



# 'Ramp Course'



## Course Guide

This 2-week programme of study is designed to fit the needs of those Students who studied their Mates course some time ago and require additional preparation prior to re-attempting the MCA/SQA external examinations in Navigation and Stability.

The course is focussed on restoring and improving Students' underpinning OOW knowledge and skills prior to joining the 6-week SQA Revision course or attending an HND course at College or University.

Students have the optional benefit of adding the Meteorology and Bridge Management 'bolt-on' module offered and delivered by Capt. Jonathan Warren of Maritime Learning Ltd.

Cost: £250 £300 (including Meteorology & Bridge Mgmt. module)

Length: 2 weeks

Morning lectures start at: 0900hrs (UK Local time) and last for 2 to 3 hrs

Afternoon lectures start at: 1300hrs (UK Local time) and last for 2 to 3 hrs

Note: Course Bookings are not confirmed until full payment has been received and cleared. Places onto the Course are allocated on the basis of 'first come, first served'.

### What to expect on the Course

Two taught sessions per day (Some afternoons free) which combine theory/principles and underpinning knowledge with worked solutions.

The typical daily routine is to alternate between Navigation and Stability sessions so as to leave you time between successive topic lessons for you to consolidate knowledge prior to the next one. You will be provided with a Scheme of Work laying out the daily and weekly schedule of lessons.

Students will be recommended to complete homework assignments after each day's sessions in readiness for the next. In this way any underlying errors or problems can be exposed and resolved.

## What you need to provide for the course

Internet connection suitable for online teaching applications

PC/Mac, laptop or similar with webcam, microphone and speakers/headphones

A4 Note paper (plenty!), Parallel ruler and standard stationery, Nautical tables, SQA Tide Tables, SQA Nautical Almanac and Radar Plotting sheets

SQA Formulae sheets

SQA Stability Data Booklet

## Areas of study during the 2 week 'Learning Ramp':

### Navigation

Sailings: Rhumb line and Great Circle Distances, Course(s), Vertex and Times and ETA

Tides: Causes and definitions, Standard and Secondary port predictions

Celestial: Azimuths and Amplitude, Altitudes, TZD and CZD, ITP and runs, Meridian Passage

Radar: Basic OAW plotting, Full Report and Alterations of Course/Speed

### Meteorology

Structure of the Atmosphere, Heating of the Earth and Pressure Systems.

Winds, Clouds, Precipitation, Air Masses, Depressions and Anticyclones.

### Stability

Theory: Underpinning principles & definitions, Conditions of stability and Free Surface Effect

Transverse: Movement of 'G' when loading, discharge, shift & FSE, List and GZ Curves

Longitudinal: Trim

I hope you enjoy the course and have great success in your future.

Ewan Kirkbride