

In the honors classes there will be senior and junior divisions; the senior will be expected to do all the work, the junior half the work. The junior divisions of the honors classes will be considered as pass classes and equivalent to the junior classes.

English Literature.

The work of the session will comprise: *a.* A course of lectures on the comedies of Shakespeare (during both terms); *b.* A course of lectures on Lyly and Chapman (during first term); *c.* A course of lectures on Swift and Pope and the literature of their times (during second term); *d.* Examinations on the general history of English literature, on special works or pieces of old authors, and on the rules of rhetoric and composition; *e.* Essays and exercises in English composition; *f.* A course of lectures on the language of Chaucer, Spenser, and Shakespeare (during both terms). *a*, *b*, and *c* will occupy Monday night; *d*, *e*, and *f* Thursday night.

In session 1879 *a* will be a course on the tragedies of Shakespeare; and *f* a course on the vocabulary of English: its source and formation. In session 1880 *a* will be a course on the historical plays of Shakespeare; and *f* a course on the inflections of English: their history and significance. In English accordingly there will be a three-years' course. *b* and *c* will vary from year to year.

English will be considered an honors subject if the student take up all the papers in the annual examination.

Mathematics.

First Year.—Euclid, algebra, and trigonometry for the B.A. pass examination.

Second Year.—Elementary mechanics and hydrostatics for the B.A. pass examination; higher parts of algebra and trigonometry, together with conic sections and the rudiments of differential calculus.

Third Year.—Differential and integral calculus; analytical statics and dynamics of a particle.

The parts of Euclid read are Books I., II., III., IV., and VI. In addition to the text, problems and examples will be set. The lectures in algebra and trigonometry during the first year, and those in mechanics during the second year, will embrace those parts of the subject prescribed by the University of New Zealand for the B.A. examination. The text-books used will be Todhunter's Algebra, Todhunter's Trigonometry, Parkinson's Mechanics, Besant's Hydrostatics. The other mathematical lectures during the second year will embrace the subjects which have hitherto been included in the examinations for the senior scholarships of the University of New Zealand. The lectures during the third year will be occupied with subjects to be taken by candidates for mathematical honors, for whom, if necessary, a more extended course will be provided. Those students who desire to take mathematics for a third examination will be required to pass in conic sections and differential and integral calculus.

Junior Chemistry.

Non-Metallic.—Simple chemical operations—The mode of formation and principal properties of the non-metallic elements—The atomic theory—Atomicity of the elements—Volumes and densities of gases.

Metallic.—Occurrence of the metals—Extraction from their ores—Properties and mode of manufacture of the principal metallic compounds—Simple tests for the metals.

Senior Chemistry.

Organic.—Classification of organic compounds—Constitutional formulæ of the principal radicles—Manufacture and properties of the more important hydrides, alcohols, ethers, and acids of the organic radicles—Manufacture and uses of the principal commercial organic compounds.

Analytical.—Blowpipe analysis and other tests by the dry method—Analysis of inorganic compounds and mixtures—Quantative analysis by measure and by weight—Ultimate organic analysis.

Physics.

(Two branches count as one subject for examination. In each branch there will be an elementary and an advanced course, and each course will be complete in one term.)

Heat.—Expansion of gases, liquids, and solids—Thermometers—Calorimeters—Conduction—Convection—Specific heat—Latent heat—Mechanical equivalent—Energy, kinetic and potential—Steam-engines—Radiant heat—Athermic and diathermic bodies—Reflection—Refraction—Calorescence.

Sound and Light.—Properties of the air—Production, propagation, reflection, refraction, and velocity of sound—Sonsorous vibrations in strings, rods, pipes, and plates—Musical scale—Quality of sound—Ear and larynx—Sources, propagation, measurement, reflection, refraction, and velocity of light—Colour—The spectrum and the spectroscope—Fluorescence and phosphorescence—Interference—Diffraction—Polarization—The eye and optical instruments.

Magnetism and Electricity.—Magnetic attraction—Polarity—Directive power—Repulsion—Dipping and compass needles—Diamagnetism—Development of frictional electricity—Conduction and insulation—Distribution—Machines—Leyden jars—Voltaic batteries—Heating, lighting, magnetic, chemical, and physiological effects of the current—Ohm's law—Potential—Electro-magnetic and other induction machines—Land and ocean telegraphy—Electro-plating—Electro-dynamics.

Geology.

Junior.—History and definition of geology—Cosmogony—Theories on the formation of the earth—Introduction to mineralogy—General stratigraphical geology.

Senior.—Introduction to petrography and palæontology—Geology of New Zealand—Economic geology.