

The New Science GCSEs – One Year On

New GCSEs were introduced in September 2006. This note follows on from a briefing issued by the RSC and summarizes courses available and the opportunities for further study at A-level.

Since the introduction of the new Science GCSEs in September 2006 there have been various expressions of concern in the press, from members, from teachers and others. This note is intended to help inform the debate.

What awarding bodies are providing specifications?

- AQA – Ethos
- Edexcel – Ethos Modern Contexts, Models and Explanation
- OCR Gateway – Ethos Modern Contexts, Models and Explanation
OCR 21st Century Science – Science for the Citizen
- WJEC

What types of GCSE are available from these awarding bodies?

- Core Science – fulfils the legal requirement to deliver the national curriculum and is designed for both the citizen and for those studying the sciences further in conjunction with those below.
- Additional Science – provides the extra material for progression to A-level.
- Single Subject Chemistry – contains the chemistry content of core and additional science plus 2 other chemistry modules.
- Additional Applied Science – provides extra material in an applied context with possible progression to Applied A-levels.
- Double Award Applied Science – a double GCSE with 60% of the assessment internally.

Where can I find more detail?

www.rsc.org/education/teachers/newGCSEs2006.asp

Progression to A-level

The RSC recommends that students who have achieved grades CC or above in Core + Additional Science, or a grade C in Single Subject Chemistry would have an appropriate amount of background to study Advanced level GCE. These students will be the cohort that begins A-level in September 2008.

What A-level specifications will be available?

- AQA – Chemistry, Science in Society, and Environmental Science
- Edexcel – Chemistry
- OCR – Chemistry and Salters' Chemistry
- WJEC – Chemistry

What will be the structure of these new A-levels?

- AS level: 2 externally assessed modules (perhaps of unequal length) + 1 internal assessment of practical skills

- A2 level: 2 externally assessed modules + 1 internal assessment of practical skills

There will be requirements for:

- stretch and challenge
- extended writing
- synopticity

What should teachers consider in choosing new chemistry specifications?

- Treatment of How Science Works
- Assessment model – proportion of multiple choice and other types of questions and the range of question styles
- Learning and teaching styles – context based or not
- What internal assessment will suit them and their students

Where can I find further information?

Draft materials are available on awarding bodies' websites:

AQA: http://www.aqa.org.uk/qual/gce/chemistry_new.php

CCEA: http://www.rewardinglearning.com/spec-changes/draft_gce_specs.asp

EDEXCEL: <http://developments.edexcel.org.uk/gce2008/subjects/chemistry/>

OCR: http://www.ocr.org.uk/qualifications/AS_ALevelGCE14-19ChemistryA.html & http://www.ocr.org.uk/qualifications/AS_ALevelGCE14-19ChemistryBSalters.html

WJEC: <http://www.wjec.co.uk/index.php?subject=13&level=21>

Over the next year the RSC will be providing both comparisons and resource materials for the new specifications. We will also be linking materials to industrial teaching units via our new resource portal of RSC material and material from around the world www.chemistryteachers.org.

Dr Colin Osborne