GL9702L Best Practices in Exploration Drilling

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BGS 1000B

Modular graduate course, end of April 2014, tentatively April 22-May 1. The course will have a cap of 20 students.

Course Description

The principles of exploration drilling are examined, starting with drilling techniques and location of drill holes in 3D co-ordinates. This will be followed visual analysis and logging for lithology, alteration, mineralization and geotechnical information and data entry. The next portion of the course involves in situ analysis of drill core using field portable techniques such as pXRF and SEM. The techniques that are covered are subject to change. The final portion of the course will consist of data treatment using the latest computer software. All of the above activities will involve working in groups to acquire data and solve exploration problems.

Marking

60% participation and group assignments during the modular portion of the course.

40 % term paper, due the end of May 2014

Provisional Topics

Drilling – 1 day

Core Logging – 2 days

Structure – 2 days

XRF – 1 day

SEM – 1 day

IR (e.g. Terraspec, SWIR) – 1 day (this may be replaced with petrophysics) ioGas – 1 day

leapfrog – 1 day

total 10 days