

GEOS3733 / GEOS6733 ENVIRONMENTAL GEOPHYSICS



17-21 JULY 2017
WELLINGTON CAVES, NSW

This 6 unit of credit course is run as a 5-day field class, during O-week of Semester 2. In 2017 we will be based at Wellington Caves, in the central west of NSW. Accommodation is in the newly refurbished Caves and Golf Course Units. All food will be provided by Wellington Caves. Students will be asked to make their own way to and from the fieldclass (by train or driving, help with car-shares will be provided).

The course will cost \$270 (covering all food and accommodation). Numbers are capped to 30. Enrolments are now. There are no course prerequisites.

This course aims to provide skills required in research and consulting environments in hydrology, hydrogeology, climatology and environment sciences.

Each day, you will be given short lectures on the theory behind various environmental geophysical methods used in the analysis of air, water, soil, vegetation or the subsurface. This will be followed by field measurements to enable everyone to get hands-on experience of geophysical techniques. These field sampling campaigns are designed by you, the student groups, strengthening your skills in sampling design, data collection and analysis, and data management.

Methods covered will include a selection of the following environmental geophysical techniques: weather station design and hydrology measurements using geophysical techniques; infra-red measurements of soil and atmospheric carbon dioxide concentrations; x-ray fluorescence analysis of soil mineral properties; optical geophysics, using fluorescence and absorbance, to measure river organic matter water quality; cavity-ringdown and off-axis mass spectrometry measurements for mapping methane and carbon dioxide processes in the landscape.

For more information see:

<http://bees.unsw.edu.au/geos3733>

Any questions: please e-mail course convenor Andy Baker on a.baker@unsw.edu.au