

SCIENCE

INFORMATION

GUIDE



*"Nothing in life is to be feared,
it is only to be understood."*

Marie Curie

Kilbreda College

A Kildare Education Ministries School in the Brigidine Tradition





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. Concepts are taught in relation to real world contexts and girls are given opportunities to hypothesise, to plan investigations, gather data and draw relevant conclusions. Students are encouraged to critically assess claims made in the media concerning contemporary issues such as the use of plastics, 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.

Additional interest based electives of Forensic Science, Environmental Science and Sustainability and Medical Science and Psychology are offered to students in Years 9 and 10. These electives enhance the core Science taught in class and open new learning contexts and possible new career pathways.

Year 7 students explore animal classification at the Melbourne Zoo. When in Year 9, students undertake a study trip to CERES Community Environment Park to explore their topic of Ecosystems, in context with the Humanities study of Farming and our Future. VCE Biology students also explore habitats and evolution at the Melbourne Zoo. Year 10 students visit the Melbourne Museum to participate in an interactive "Road to Zero" workshop which highlights aspects of car safety and the quest for a zero road toll that link to their topic of forces and motion. Many Chemistry students take on the challenge of the annual Titration Stakes competition to test their accuracy of chemical techniques. VCE Physics students experience first hand and later analyse the forces at work in the thrills and spills of rides at the iconic Luna Park. VCE Psychology students visit ArtVo to enhance their study of how the brain perceives images. These experiences help to bring studies to life and allow students to see their relevance in the world today.

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"> • Environmental Science and Sustainability • Forensic Science
YEAR 10	YEAR 11	YEAR 12
Core Study – Year Long	Elective Studies – Year Long	Elective Studies – Year Long
<ul style="list-style-type: none"> • Science 	<ul style="list-style-type: none"> • Biology 1&2 • Chemistry 1&2 • Physics 1&2 • Psychology 1&2 	<ul style="list-style-type: none"> • Biology 3&4 • Chemistry 3&4 • Physics 3&4 • Psychology 3&4
Elective Studies – Semester Based		
<ul style="list-style-type: none"> • Medical Science and Psychology Accelerated Studies (VCE Units 1&2) <ul style="list-style-type: none"> • Biology • Psychology 		

Cocurricular and Enrichment Opportunities

- Sustainability Group
- Foreshore Program
- *RACI Titrations Stakes*
- *Big Science Competition*
- *Brain Bee Competition*
- The University of Melbourne *Girl Power in STEM* Program
- Monash University *Year 8 Engineering Challenge*
- Year 8 Science Talent Search

Annual Events

Science Week

A dedicated week planned by Science staff along with the Science student 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.

To find out more information about Science
at Kilbreda College, please contact:

Jacinta Devlin
Learning Leader: Science

(03) 9581 7609
jacinta.devlin@kilbreda.vic.edu.au

Kilbreda College

118 Mentone Parade, Mentone VIC 3194
kilbreda@kilbreda.vic.edu.au
kilbreda.vic.edu.au
(03) 9581 7766
PO Box 248, Mentone VIC 3194

