

The study of Senior Science Stage 6 provides students with a contemporary and coherent understanding of some of the basic laws, theories and principles of Biology, Chemistry, Physics and Earth and Environmental Science and their application. It includes an examination of the technology that uses these laws, theories and principles and the impact of this science and technology on society. It reflects the interdisciplinary nature of science with a focus on the interdependence of science, technology and society. Senior Science Stage 6 caters to a wide range of students who wish to become scientifically literate citizens. The course encourages students to develop a range of practical skills including the use of current instrumentation, information technology and an increased ability to communicate understanding. Senior Science Stage 6 focuses on all of these areas framed within the principles of Biology, Chemistry, Physics and Earth and Environmental Science.

Senior Science Stage 6 draws upon and builds on the knowledge and understanding, skills and values and attitudes developed in Science Stages 4–5. It further develops students' understanding of science as a continually developing body of knowledge, of the role of experimentation in deciding between competing theories and of the provisional nature of scientific explanations. In addition, this course develops further understanding of the interdisciplinary nature of science, the complex relationship between evidence and ideas and the impact of science on society.

The study of Senior Science Stage 6 involves the students working individually and with others in the laboratory, in the field and with interactive multimedia, gaining experiences that are related to the theoretical concepts considered in the course. It is expected that students studying Senior Science Stage 6 will apply investigative and problem-solving skills, effectively communicate scientific information and understanding and appreciate the contribution that a study of science makes to our understanding of the world.

Senior Science Stage 6 caters for a wide range of students, providing stimulation for students who have achieved elementary to substantial achievement level in the Science Stages 4–5 course. Students who have completed the Biology, Chemistry, Earth and Environmental Science or Physics Preliminary course but do not wish to continue on to the HSC in that course can elect to undertake the Senior Science HSC course.