



HSC Subject Selections



What Science subjects are available to study?

- Biology
- Chemistry
- Earth and Environmental
- Investigating Science
- Physics
- Marine Studies

Biology (2 units)

Year 11

- Module 1: Cells as the Basis of Life
- Module 2: Organisation of Living Things
- Module 3: Biological Diversity
- Module 4: Ecosystem Dynamics

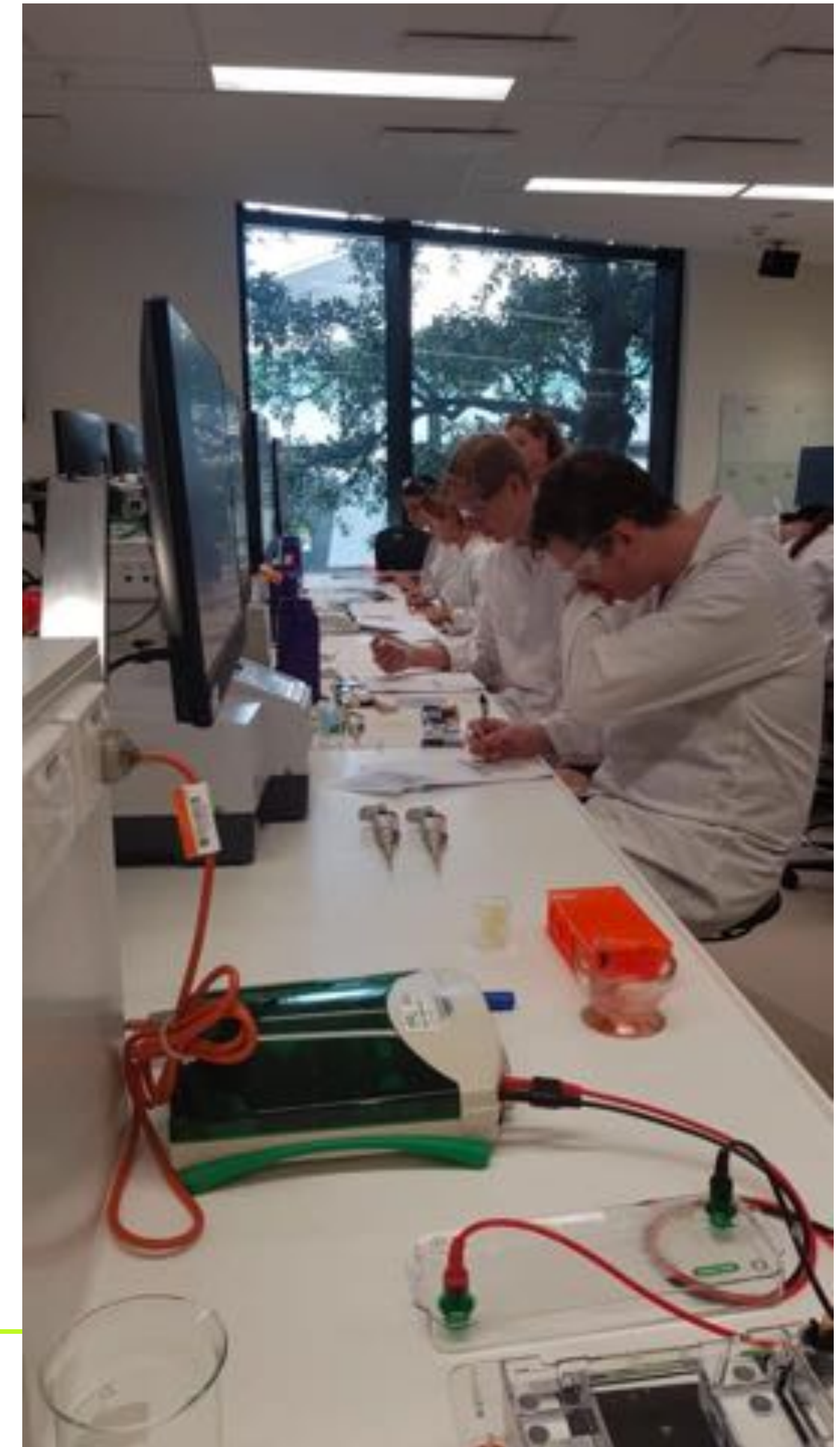
Year 12

- Module 5: Heredity
- Module 6: Genetic Change
- Module 7: Infectious Disease
- Module 8: Non-Infectious Disease

Biology is the study of life. In this course you will learn about the diversity of life, from microscopic cells to organisms and their wider environment.

Beneficial for careers in agriculture, animal sciences, earth sciences, teaching, health sciences and sports sciences.

Biology (2 units)



Chemistry (2 units)

Year 11

- Module 1: Properties and Structure of Matter
- Module 2: Introduction to Quantitative Chemistry
- Module 3: Reactive Chemistry
- Module 4: Drivers of Reactions

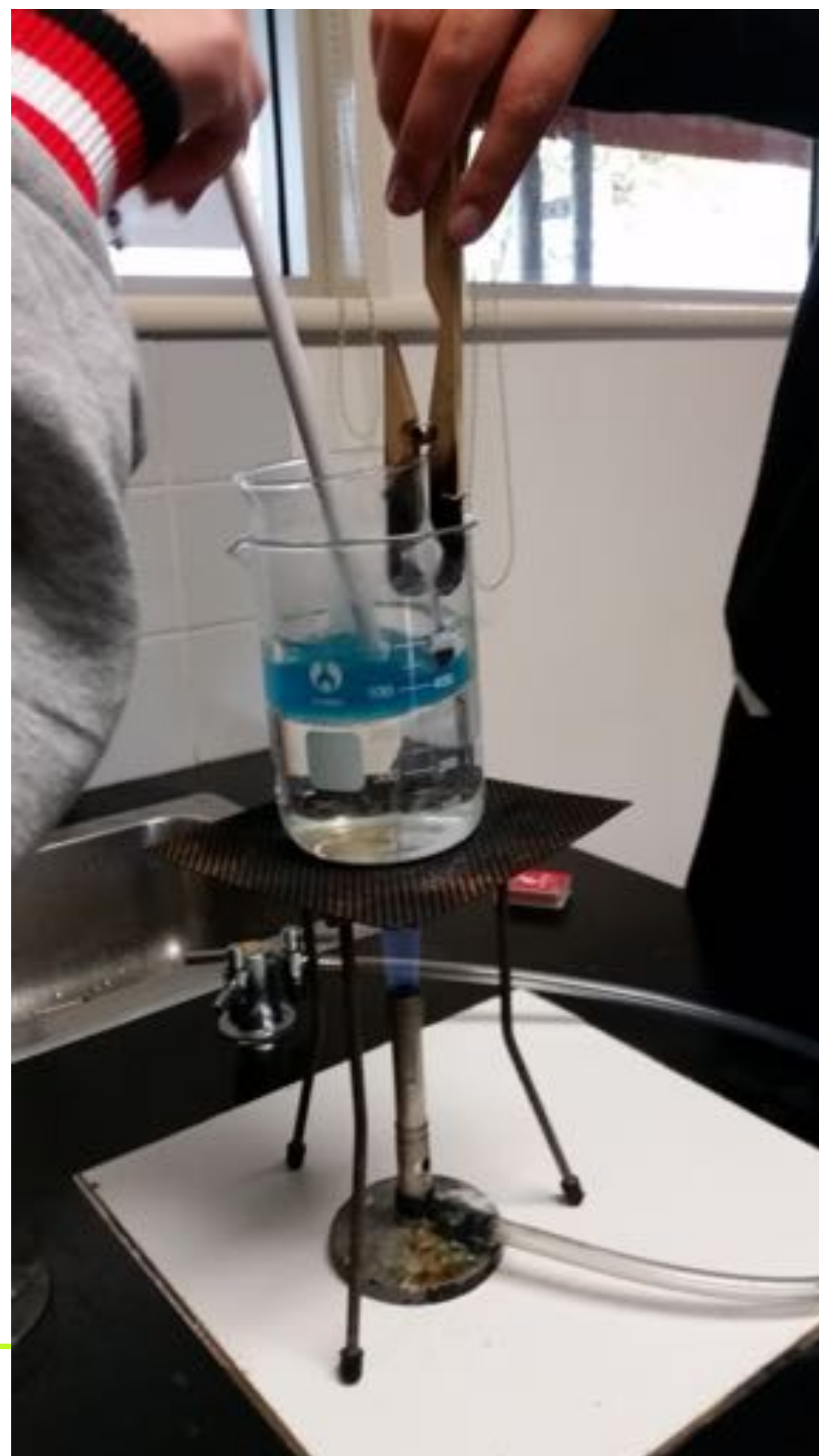
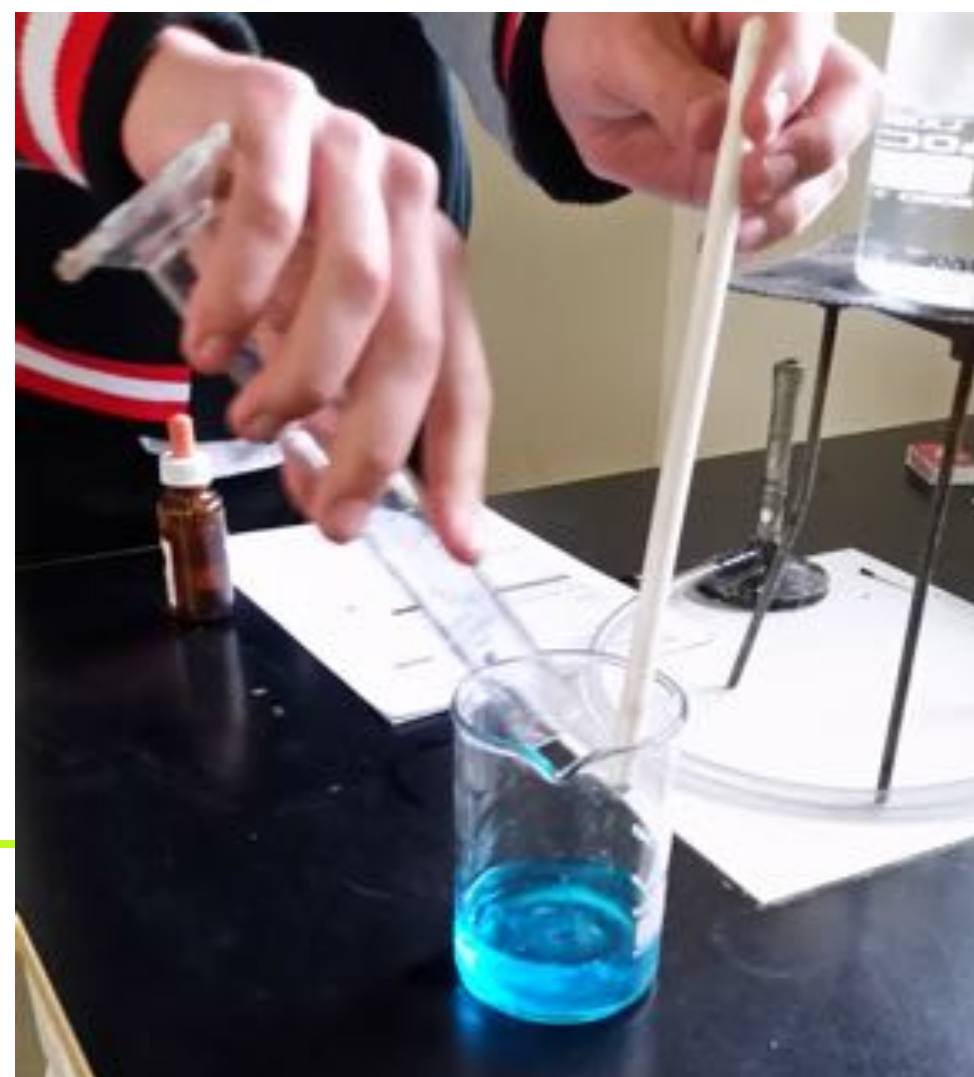
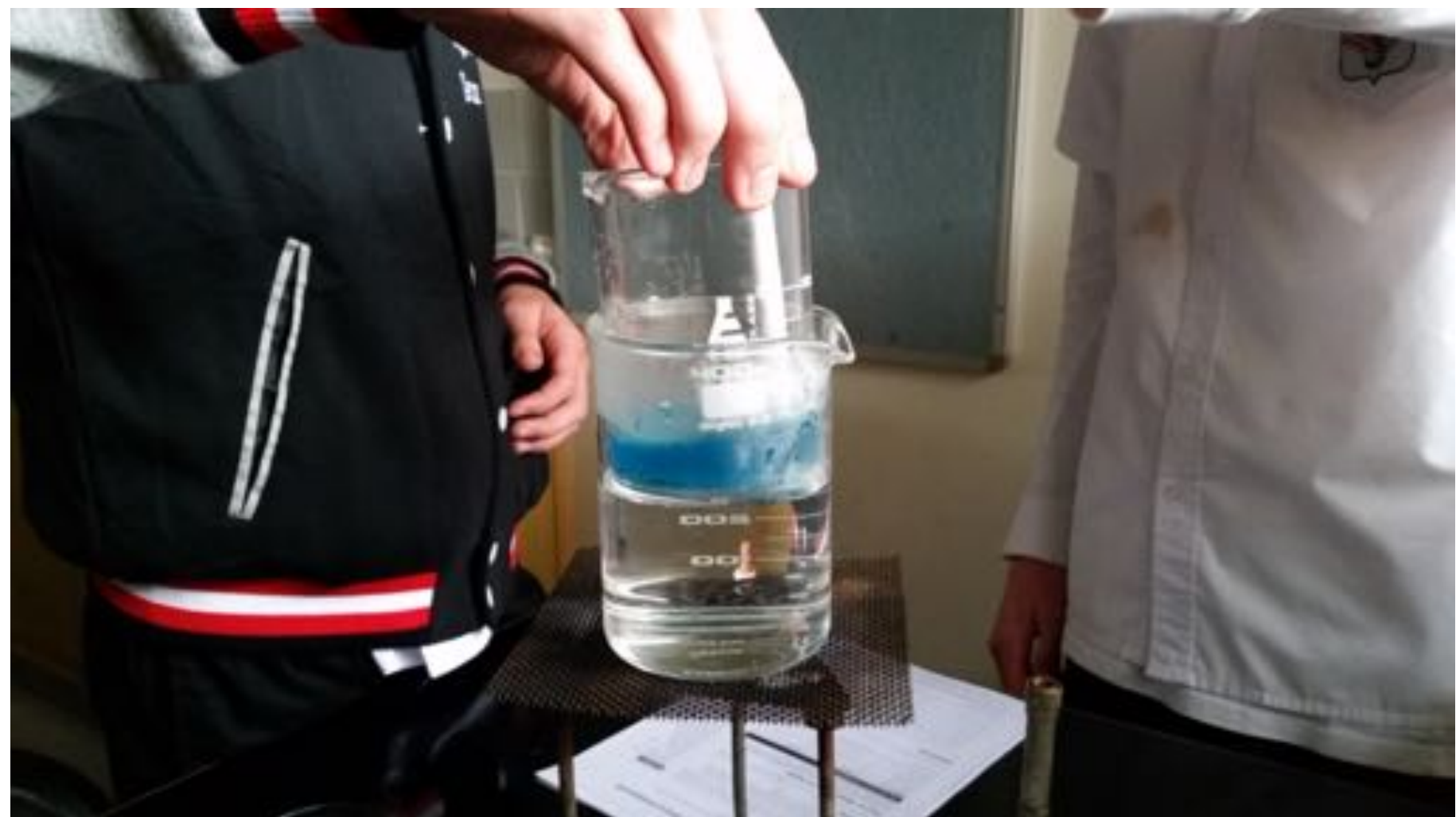
Year 12

- Module 5: Equilibrium and Acid Reactions
- Module 6: Acid/Base Reactions
- Module 7: Organic Chemistry
- Module 8: Applying Chemical Ideas

Chemistry explores the structure, composition and reactions of and between all the elements, compounds and mixtures that exist in the Universe.

Beneficial for careers in agriculture, animal sciences, earth sciences, education, engineering, health sciences and sport sciences.

Chemistry (2 units)



Earth and Environmental (2 units)

Year 11

- Module 1: Earth's Resources
- Module 2: Plate Tectonics
- Module 3: Energy Transformations
- Module 4: Human Impacts

Year 12

- Module 5: Earth's Processes
- Module 6: Hazards
- Module 7: Climate Science
- Module 8: Resource Management

Earth and Environmental Science explores Earth's renewable and non-renewable resources, as well as environmental issues that society faces.

Beneficial for careers in agriculture, animal sciences, earth sciences and education.

Earth and Environmental (2 units)



Investigating Science (2 units)

Year 11

- Module 1: Cause and Effect - Observing
- Module 2: Cause and Effect - Inferences and Generalisations
- Module 3: Scientific Models
- Module 4: Theories and Laws

Year 12

- Module 5: Scientific Investigations
- Module 6: Technologies
- Module 7: Fact or Fallacy?
- Module 8: Science and Society

Investigating Science is designed to assist students of all abilities to engage with the scientific process and apply those processes to investigate personal, community and global scientific issues.

Beneficial for careers in agriculture, animal sciences, earth sciences, education, engineering, health sciences and sport sciences.

Investigating Science (2 units)



Physics (2 units)

Year 11

- Module 1: Kinematics
- Module 2: Dynamics
- Module 3: Waves and Thermodynamics
- Module 4: Electricity and Magnetism

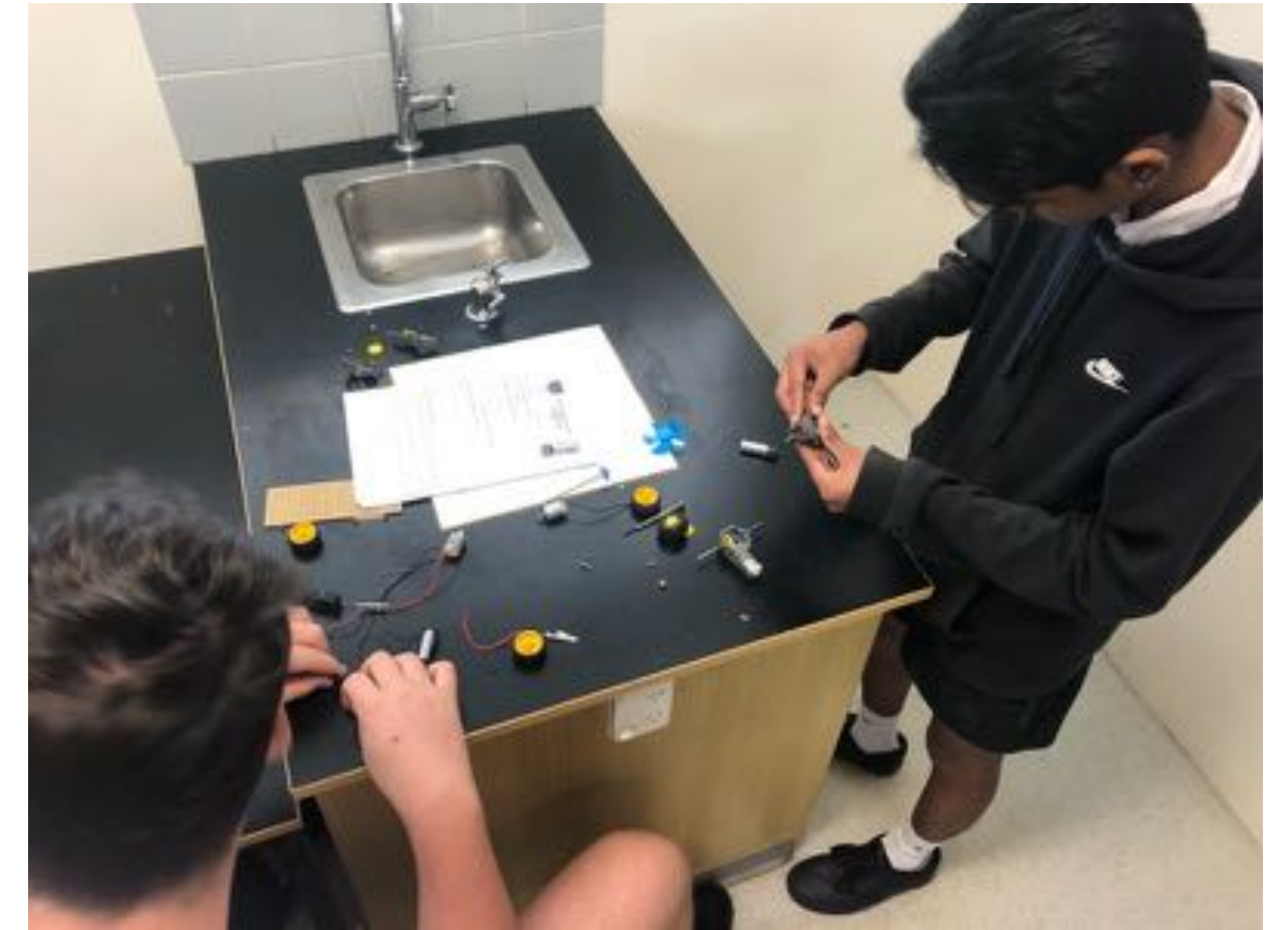
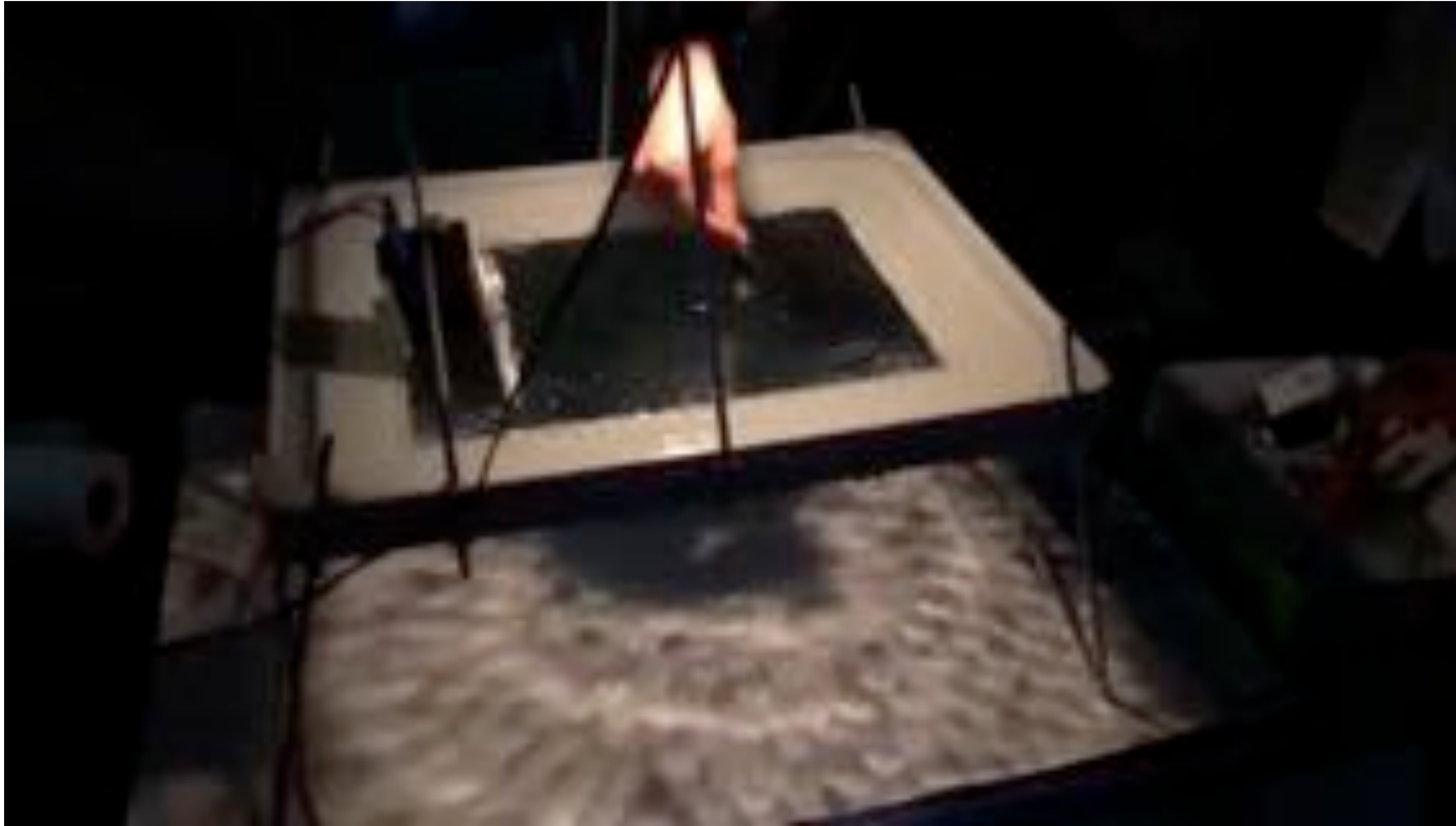
Year 12

- Module 5: Advanced Mechanics
- Module 6: Electromagnetism
- Module 7: The Nature of Light
- Module 8: From the Universe to the Atom

Physics involves the study of matter and its motion through space and time, along with the related concepts of energy and force.

Beneficial for careers in agriculture, animal sciences, architecture, building/planning, earth sciences, education, engineering, health sciences and sport sciences.

Physics (2 units)



Marine Studies

Year 11

30 hours core modules + 90 hours optional modules:

- Marine Safety and First Aid
- The Marine Environment
- Life in the Sea
- Humans in Water
- Marine and Maritime Employment

Year 12

120 hours optional modules:

- Dangerous Marine Creatures
- Commercial and Recreational Fishing
- Seafood Handling and Processing
- Anatomy and Physiology of Marine Organisms
- Boating and Seamanship
- Personal Interest Project

Marine Studies is a Board Endorsed Course and DOES NOT count towards your ATAR.

Beneficial for careers in agriculture, animal sciences, earth sciences, education and tourism.

Marine Studies



Other Considerations

- You can only study a maximum of 6 units of Science in Year 11 and 12.
 - Each Science course requires a minimum number of “Depth Study” hours (15-30 hours) per Year 11 and Year 12 subject as directed by the student/teacher.
 - Many of the Science subjects offer excursions/camps as part of the Stage 6 courses which students are encouraged to attend. They will incur a fee.
 - Each subject has a total of x3 Assessment Tasks in Year 11 and x4 Assessment Tasks in Year 12.
 - Those students who fail to meet the requirements may be issued N-Warnings which places them at risk of completing the course and receiving a completed HSC.
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