

Course: **INVESTIGATING SCIENCE**

2 Units for each of Preliminary and HSC Board Developed Course



Exclusions: Nil

Course Description:

Investigating Science is a new stage 6 science course and is not a replacement for Senior Science. It is also a much more difficult stage 6 course than Senior Science. Students wishing to enroll in this new course should speak to their science teacher before making a final decision to select the subject.

The *Investigating Science Stage 6 Syllabus* is designed to assist students of all abilities engage with scientific processes, and apply those processes to investigate relevant personal, community and global scientific issues.

The ongoing study of science and the specific Working Scientifically skills processes and their application have led humans to accumulate an evidence-based body of knowledge about human interactions – past, present and future – with the world and its galactic neighbourhood. The course is firmly focused on developing the Working Scientifically skills, as they provide a foundation for students to value investigation, solve problems, develop and communicate evidence-based arguments, and make informed decisions.

The course promotes active inquiry and explores key concepts, models and phenomena. It draws and builds on the knowledge, understanding, skills, values and attitudes gained in Science Stage 5. The Stage 6 course is designed to enhance students' understanding of the value of evidence-based investigations and the use of science-based inquiry in their lives.

The Investigating Science course is designed to complement the study of the science disciplines by providing additional opportunities for students to investigate and develop an understanding of scientific concepts, their current and future uses, and their impacts on science and society. The course draws on and promotes interdisciplinary science, by allowing students to investigate a wide range of STEM (Science, Technology, Engineering and Mathematics) related issues and concepts in depth.

Investigating Science encourages the development of a range of capabilities and capacities that enhance a student's ability to participate in all aspects of community life and within a fast-changing technological landscape. The knowledge, understanding and skills gained from this course are intended to support students' ongoing engagement with science, and to form the foundation for further studies and participation in current and emerging STEM-related post-school activities and industries.

Preliminary Course

Year 11 course (120 hours)	Working Scientifically Skills	Modules	Indicative hours	Depth studies
		Module 1 Cause and Effect – Observing	60	*30 hours in Modules 1–4
		Module 2 Cause and Effect – Inferences and Generalisations		
		Module 3 Scientific Models	60	
		Module 4 Theories and Laws		

HSC Course

Year 12 course (120 hours)	Working Scientifically Skills	Modules	Indicative hours	Depth studies
		Module 5 Scientific Investigations	60	*30 hours in Modules 5–8
		Module 6 Technologies		
		Module 7 Fact or Fallacy?	60	
		Module 8 Science and Society		