Open Awards Qualification Unit

This unit forms part of a regulated qualification. Click here to view qualifications.

1 Unit Details

Unit Title:	Navigation and Seamanship
Unit Reference Number:	Y/617/9949
Level:	2
Credit Value:	4
Minimum GLH:	35

2 Learning Outcomes and Criteria

Learning Outcome (The Learner will):	Assessment Criterion (The Learner can):
1. Understand relative directions on a boat, chart conventions and where to find information on chart symbols	1.1 Outline admiralty chart conventions
	1.2 Outline the IALA A buoyage convention
	1.3 Plot a position using latitude and longitude scales
	1.4 Plot true and magnetic bearings on a chart
	1.5 Fix a position on a chart
2. Understand the importance of personal and vessel safety	2.1 Outline the importance of pre-sailing checks on personal and vessel safety
	2.2 Outline how the GMDSS safety system works
	2.3 Describe how to send a mayday and urgency message
	2.4 Describe the action to be taken in the case of person overboard, including the use of aids to how to locate the person
3. Know about basic electronic navigation	3.1 Describe the functions of Global Positioning System (GPS), including use of waypoints, tracks, limitations, and the main potential source of error
	3.2 Outline how electronic chart plotters can be used to aid navigation

		3.3	Describe the principles of radar operation, including factors that influence radar accuracy
4.	Understand the rules of the road and their role in avoiding collision situations	4.1	Identify basic day symbols, including: a) Anchoring b) Fishing c) Diver down d) Motor sailing e) Reduce wash
		4.2	Outline how rules of the road (IRPCS) can be used to reduce the risk of collision
		4.3	Describe what IRCPS says about watch keeping
5.	Be able to plan a passage	5.1	Identify sources of information to consult when passage planning
		5.2	Plot a course including: a) Length of route b) Length of each leg c) True compass courses between waypoints
		5.3	Use compass bearings and latitude and longitude scale to fix a vessel position on a chart
		5.4	Use tide tables, tidal curves, tide atlases and tidal diamonds to predict information and make decisions about passage planning
		5.5	Demonstrate interpreting a shipping forecast and using it to update a passage plan
		5.6	For a given passage plan, describe the following influences to a safe passage a) Under keel clearance b) use of Vessel Traffic Services (VTS), Traffic Separation Schemes (TSS) and precautionary areas c) Appropriate speed
		5.7	Outline how to use pilotage information to assist entry or exit from a part
		5.8	Describe how to anchor safely
		5.9	Describe why it is important to communicate passage plan to someone ashore, and advantage of using apps for this purpose.

Indicative Content	
One way that the knowledge needed to pass this unit can be learned is via the successful completion of the Royal Yachting Association course Essential Navigation and Seamanship through an RYA approved centre. However, centres delivering this qualification must ensure that all assessment criteria are met in full.	
LO1	AC1.2 If this course is taken in an IALA B region of the world, then IALA A and B should be taught. AC1.4 Students should be taught sources of compass error, but they do not need to work out deviation. AC1.5 Fix methods could include: three point fix, passing close to charted object, transit, bearing and depth contour, range and bearing from waypoint
LO2	AC2.1 should include hull, stowage and engine pre sea checks AC2.2 GMDSS to the level of DSC radios, Navtex, EPIRBS, PLB, SART, and AIS SART. AC2.4 should include the importance of visual sight of MOB, deployment of DAHN buoy with strobe, value of PLBs It is useful to have a discussion with the students about other ways of signalling distress such as electronic flares compared to traditional flares.
LO5	Students should be aware that this is mandatory under SOLAS chapter V Students should be made aware that the Coastguard CG66 scheme has been replaced by the RYA Safe Trax app.