:

- Design & technology
- Environmental science
- History of art
- Music technology
- Philosophy

We set out in this document the decisions we have taken on the assessment arrangements for these subjects. The DfE has also confirmed the content requirements for them, which it has published on its website.¹ Our decisions have been confirmed in relation to this final content.

¹ <https://www.gov.uk/government/collections/gcse-subject-content> and <https://www.gov.uk/government/collections/gce-as-and-a-level-subject-content>

Decisions on Assessment arrangements

In deciding on the assessment arrangements for these subjects we have carefully considered the responses to our consultation and the potential impact of our decisions in terms of regulatory burden and on those with protected characteristics. Alongside this document we are publishing a full evaluation of the responses to our consultation together with our assessments of the potential impact of our decisions.²

We have already made qualification-level decisions about the purpose and the design of reformed GCSEs, AS and A levels. You can find more information on the changes we are making to these qualifications on our website.

Tiering

We have previously confirmed that new GCSEs should only be tiered where a single set of assessments cannot, in a valid and manageable way, assess students across the full ability range. Accordingly, and in line with our consultation proposals, we have decided that none of the GCSE subjects included in this consultation will be tiered. In line with current practice, all reformed AS qualifications and A levels will be untiered.

Balance of exam and non-exam assessment

To determine how new GCSEs, AS and A levels should be assessed we are applying a common set of principles to each subject. We consider that where subject content can be validly assessed by exams, set and marked by exam boards, this should be the default method of assessment. Where other forms of assessment are necessary to assess essential subject skills or knowledge, the non-exam assessment must:

1. strike a balance between valid assessment of essential knowledge and skills, sound assessment practice and manageability;
2. be designed to fit the requirements of the particular subject, including the relative weighting of exams and other components assigned to it;
3. be designed so that the qualification is not easily distorted by external pressures from the wider system.

If we determine that a subject should include a proportion of non-exam assessment, that proportion will apply to all qualifications offered by exam boards in that subject.

Having applied these principles to the updated content requirements and taken into account the responses to our consultation, we have decided on the balance of exam

² Available at <https://www.gov.uk/government/consultations/development-of-new-gcses-and-a-levels-for-teaching-from-2017>

and non-exam assessment for the subjects on which we consulted; these are summarised in Table 1 below.

Table 1 – Overview of our decisions on the proportion of non-exam assessment

Subject	GCSE		AS qualification		A level	
	Current weighting of non-exam assessment	New weighting of non-exam assessment	Current weighting of non-exam assessment	New weighting of non-exam assessment	Current weighting of non-exam assessment	New weighting of non-exam assessment
Astronomy	25%	0%	N/A	N/A	N/A	N/A
Business	25%	0%	N/A	N/A	N/A	N/A
Economics	0%	0%	N/A	N/A	N/A	N/A
Engineering	60%	40%	N/A	N/A	N/A	N/A
Geology	25%	0%	N/A	N/A	N/A	N/A
Psychology	0%	0%	N/A	N/A	N/A	N/A
Sociology	0%	0%	N/A	N/A	N/A	N/A
Design & technology	N/A	N/A	30-60%	50%	30-60%	50%
Environmental science	N/A	N/A	25%	0%	25%	0%
History of art	N/A	N/A	0%	0%	0%	0%
Music technology	N/A	N/A	65%	40%	70%	40%
Philosophy	N/A	N/A	0%	0%	0%	0%

In ten subjects (astronomy, business, economics, engineering, psychology, sociology, design & technology, environmental science, history of art and philosophy) there was broad support for the proposed weighting of non-exam assessment we consulted on.

However as can be seen from the consultation response analysis³ not every respondent agreed with our proposals. We considered all responses and the reasons for objection or suggestions for different weightings.

For example, in music technology, a majority of consultation respondents favoured a higher weighting of non-exam assessment than we had proposed. Respondents set

³ Available at <https://www.gov.uk/government/consultations/development-of-new-gcses-and-a-levels-for-teaching-from-2017>

out arguments that the weightings we proposed meant the examination would cover more content than was suitable to be examined in this way. After detailed discussions with the exam board that plans to offer this subject, we are of the view that a significant amount of the content can be assessed through a practically focused assessment, which meets our definition for an examination, that is focused on testing much of the knowledge and skills set out in the subject content. As this part of the content can be validly assessed through examination we have decided not to change the proposal we consulted on for non-exam assessment.

In general, across all subjects, when making a case that our proposals should require a higher percentage of non-exam assessment this was because of the presence of practical and applied learning during the student's course and the benefits for teaching and learning of non-exam assessment. Where respondents highlighted that the existing qualifications had non-exam assessment, they did not generally set out reasons why an examination would lead to invalid assessment.

We agree that examinations, like any assessment, can be badly designed and fail to validly assess the content required in the subject. But where we judge it is possible for an examination to validly assess the content we will use our regulatory requirements to require exam boards to design and operate effective assessments. As with all of the reforms to GCSE, AS and A level qualifications we will keep exam boards' development of assessments under review, both as we accredit their qualifications and throughout the lifetime of the qualification.

In the responses on environmental science a different set of issues was raised. Here, although a majority agreed with our proposals, a significant minority of respondents questioned why there would be a difference between this subject and other A level sciences in terms of the approach we propose to take to practical work. In A levels in biology, physics and chemistry we have proposed that a separate result will be included on the certificate in relation to competency in practical skills.

Our proposal here reflected the fact that, in this subject, the nature of the practical work that students will complete is different from the other sciences. It is more focused on work in the field and the content does not specify a list of equipment and techniques as in other science subjects. This means that we do not think that, for this content, competency requirements could be expressed in a way that could support consistent application and assessment. Following consultation, the DfE has decided to revise the requirements related to practical skills, in particular to increase the focus on fieldwork. Given the revised content, we think it is most appropriate for us to consult on a regulatory requirement to require a fieldwork statement, similar to those used in AS and A level geography, from centres to confirm this activity has taken place. Although the overall approach in this subject will be different to some of the other science subjects we believe it is appropriate and valid based on the subject content.

Assessment Objectives

After considering the responses to our consultation and reviewing the changes the DfE has made to the content requirements following its consultation, we have finalised the assessment objectives for the subjects on which we consulted. The final versions are set out at the end of this document, along with a link to the related DfE published content.

For each subject, we consulted on the wording and weighting of the assessment objectives that we require exam boards to target their assessment against. The assessment objectives we consulted on were aligned with the proposed subject content. Where following consultation there have been changes to the subject content we have reviewed the assessment objectives and updated them where necessary.

For each subject, the majority of respondents supported both the wording and weighting of the assessment objectives that we proposed. This was the case even in subjects where there were strong views about our non-exam assessment proposals. However, we have carefully considered the full range of comments made to us through consultation and decided to make some limited changes to the wording and/or the weighting of the assessment objectives in all subjects.

In some subjects the final assessment objectives we are setting out have been changed to reflect more than an evolution of the subject content. In particular:

- In GCSE astronomy the weightings we proposed were slightly different from those in the reformed GCSE sciences. Having reviewed this, we do not believe the subject content suggests a basis for this difference, and so we are changing the weightings to be consistent with the other science subjects.
- In GCSE sociology we reduced the weighting of AO1 and increased the weighting of AO2 by 10%. This better aligns with the updated subject content by reducing the marks available for demonstrating knowledge and understanding.
- For A level design & technology we have changed the wording of the assessment objectives to better align with those for GCSE design and technology, to promote coherence between the qualifications, since we do not believe the abilities to be targeted in each case are fundamentally different. The weighting of the assessment objectives has also changed slightly to reflect changes to the subject content.
- In A level philosophy we have moved from three assessment objectives to two. This is because we have been persuaded that having the three assessment objectives we proposed risks restricting the question types exam boards would be able to set, in a way that would be inappropriate for the subject. Combining

two of the previous objectives into one has led to a heavily weighted objective and we have taken care to develop it so that we it reflects the subject content in a way that will require it to be targeted appropriately.

Assessment arrangements for GCSE astronomy

Tiering

Assessment will not be tiered in this subject.

Non Exam assessment

There will be no non exam assessment in this subject.

Assessment Objectives

	Objective	Weighting
AO1	Demonstrate knowledge and understanding of: <ul style="list-style-type: none">▪ scientific ideas▪ scientific techniques and procedures	40%
AO2	Apply knowledge and understanding of: <ul style="list-style-type: none">▪ scientific ideas▪ scientific techniques and procedures	40%
AO3	Analyse information and ideas to: <ul style="list-style-type: none">▪ interpret and evaluate astronomical observations, data and methods▪ make judgements and draw conclusions▪ develop and improve observational procedures	20%

Assessment arrangements for GCSE business

Tiering

Assessment will not be tiered in this subject.

Non Exam assessment

There will be no non exam assessment in this subject.

Assessment Objectives

	Objective	Weighting
AO1	Demonstrate knowledge and understanding of business concepts and issues	35%
AO2	Apply knowledge and understanding of business concepts and issues to a variety of contexts	35%
AO3	Analyse and evaluate business information and issues to demonstrate understanding of business activity, make judgements and draw conclusions	30%

Assessment arrangements for GCSE economics

Tiering

Assessment will not be tiered in this subject.

Non Exam assessment

There will be no non exam assessment in this subject.

Assessment Objectives

	Objective	Weighting
AO1	Demonstrate knowledge and understanding of economic concepts and issues	35%
AO2	Apply knowledge and understanding of economic concepts and issues to a variety of contexts	35%
AO3	Analyse and evaluate economic evidence and issues to demonstrate understanding of economic behaviour, make judgements and draw conclusions	30%

Assessment arrangements for GCSE engineering

Tiering

Assessment will not be tiered in this subject.

Non Exam assessment

40% of the marks in this subject will be allocated to non-exam assessment.

Assessment Objectives

	Objective	Weighting
AO1	Demonstrate knowledge and understanding of engineering principles and processes	25%
AO2	Apply knowledge, understanding and skills in different contexts, including through the use of a range of tools, equipment, materials, components and manufacturing processes	50%
AO3	Analyse and evaluate evidence in relation to a range of engineering contexts	25%

Assessment arrangements for GCSE geology

Tiering

Assessment will not be tiered in this subject.

Non Exam assessment

There will be no non exam assessment in this subject.

Assessment Objectives

	Objective	Weighting
AO1	Demonstrate knowledge and understanding of geological ideas, skills and techniques	40%
AO2	Apply knowledge and understanding of geological ideas, skills and techniques	40%
AO3	Analyse, interpret and evaluate geological ideas, information and evidence to make judgements and draw conclusions	20%

Assessment arrangements for GCSE psychology

Tiering

Assessment will not be tiered in this subject.

Non Exam assessment

There will be no non exam assessment in this subject.

Assessment Objectives

	Objective	Weighting
AO1	Demonstrate knowledge and understanding of psychological ideas, processes and procedures	35%
AO2	Apply knowledge and understanding of psychological ideas, processes and procedures	35%
AO3	Analyse and evaluate psychological information, ideas, processes and procedures to make judgements and draw conclusions	30%

Assessment arrangements for GCSE sociology

Tiering

Assessment will not be tiered in this subject

Non-exam assessment

There will be no non-exam assessment in this subject

Assessment objectives

	Assessment objective	Weighting
AO1	Demonstrate knowledge and understanding of sociological theories, concepts, evidence and methods.	40%
AO2	Apply knowledge and understanding of sociological theories, concepts, evidence and methods.	40%
AO3	Analyse and evaluate sociological theories, concepts, evidence and methods in order to construct arguments, make judgements and draw conclusions.	20%

Assessment arrangements for AS and A level design & technology

Tiering

Assessment will not be tiered in this subject.

Non Exam assessment

50% of the marks in this subject will be allocated to non-exam assessment.

Assessment Objectives

Objective	Weighting	
	A level	AS level
AO1 Identify, investigate and outline design possibilities to address needs and wants	10-15%	10-15%
AO2 Design and make prototypes that are fit for purpose	20-25%	20-25%
AO3 Analyse and evaluate – <ul style="list-style-type: none">▪ design decisions and outcomes, including for prototypes made by themselves and others▪ wider issues in design and technology	20-25%	20-25%
AO4 Demonstrate and apply knowledge and understanding of – <ul style="list-style-type: none">▪ technical principles▪ design and making principles	35-40%	35-40%

Assessment arrangements for AS and A level environmental science

Tiering

Assessment will not be tiered in this subject.

Non Exam assessment

There will be no non exam assessment in this subject.

Assessment Objectives

Objectives	Weightings	
	A level	A/S
AO1 Demonstrate knowledge and understanding of scientific ideas, processes, techniques and procedures, including in relation to natural processes/systems and environmental issues	30-35%	35-40%
AO2 Apply knowledge and understanding of scientific ideas, processes, techniques and procedures, including in relation to natural processes/systems and environmental issues	40-45%	40-45%
AO3 Analyse, interpret and evaluate scientific information, ideas and evidence, including in relation to environmental issues, to make judgements and draw conclusions	25-30%	20-25%

Assessment arrangements for AS and A level history of art

Tiering

Assessment will not be tiered in this subject.

Non Exam assessment

There will be no non exam assessment in this subject

Assessment Objectives

	Objectives	Weightings	
		A level	A/S
AO1	Demonstrate knowledge and understanding of the contexts of art	30-40%	30-40%
AO2	Analyse and interpret artists' work, demonstrating understanding of visual language	30-40%	30-40%
AO3	Make critical judgements about art through substantiated reasoned argument	30-40%	20-30%

Assessment arrangements for AS and A level music technology

Tiering

Assessment will not be tiered in this subject.

Non Exam assessment

40% of the marks in this subject will be allocated to non-exam assessment.

Assessment Objectives

	Objective	Weighting
AO1	Demonstrate use of music technology to capture, edit and produce recordings	A level 30-40% AS level 30-40%
AO2	Demonstrate use of music technology to create, edit and structure sounds to develop a technology based composition	A level 20-30% AS level 20-30%
AO3	Demonstrate and apply knowledge and understanding of music technology	A level 20-30% AS level 25-35%
AO4	Use analytical and appraising skills to make evaluative and critical judgements about the use of music technology	A level 15-25% AS level 10-20%

Assessment arrangements for AS and A level philosophy

Tiering

Assessment will not be tiered in this subject.

Non Exam assessment

There will be no non exam assessment in this subject.

Assessment Objectives

	Objective	Weighting
AO1	Demonstrate knowledge and understanding of the core concepts and methods of philosophy, including through the use of philosophical analysis	A level 60-65% AS 75-80%
AO2	Analyse and evaluate philosophical arguments to form reasoned judgements	A level 35-40% AS 20-25%

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