

Experiments in Physical Geography II

ENVS154

This is the second of a pair of modules (with ENVS120 Experiment in Physical Geography I) designed to provide first year students with a practical introduction to environmental processes, experimental design, reliable measurement, and data analysis. You will work in a team of 7-10 students every week of the 2nd Semester and complete 10 different experiments, each lasting a full day in the Environmental Suite (1st Floor) of the Central Teaching Laboratory. These exercises will enable you to learn from the experience of using state-of-the-art equipment. The practical exercises are linked to geography modules (in both the first and second years) and complement themes covered within these.

Each practical has detailed written instructions, but you will refine the objectives of the experiments according to your interests. You will write detailed laboratory notes, and analyse the data you have gathered using graphical and statistical methods. Your individual laboratory notebook will form the module assessment. Practicals will include: assessing the controls on sediment entrainment and deposition using experimental flumes and particle settling tubes; examining how lake records change in delivery of particles from catchments in the sediment record using Xray fluorescence spectrometry and laser granulometry; exploring how surface albedo (fresh snow, volcanic ash or glacial debris) controls the melting regime of ice, using foraminifera in coastal sediments to understand how sea levels may have changed in the past. The module will provide the key practical skills which you will draw upon in years 2 and 3 of the course.

