

GEOLOGY (Course Code Ge)

Head of Department: Mr. P. King LLB

OCR A level H414

Course entry requirements

GCSE Grade 7 at Mathematics

Geology is the study of the Earth. It is a popular course, with a significant proportion of students choosing to go on to study the subject at university each year.

As a recognised science subject, A Level geology involves a mixture of practical and classroom work. The department owns a large collection of rocks, minerals and fossils which is used on a regular basis.

The Geology A level is divided into seven modules: Geological Skills; Foundations of Geology; Global Tectonics; Interpreting the Past; Petrology & Economic Geology; Geohazards; and Basin Analysis.

The **Geological Skills** unit looks at the planning of geological fieldwork & involves carrying out practical geological skills including field sketching of geological structures, graphical logs, compiling a field notebook, mineral testing, fossil identification and measuring dip & strike. A five day residential field trip forms part of the preparation for this unit.

The **Foundations of Geology** unit looks at the formation, characteristics and identification of key igneous, sedimentary & metamorphic rocks. It also covers the characteristics & identification of common minerals & fossils.

The **Global Tectonics** unit studies the origin of the Earth; the Earth's internal structure; continental drift, sea-floor spreading & plate tectonics; and geological structures produced by faulting & folding.

The **Interpreting the Past** unit looks at surface processes, geochronology, relative dating & biostratigraphy.

The **Petrology & Economic Geology** unit covers sedimentology, fluids in rocks, igneous & metamorphic petrology, mining geology, metal exploration, resource extraction & its impacts.

The **Geohazards** unit considers earthquakes, risk analysis and applied engineering geology.

The **Basin Analysis** unit looks at applied palaeontology, evolution, mass extinctions, and oil & gas basins.

The course is linear, with three examinations sat at the end of year 13. Two of the examinations are 2¼ hours long, while the Practical Skills examination lasts 1 hour 30 minutes. The A Level course includes week-long field trips to undertake practical research as we consider this an important part of training our Geologists.

(Nov 2018)