Weather for Sailors

This is a full one day course which aims to give the background for the different weather systems and phenomena you will meet on a global, regional and local scale. Previous training up to the level of RYA Day Skipper Theory is advisable, but if you have a keen interest in outdoor activities and can look at a weather chart with a basic level of practical understanding then that will also do. There is an element of revision in the course, but it's done by going back to first principles to help deeper understanding of the subject during the day. A 100 page pdf file is sent out prior to joining which acts as reference material and course notes, and includes a full list of all sources used.

Simon Rowell is an RYA Ocean Yachtmaster Instructor and Examiner and has been rained on a lot. After skippering the winning yacht in the Clipper 2002 race he became Chief Instructor at UKSA in Cowes before seeing the light and moving down to St Just-in-Roseland. He has since completed an MSc in meteorology at the University of Reading and is working towards a PhD looking at how hurricanes develop in the North Atlantic.

You will need to bring a notebook and writing materials, and a pair of dividers would be very useful too for the exercises.

The course covers the following:

Global Weather Patterns: why we have weather and seasons, the Jet Streams and their importance, the Coriolis Effect and the general surface distribution of the major pressure systems.

Weather Charts and Forecasts: synoptic and surface forecast charts, geopotential height and thickness charts, GRIB data, ensemble forecasts and weather sources in general in the GMDSS system and beyond.

Mid-Latitude Weather: depressions, mid-level troughs and ridges, frontal systems, heat lows, rain/sleet/snow/hail, high pressure systems and the ominously named "storm track".

Boundary Layer Weather: this is the bit we go sailing in, and covered in this section are sea and land breezes, gusts and fog.

Topographic Effects: wind coming on to and off land, surface convergence and divergence, acceleration zones, katabatic winds and Chinook winds.

Tropical Weather: a definition, the Hadley Cell, trade winds, the ITCZ, diurnal variation, tropical waves, tropical revolving storms, monsoons and squalls.