

Science

Physics – 13PHY NCEA Level 3

Practical Skills

Planning and carrying out an investigation. Allowing for uncertainties in measurements. Graphing and analysing results.

Mechanics

Linear, rotational and simple harmonic motion.

Waves

Behaviour of waves such as sound and light.

Electromagnetism

DC and AC circuits, capacitance, electromagnetic induction.

Atomic Physics

Atomic structure, radioactivity and 'ideas' on the nature of matter and light.

Credits: 9 Internal, 19 External.

Entry Requirements: Physics Achievement Standards 2.1, 2.4 plus two others (1 from 2.3-2.7) totalling 12 credits plus Maths 1.1 or 2.1 and 1.8 or 2.8 or HOD discretion.

Materials Fee: \$20

Book Bond: \$10

Pre-Health

Pre-Health Studies NCEA Level 2-4

Designed and recognised as a qualification for entry to the Polytechnic Nursing Degree and Nurse Assistant Programme. This course is also suitable for students who want to equip themselves better to study other health related courses such as veterinary nursing. Students can gain credits towards the National Certificate in Community Support which would be valuable in securing caregiver positions.

Students who have English as their second language will be required to sit an English test prior to interview for this course.

Pre-Health Biology – 13BPH

- Cells and cell chemistry, living human cells and their processes.
- Biological systems, human organ systems, their structures and functions.
- Internal control mechanisms of the human body from a cellular level to the sensitivity and coordination of the body as a whole.
- Health and the various factors which lead to disease of the human organism.

Chemistry/Maths – 13CPH

- Use of chemicals and apparatus and developing a scientific vocabulary. Chemical bonding using a model of atomic structure, identification of ions.
- Organic, body and environmental chemistry. Carbon compounds and their relationship to our body and the environment.
- Scientific calculations. Basic mathematical skills and problem solving.
- Chemical changes. Acid-base titrations.

Practical Work Placement 13PPH

- Practical placement in healthcare industry or veterinary surgery leading to general workforce and health industry specific qualifications.
- Individualised workplace support.

Duration:

16 hours/week tuition plus 4 hours of key competency development.

**Credits: 30 Internal
Level 2:6/Level 3:7/Level 4:17.**

Entry Requirements: 18 years plus. Interview. Students that have English as their second language will be required to sit an English test prior to interview for this course.

Materials Fee: \$140 (includes hire of uniform, name badge, and Biology book bond. First aid certificate fee additional (if applicable).

Psychology

Psychology – 12PSY NCEA Level 2

This popular and interesting course will be of interest to students who want to find out more about what makes people tick. You may be interested in studying psychology at university or in a career with people.

The Scope and Methods of Psychology

Main approaches to the study of human behaviour and the workings of the mind. The relevance of psychology to human purposes, its applications in today's world and some of the interesting work that psychologists do.

Learning and Forgetting

Behaviour change through learning, reward and punishment; and the processes of memory and forgetting.

Individual Differences:

Intelligence and Personality

Theories of personality and intelligence. Discussion of arguments used to explain our differences from one another. Are differences in intelligence and personality due to: differing genetic blueprints, or upbringing, culture and current circumstances?

Topics from Social Psychology

Social psychology is defined and several topics studied. These include deindividuation, obedience to authority, bystander apathy and social facilitation.

Credits: 28 Internal.

Entry Requirements:

Evidence of achievement at NCEA Level 1 in English/Maths/Science or equivalent.

Materials Fee: \$10

Psychology – 13PSY NCEA Level 3

Scientific Method in Psychology

Describing scientific method and its various forms: observation, theory and hypothesis, surveys, correlation, case studies and experiments.

Brain, Behaviour and Intelligence

Relating brain structure and chemistry to behaviour. Intelligence: genes or environment?

Abnormal Behaviour and Group Processes

The classification and treatment of mental disorders. An examination of the structure, function and dynamics of human groups.

Selected Topics in the History of Psychology

Own assignment on the history of psychology.

Credits: 32 Internal.

Entry Requirements: Year 12 Psychology (12PSY) or equivalent.

Materials Fee: \$10