

Science

Learning Area Overview

The learning and teaching program at Kilbreda College is both dynamic and innovative, catering for the students' spiritual, academic, social, emotional and physical development. Students are challenged to be creative, critical and reflective thinkers and to develop a broad and transferable skill set. Opportunities for both independent and collaborative learning are provided and contemporary technologies are integrated throughout the learning and teaching program.

Science is a dynamic, collaborative and creative human activity where students explore the unknown and conduct experiments to make sense of what they have heard and seen, be it in the classroom or beyond.

At the College, we aim to foster curiosity and nurture a love of learning. All topics provide opportunities to hypothesise, to plan investigations, gather data and draw evidence-based conclusions. Students are encouraged to critically assess claims made in the media concerning contemporary issues such as the use of finite resources and renewable energy, genetic engineering and global warming, to become independent thinkers who will have a voice in society beyond their school years. In Year 7 to Year 10 Science classes, students are exposed to a range of areas from the biological, chemical, physical, earth and space science fields as prescribed by the Victorian Curriculum. Almost all Science classes are conducted in a dedicated laboratory to allow a practical approach to learning.

An additional interested-based elective of Forensic Science is offered to students in Year 9, while students in Year 10 can choose from Medical Science, Science of Survival and Life Beyond Earth. These electives provide the opportunity to learn science in real-world contexts and explore possible STEM career pathways.

Many Years 7 to 10 students enjoy competing in The Big Science competition, while our senior STEM students look forward to our annual Kilbreda in STEM morning tea. Physics students experience first-hand and later analyse the forces at work in the thrills and spills of rides at the iconic Luna Park and Biology students learn about primate evolution at Melbourne Zoo. These experiences help to bring studies to life and allow students to see their relevance in the world today.

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Science Curriculum

The Science curriculum includes a range of core subjects and electives, both semester based and year long.

YEAR 7	YEAR 8	YEAR 9
Core Study – Year Long	Core Study – Year Long	Core Study – Year Long
<ul style="list-style-type: none">Science	<ul style="list-style-type: none">Science	<ul style="list-style-type: none">Science
		Elective Studies - Semester Based
		<ul style="list-style-type: none">Forensic Science
YEAR 10	YEAR 11	YEAR 12
Elective Studies – Semester Based	Elective Studies – Year Long	Elective Studies – Year Long
<ul style="list-style-type: none">Science of SurvivalLife Beyond EarthMedical Science	<ul style="list-style-type: none">Biology 1&2Chemistry 1&2Physics 1&2Psychology 1&2	<ul style="list-style-type: none">Biology 3&4Chemistry 3&4Physics 3&4Psychology 3&4
Accelerated Studies (VCE Units 1&2)		
<ul style="list-style-type: none">BiologyPsychology		

Cocurricular and Enrichment Opportunities

- Sustainability Group
- Foreshore Program
- Big Science* Competition
- STEM MAD National Competition
- Science Talent Search

Annual Events

Science Week

A dedicated week planned by Science staff along with the STEM leaders, that highlights the Learning Area and encourages participation from all students in the College. There are activities every day at lunchtime for students to participate in whilst using their imagination, being creative and having fun.

Our Kilbreda in STEM morning tea also occurs during Science Week, with alumni studying and working in STEM fields returning to the school to share their experiences with current STEM students.