



Investigating Science



Science

Stage 6

There are five Science subjects offered in Stage 6 at Waverley College for 2021:

- Biology (HSC plus ATAR course)
 - Chemistry (HSC plus ATAR course)
 - Physics (HSC plus ATAR course)
 - Investigating Science (HSC plus ATAR course)
 - Marine Studies (HSC plus vocational course)
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HSC Results

How well do our students do in the HSC?

Biology had 2 students with a Band 6 result 90+ in 2019
(11.11% of Waverley students versus 7.31% of students in the state)

Chemistry had 4 students with a Band 6 result 90+ in 2019
(25.0 % of Waverley students versus 16.04 % of students in the state)

Physics had 4 students with a Band 6 result 90+ in 2019
(21.05% of Waverley students versus 12.37 % of students in the state)

In 2019, Investigating Science had the average that was the most above state average at Waverley (7.99 marks above the state average)



Investigating Science - What do I need to know?

Investigating Science is a Science subject open to the top 70% of students in Year 10.

The HSC mark in Investigating Science counts toward the ATAR.

The Investigating Science course covers content from all areas of science and focuses more on designing, carrying out and analysing investigations.

It can be studied in combination with Biology, Chemistry and Physics

Go to NESA website - Science Stage 6 for more detail

www.educationstandards.nsw.edu.au



Investigating Science - Preliminary Course

Year 11 is all about the entire business of evidence-based thinking/collection/analysis

- Learning how to write a scientific investigation (very useful if you are doing another science as those topics do not have time to cover the intricate details of writing a report.
 - Two assignments and one exam (Time allocated in class to complete the assignments)
 1. Students investigate something that interests them (a similar concept to the Year 9 Student Research Project)
 2. Students make a model and write an essay on the effects of models on our scientific understanding
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Investigating Science HSC Course

Year 12 unpacks scientific information (can we find flaws in an experimental method? Does it test what it says? Is it fraud? Is it pseudoscience?)

- Technologies that have helped develop science; science that has helped develop technology
 - Fact or Fallacy?
 - Ethical issues / Regulations / public image of science e.g. designer babies, GMO
 - Two assignments (completed in class time) and one exam
1. Students investigate something that interests them (similar concept to Year 9/11 task)
 2. Student essay – evidence based argument on a choice of topic e.g. Tobacco industries vs science; climate change vs mining industry
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Who should take investigating science?

1. Students aiming for work within the technology industries
2. Students taking other HSC sciences (the skills developed in Investigating Science help in other science subjects)
3. Students aiming to do University level STEM.
4. Students who want to become evidence-based decision makers
5. Students who would like to do a Science that is more focused on real world issues.

The aim of Investigating Science is for students to investigate the biggest societal issues (scientific/innovative/technological) on the horizon across different industries.

