# RYA COASTAL SKIPPER/ YACHTMASTER SHOREBASED SYLLABUS

This is an advanced course in navigation and meteorology for candidates for the Coastal Skipper and Yachtmaster Offshore Certificate. The syllabus makes some provision for the revision of subjects in the Day Skipper Course but those who have not acquired the knowledge set out in the Day Skipper Course are unlikely to be able to assimilate all the subjects covered in this advanced course in the time available.

The assumed level of knowledge before starting this course is the Day Skipper Shorebased Course.

## 1 Position

- Dead reckoning and estimated position
- Satellite-derived position
- Use of waypoints to fix position
- Radar fixes
- Techniques of visual fixing
- Fixes using a mixture of position lines
- Relative accuracy of different methods of position fixing
- Areas of uncertainty

## 2 The magnetic compass

- Allowance for variation
- Change of variation with time and position
- Causes for deviation
- Swing for deviation (but not correction)
- Allowance for deviation
- Different types of compass

## 3 Tides

- Causes of tides – Springs and Neaps
- Tide tables – sources
- Tidal levels and datum
- Standard and secondary ports
- Tidal anomalies (Solent, etc)

### 4 Tidal streams

- Sources of tidal information
- Tidal stream information in sailing directions and Yachtsmen's Almanacs
- Allowance for tidal streams in computing a course to steer
- Tide rips, overfalls and races
- Tidal observation buoys, beacons etc

### 5 Buoyage

- IALA system buoyage in Region A
- Limitations of buoys as navigational aids

### 6 Lights

- Characteristics
- Ranges – visual, luminous and nominal
- Rising and dipping distances
- Light lists

### 7 Pilotage

- Harbour regulations and control signals
- Methods of pre-planning
- Clearing lines
- Use of soundings
- Transits and leading lines

### 8 GPS and chart plotters

- Principles of operation and limitations of use
- Raster and vector charts
- Datum
- Importance of confirmation of position by an independent source and keeping a separate record of position
- Importance of paper charts

### 9 Echo sounders

- Principles of operation and limitations of use

### 10 Logs (speed and distance measuring)

- Principles of operation and limitations of use

### 11 Deck log

- Importance of log as yacht's official document
- Layout of log, hourly and occasional entries

## 12 Meteorology

- Basic terms, the Beaufort scale
- Air masses
- Cloud types
- Weather patterns associated with pressure and frontal systems
- Sources of weather forecasts
- Ability to interprete a shipping forecast, weatherfax and weather satellite information
- Land and sea breezes
- Sea fog
- Use of a barometer as a forecasting aid

## 13 Rule of the road

- A sound knowledge of the International Regulations for Preventing Collisions at Sea, except Annexes 1 and 3

## 14 Safety at sea

- Personal safety, use of lifejackets, safety harnesses and lifelines
- Fire prevention and fire fighting
- Distress signals
- Coastguard and Boat Safety Scheme
- Preparation for heavy weather
- Liferafts and helicopter rescue
- Understanding of capabilities of vessel and basic knowledge of stability

## 15 Navigation in restricted visibility

- Precautions to be taken in fog
- Limitations to safe navigation imposed by fog
- Navigation strategy in poor visibility

## 16 Passage planning

- Preparation of charts and notebook for route planning and making, and use at sea
- Customs regulations as they apply to yachts
- Routine for navigating in coastal waters
- Strategy for course laying
- Use of waypoints and routes
- Use of weather forecast information for passage planning strategy
- Sources of local and national regulations

## 17 Marine environment

- Responsibility  to minimise pollution and protect the marine environment