

RYA Day Skipper Theory Syllabus



00 – Introduction					
01 – Chart Familiarisation	01	01	A – Safety & The Environment	B – Meteorology	C – The Collision Regulations
02 – a) Tidal Heights	02a	02a			
02 – b) Secondary Ports	02b	02b			
02 – c) Tidal Streams	02c	02c			
03 – The Compass & Position Fixing	03	03			
04 – Dead Reckoning & Estimated Position	04	04			
05 – Course to Steer	05	05			
06 – Electronic Navigation	06	06			
07 – Buoyage	07	07			
08 – Pilotage	08	08			
09 – Passage Planning	09	09	A	B	C
10 – Passage Making		10	A	B	C
Exam 1 – General Assessment					
Exam 2 – Chartwork					

Lessons A, B & C (green menu items) together with their associated exercises (red menu items) may be studied at any time and, because they don't rely on any of the contents of the Student Pack which we mail to you when you register, can be studied whilst you're waiting for your pack to arrive.

Lessons 1-9 (blue menu items) together with their associated exercises (red menu items) must be studied sequentially.

Exercises can be tackled online or downloaded and printed for offline use. If you taking them online, once you commence an exercise you will be given the opportunity to save your work and you will be sent an email providing you with a link which will allow you to re-open the exercise. When an exercise is submitted you will be sent a copy of your answers by email. The exercise is then locked and you cannot re-open it however you can start it afresh if you wish.

Detailed explanations of all answers can be accessed from the orange menu items.

There is no lesson associated with Item 10, just an exercise which brings together many of the individual topics you have studied.

There are 2 exams – a general assessment and a Chartwork exam. You can request links to these once you have finished studying all the lessons and have submitted all the exercises.

USE THIS FORM TO RECORD YOUR PROGRESS

Lessons A – C which can be studied at any time

Lesson	Topics	Lesson Completed (date)	Exercise Completed (date)
A	<p>SAFETY & PROTECTION OF THE ENVIRONMENT</p> <p>Engine checks breakdown & repairs, dismasting, jury rigs, flooding, fire-fighting & prevention, gas safety, capsize, stability, lifejackets, harnesses, man overboard recovery, liferafts, medical emergencies, distress, Mayday procedure, EPIRBs, mobile phones, SARTs, distress flares, other means of signalling distress, preparing for a tow, helicopter rescue, other dangers, protection of the environment.</p>		
B	<p>METEOROLOGY</p> <p>What to take account of when planning your passages, How to interpret a weather forecast, About various sources of weather forecasts, About The Coriolis Effect and how it affects winds, About Global weather and weather systems, Why the British weather is so unpredictable, How to interpret weather charts, About local weather phenomena.</p>		
C	<p>THE COLLISION REGULATIONS</p> <p>Who these rules apply to, what you need to know, keeping a proper lookout, assessing the risk of collision, safe speed, avoiding collisions, narrow channels and traffic separation schemes, different classes of vessel, when two power driven Vessels meet, when 2 sailing vessels meet, what do you do if the give-way vessel fails to manoeuvre to keep out of your way, fog, how the rules differ from the racing rules of sailing, sound signals, lights.</p>		

Lessons 1 – 9 which must be studied sequentially

Lesson	Topics	Lesson Completed (date)	Exercise Completed (date)
01	<p>CHART FAMILIARISATION</p> <p>Sources of charts, chart-correction, survey dates, scale, map datum, measuring distance, charted depths, drying heights, charted elevations, clearance heights, depth contours & safety contours, chart symbols & abbreviations, almanacs, pilot books, time speed and distance calculations.</p>		
02a	<p>TIDAL HEIGHTS</p> <p>Why a good knowledge of tides is fundamental to safe, efficient and enjoyable sailing in tidal waters. Why we have tides. Extreme meteorological conditions. LAT, CD, Height of Tide, charted depths, drying heights, MHWS, MLWS, spring range, MHWN, MLWN, neap range, charted elevations, HAT, clearance heights. Navigating over areas of shallow water. Least depth of water to anchor. Will I ground at low water? Navigating under overhead obstructions. The questions we need to be able to confidently answers. Safety margins. Calculating tidal heights at standard ports.</p>		
02b	<p>SECONDARY PORTS</p> <p>Calculating tidal heights at secondary ports.</p>		
02c	<p>TIDAL STEAMS</p> <p>Tidal stream planning, using a tidal atlas and tidal diamonds, set and drift, computation of rates, flood and ebb tides, turn of the tide, tidal races and overfalls.</p>		
03	<p>THE COMPASS & POSITION FIXING</p> <p>Magnetic variation, magnetic anomalies, deviation, the deviation card, true to compass and compass to true, fluxgate (electronic) compasses, GPS and Gyro compasses, using the hand-bearing compass. Fixing position, compass fix, transits, using depth contours.</p>		
04	<p>DEAD RECKONING & ESTIMATED POSITION</p> <p>Calculating a dead reckoning and estimated position using course steered, distance on the log and allowing for tidal streams and leeway.</p>		
05	<p>COURSE TO STEER</p> <p>Calculating a course to steer informally using a hand bearing compass or GPS and formally using an estimate for speed and tidal streams and leeway.</p>		

06	ELECTRONIC NAVIGATION Calibrating and adjusting the log, depth-sounder and wind instruments. Satellite navigation systems. GPS vulnerabilities. Entering waypoints. Using a GPS receiver to display bearing, distance, speed and velocity. GPS assisted accidents. The relative merits of purpose-built chart-plotters, vs. PCs vs. tablets. Raster vs Vector charts. Using a chart-plotter. AIS.		
07	BUOYAGE & LIGHTS Lateral Buoyage, Cardinal Buoyage, other types of buoys, navigation marks, lights and their meanings, the limitations of buoys and lights as aids to safe navigation.		
08	PILOTAGE Transits, leading bearings, back bearings, turning bearings, following depth contours, constructing a pilotage plan, harbour regulations, International Port Control Signals.		
09	PASSAGE PLANNING Passage considerations, SOLAS V, check-list & plan, vessel suitability, crew considerations & briefing, paperwork, sample passage, go-no-go decisions, shaping a course to windward, wind-shifts, cross tide planning, optimising VMG, lee bowing the tide, tidal gates, tidal height considerations, anchorages & anchoring, weather to sail, customs formalities.		
10	PASSAGE MAKING		