

Geostudies

Summary guide to Geostudies Geology Courses and Field Trips 2018-2019

For full details see the Geostudies Website (<http://www.geostudies.co.uk>), or contact Dave Green.

September 2018

Understanding Geology and Scenery around Ross-on-Wye Starts September 21st (not 25th Oct or 8th Nov), finishes 6th December.

This 10 week course aims to introduce you to the ways in which the varied and beautiful landscape round our area has come into being. The effects of folds, faults and tectonic dip in exposing different rock types, and the past and present processes of uplift, weathering, erosion and deposition that have acted upon them, will be examined by reference to local scenery. Use will be made of local maps and cross-sections across them, both geological and topographic; together with specimens of local rocks. Contact Paul Mason on 01989 760399. Cost £60 Enrol before 15th September to ensure that the course runs.

Geology of the Bristol and Gloucester Region. One of the most varied regions of Britain, spanning the major divisions of the Variscan Front/Bristol Channel-Bray Fault, and the Malvern fault/ Worcester Graben, incorporating rocks varying in age from late PreCambrian to Cretaceous, and three of the terranes making up the geological "jigsaw" of Britain. The course will cover roughly the area covered by the eponymous BGS publication in the British Regional Geology series (3rd edition 1992). Starts Mon 17th September for 10 weeks (not 22nd or 29th Oct or 5th Nov), until 10th December Held at Wynstones School, Stroud Road, Whaddon, Gloucester from 7.30-9.30pm on Mondays. Cost £75 (including tea, coffee etc at breaktime!).

October 2018

Field Course: The Geology of Northern Cyprus and NW Turkey. Dates will be for a week to 10 days trip around a period from 19th to 31st October (half term in Glos). Half the time will be spent in N Cyprus and half in Turkey, in the area around and to the south west of Istanbul. A wide variety of geology is exposed; from the Kyrenia Terrane of N Cyprus, spectacularly exposed in the narrow, and still rising, mountain range that forms the entire northernmost coast, but deeply buried beneath the younger sediments of the Mesoria Basin to the south. Jurassic and Cretaceous sediments were folded and metamorphosed during subduction in the late Cretaceous, then exhumed, eroded and covered by latest Cretaceous-Palaeogene sediments and volcanics, then by an Eocene melange; the whole being thrust and folded by Eocene collision with Troodos. Turkey was not a single entity until the Early Tertiary, when several continental fragments with independent Palaeozoic and Mesozoic geological histories were assembled during a complex sequence of events leading to the collision of Gondwana and Laurasia. We shall examine the Istanbul and Sakarya terranes, which were detached parts of Laurasia, undergoing Triassic subduction, collision and obduction/exhumation of ophiolites, including some of the best high pressure metamorphic rocks in the world.

November - December 2018

Field Course: 30th Nov – 2nd Dec (and possibly Monday 3rd too) **Geology of the Quantocks and West Somerset** A classic area for the study of the folded Upper Palaeozoic basement in the Quantocks and Cannington Park, and the unconformable Triassic and Jurassic sequence exposed in faulted basins associated with the Bristol Channel fault. What is the evidence for and against massive Variscan movement of formerly widely separated terranes along this fault? Excellent exposures, particularly of the Mesozoic rocks at and near the coast.

17th December (Monday) Annual Geological Reunion Dinner at Watersmeet, Hartpury 7.30 for 8.00pm

January 2019

The Geology of Eruptions, Earthquakes and Tsunamis. Three of the most devastating natural disaster-forming events are geological, all related to plate tectonics, and are very difficult, if not impossible, to accurately forecast. What are the causes of these events and their various manifestations? Why are some more dangerous than others? How can we prevent or mitigate these effects? Examples of some of these phenomena will be used to illustrate these points Monday 7th for 10 weeks (not 18th Feb) until 18th March. Held at Wynstones School, Stroud Road, Whaddon, Gloucester from 7.30-9.30pm on Mondays. Cost £75

Advances in Understanding Earth's Structure and Operation. This 10 week course aims to introduce you to relatively new ideas, some accepted, some controversial, about the internal structure and tectonics of the Earth. Many ideas have changed radically since the inception of the Plate Tectonic hypothesis, and especially in the period from the 1990s, partly as a result of new technology, and the re-examination of parts of the theory that evidence did not support. Each week we will examine a different topic, such as subduction, mantle dynamics, mantle plumes. Held at The Chantry, Thornbury. First meeting 7.30 – 9.30, Thurs 10th January until March 21st (not Thurs 21st Feb). Cost £75

February 2019

Possible Field Course: The Geology of Neapolitan Volcanoes and their Eruptions Dates will be for a week trip around a period from Fri 15th to Monday 25th. LET ME KNOW BEFORE CHRISTMAS IF YOU WANT TO COME to take advantage of cheaper air fares and determine the viability of such a trip.

April 2019

The Practical Study of Minerals. How to identify minerals using techniques based on both physical (crystallographic, twinning, cleavage, hardness, density, streak, colour, lustre, acid reaction, taste etc) and optical properties under the petrological microscope (relief, pleochroism, birefringence, extinction etc) Monday 29th April, for 10 weeks, until 15th July (not 6th nor 27th May). Held at Wynstones School, Stroud Rd, Whaddon, Gloucester from 7.30-9.30pm on Mondays. Cost £75.

June 2019

Field Course: Tues 4th June - Tues 16th July **Geology and Landscape in Gloucestershire** (evening field course Tuesdays 7-9 First meeting point:- Stinchcombe Hill: Meet at the car park /roadside pull-in just over the crest of the hill GR ST 744 983 (beyond the golf course car park) . Further sessions on website, separate leaflet, and/or by contacting Dave Green.

Field Course: to Estonia (Lower Palaeozoic/Quaternary, undeformed) **or Brittany** (Proterozoic/Palaeozoic high grade Cadomian orogeny)? Dates could be any week/weekend in June apart from 1-7th. Details later. Expressions of interest/choice of venue/dates needed

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