The Australian Curriculum, Assessment and Reporting Authority (ACARA) plans to release the draft senior secondary Australian Curriculum in 14 subjects for English, Mathematics, Science and History for public consultation from late April to early July 2012.

The curriculum developed by ACARA for 14 subjects will include content and achievement standards that will provide the basis for greater consistency in what is to be taught in senior secondary years of schooling. The focus for consultation will be on whether the proposed curriculum content and achievement standards represents what young Australian should have the opportunity to learn in the senior years of schooling.

Once approved, the national curriculum will be available for integration into state and territory courses which will also include additional information, guidelines and rules that meet local assessment and certification requirements. Senior secondary courses will be approved by the relevant state and territory curriculum, assessment and certification authority.

Preparation of draft curriculum

In 2010 ACARA released draft senior secondary Australian Curriculum for public consultation. The feedback from this consultation, independently collected and analysed, was considered in developing the current draft curriculum. Since then ACARA has also conducted the following activities seeking feedback on revisions to the curriculum content:

- national forums with teachers, professional associations and academics from each state and territory with specific subject expertise in June 2010 and August 2011
- national panel meetings with representatives from each state and territory for each of the 14 subjects in November 2011.

In response to all this feedback, the following revisions have been made:

- the rationale and aims have been refined to make the purpose of each subject explicit
- the content has been revised to address issues with volume, pitch, clarity and coherence
- unit descriptions have been revised to better describe the context for learning in each unit
- language has been simplified

Achievement standards for each subject have also been drafted. This work has involved collaboration with experienced senior secondary practitioners and curriculum, assessment and certification authorities. The achievement standards are organised by two dimensions and describe expected learning at five levels of achievement for units 1 and 2 and for units 3 and 4.

Further information about the draft senior secondary Australian Curriculum for each of the four areas (including notes on how the curriculum has changed since national consultation in 2010) can be accessed here:

- English
- Mathematics
- Science
- History
The senior secondary Australian Curriculum for English consists of four subjects – English, Essential English, English as an Additional Language or Dialect (EAL/D) and Literature.

**What’s changed from 2010?**

In response to the 2010 consultation feedback, changes made to each of the four senior secondary English subjects (beyond what is stated in the introduction) include:

- The four unit structure is retained for each subject although English as an Additional Language or Dialect (EAL/D) has an additional four units to cater for greater diversity in the student cohort. A clearer development in language acquisition has also been established in this subject.

- Sample texts accompany each subject and have been included for illustrative purposes only.

**Senior English subjects**

**English** is a study of the language of literary and media texts in which students critically and creatively engage with a variety of texts in all language modes. English extends students’ language, literature and literacy skills for a range of purposes, audiences and contexts.

**Essential English** focuses on refining and consolidating literacy skills to enable students to become competent, confident and engaged users of language in a range of everyday, community, social and applied learning contexts. Students engage with a range of texts such as literary and media texts.

**English as an Additional Language or Dialect** focuses on language learning and the explicit teaching of the structure, linguistic features and sociolinguistic and sociocultural aspects of SAE. Units 1-4 are designed for students whose home language/dialect is not Standard Australian English (SAE) and whose senior secondary study in all curriculum areas will benefit from explicit teaching of these aspects of SAE.

EAL/D Bridging Units are also offered and are designed for students who:

- have had limited exposure to SAE. These students may have recently exited an Intensive English Centre, or be in a rural, remote or very remote setting with limited or no access to EAL/D specialist intervention
- are new to the Australian educational setting or who have had little or no prior formal education.

**Literature** focuses on the study literary texts at an intensive level. Literature deepens students’ understanding of conventions common to different types of composition and refines their understanding of the effects of language through shared experience of texts and the creative process.
The senior secondary Australian Curriculum for Mathematics consists of four subjects - Essential Mathematics, General Mathematics, Mathematical Methods and Specialist Mathematics.

**What’s changed from 2010?**

In response to the 2010 consultation feedback, changes made to each of the four senior secondary Mathematics subjects (beyond what is stated in the introduction) include:

- The ordering of topics within each unit has been refined to make combinations of subjects workable
- The role and use of technology within each topic has been made more explicit.

The four unit structure has remained the same for each subject.

**Senior Mathematics subjects**

**Essential Mathematics** focuses on using mathematics effectively, efficiently and critically, to make informed decisions in daily lives. The emphasis of Essential Mathematics is to provide students with the mathematical knowledge, skills and understanding to solve problems in real contexts for a range of workplace, personal, further learning and community settings. This subject provides the opportunity for students to prepare for post-school options of employment and further training.

**General Mathematics** focuses on using the techniques of discrete mathematics to solve problems in contexts that include financial modelling, network analysis, route & project planning, decision making, and discrete growth and decay. General Mathematics provides an opportunity to analyse and solve a wide range of geometrical problems in areas such as measurement, scaling, triangulation and navigation. It also provides opportunities to develop systematic strategies based on the statistical investigation process for answering statistical questions that involve comparing groups, investigating associations and analysing time series.

**Mathematical Methods** focuses on the development of the use of calculus and statistical analysis. The study of calculus in Mathematical Methods provides a basis for an understanding of the physical world involving rates of change and includes the use of functions, their derivatives and integrals, in modelling physical processes. The study of statistics in Mathematical Methods develops the ability to describe and analyse phenomena involving uncertainty and variation.

**Specialist Mathematics** provides opportunities, beyond those presented in Mathematical Methods, to develop rigorous mathematical arguments and proofs, and to use mathematical models more extensively. Specialist Mathematics contains topics in functions and calculus that build on and deepen the ideas presented in Mathematical Methods and demonstrate their application in many areas. Specialist Mathematics also extends understanding and knowledge of probability and statistics and introduces the topics of vectors, complex numbers, matrices and recursive methods.
The senior secondary Australian Curriculum for Science consists of four subjects - Biology, Chemistry, Earth and Environmental Science, and Physics.

**What’s changed from 2010?**

In response to the 2010 consultation feedback, changes made to each of the four senior secondary Science subjects (beyond what is stated in the introduction) include:

- Each subject has been reconceptualised with a focus on ‘big ideas’ and to ensure that there is a clear developmental sequence across the units.

- The units have been written to accommodate an *Extended Scientific Investigation* per pair of units (not one per unit as proposed in 2010), noting that such requirements will need to be confirmed by state or territory authorities.

- A set of *Possible Inquiry Questions* have been provided for each unit, to assist teachers to integrate the three strands of Science Understanding, Science as a Human Endeavour and Science Inquiry Skills within an inquiry focus.

- Across the subjects, the conceptual demand of Unit 1 has been reviewed to ensure that there is appropriate progression from Year 10 Science to senior secondary Science. Key concepts are revisited and extended in Units 1 and 2 to ensure students have a deep understanding of the fundamental knowledge and understanding.

**Senior Science subjects**

As with the Foundation to Year 10 Australian Curriculum: Science, the content for each of the senior secondary subjects is organised by the three strands of Science Understanding, Science as a Human Endeavour and Science Inquiry Skills and these strands are reflected in the dimensions of the draft Achievement Standards.

**Biology** emphasises a systems approach to biological phenomena, connecting systems at sub-cellular scales to whole organisms systems and ecosystems, and exploring the relationships between structure and function, flows of matter and energy, and change and continuity.

**Chemistry** focuses on the big ideas of chemical structure and properties, energy and reaction, developing understanding of chemical models and theories and culminating in an exploration of system equilibrium, synthesis and analysis.

**Earth and Environmental Science** develops understanding of the Earth system model, and focuses on the formation, interaction and inter-dependencies of Earth’s spheres, and how these interactions result in and impact Earth processes, environments and resources.

**Physics** focuses on building student understanding of key concepts, models and theories in Physics, and emphasises how these have been developed; how they are applied; and how they have been challenged and reconceptualised over time.
The senior secondary Australian Curriculum for History consists of two subjects – Modern History and Ancient History.

Previously:

• the Modern History draft was based on a six unit structure with pairs of units for Unit 2 (that is Units 2a and 2b) and for Unit 3 (that is Units 3a and 3b).

What’s changed from 2010?

In response to the 2010 consultation feedback, changes made to each of the senior secondary History subjects (beyond what is stated in the introduction) include:

• The development of a more coherent structure based on FOUR units for each subject maintaining the flexibility in the choice of topic electives that was a key feature of the former structure.

• Modern history has been revised to:
  • strengthen opportunities for the study of contemporary history post-1945
  • broaden the focus of Units 1 and 2 beyond a study of World Wars I and II
  • provide opportunities to follow particular pathways of study across some units, for example in the study of revolutions or in the study of Asian history.

• Ancient history has been revised to:
  • provide a stronger emphasis on written sources while retaining opportunities to study topics with more of an archaeological focus
  • provide opportunities to follow particular pathways of study across some units, for example in the study of Egyptian history or in the study of Roman history.

Senior History subjects

The two senior secondary History subjects continue to develop student learning through the two strands of historical knowledge and understanding, and historical skills.

Modern History focuses on key events, ideas, movements, developments and people that have shaped the modern world. It enables students to develop a broader and deeper comprehension of the world in which they live through their study of key developments that have defined the modern world: the ideas that underpinned them; movements for change; the crises that confronted nation-states; and the distinctive features of the modern world that have emerged since 1945.

Ancient History focuses on the nature of the evidence for the ancient world, the key features of ancient societies, and issues of preservation, conservation and reconstruction. It enables students to develop an understanding of the distinctive features of contemporary societies through their study of the social organisation, systems of law, governance and religion of ancient societies.