Experiments in Physical Geography

ENVS120

This module, led by John Boyle is designed to provide first year students with a practical introduction to environmental processes, experimental design, reliable measurement, and data analysis.

Working in a team of 7-10 people you will undertake 10 different experiments, each lasting a full day, using new dedicated equipment in the University's Central Teaching Laboratory. This enables you to learn from experience to complement your other learning from reading and lectures. The practicals link with geography modules (in both the first and second years) in which you will learn the associated theory.

Each practical has detailed written instructions, but you are encouraged to refine the objectives of the experiments according to your interests. You will write detailed laboratory notes, and will analyse the data you have gathered using graphical and statistical methods in EXCEL. The module is assessed via the lab notebook.

Practicals include: Impact of forest on soil composition; Inferring vegetation from the pollen in soil and sediment; Peat core record of atmospheric pollution from Manchester; Radioactivity and exponential decay; Stream water from source to sea: natural and anthropogenic factors; What controls potential and actual evaporation rates?; Tree rings and carbon sequestration; Storm flow generation in a catchment simulator; Measuring and analysing weather.

