

## RYA Powerboat Level 2 Course Syllabus

**Aim:** The purpose of this course is to teach boat handling and seamanship in power boats. The course may be conducted in a variety of boat types, both planning and displacement, and the certificate issued will be endorsed to show the type(s) of boat in which the training took place. The ratio of students will not exceed 3:1.

**Duration:** 2 days      **Minimum Age:** 12

*Please note 12-15 year olds will receive the Level 2 Certificate which will be endorsed - "The holder should only use powered craft under the supervision of a responsible adult."*

## PRACTICAL (Section A)

### Launching and Recovery

#### Knowledge of:

- Use of a trailer or launching trolley
- Consideration of launching and sea conditions, including hazards and obstructions.
- Number of persons required to launch/recover
- Construction, width and condition of slipway
- Steep/slippery slipways, beach launching, lee shores
- Care of trailer bearings, hitch, lashings, ties, lights and winch
- Trailer parking

#### Can:

- Prepare the boat, lines, fenders, safety equipment, fuel tanks, lines and secure gear on board.
- Prepare to go afloat
- Tie relevant knots

### Preparation of Boat and Crew

#### Understands

- Personal buoyancy and appropriate clothing
- The use of the following equipment: lines, fenders, anchor and warp, bailer, fire extinguisher, pump, paddles or oars, compass, flares, torch, whistle, charts, first aid kit, knife

### Boat Handling

#### Knowledge of:

- Loading: effect on handling and performance, effect on balance and trim, CE plate and manufacturer's recommendation.
- Handling characteristics of displacement boats, rudder steered craft and shaft driven vessels.

### Understands:

- Crew members: minimum number in high speed craft, keeping a look-out
- The importance of boat control in waves, and adequate seating to minimise the possibility of injury
- Awareness of other water users, including effect of wash
- Steering, controls, effect of current or tidal stream
- Handling a boat at planing speed, trim tabs and power trim
- Planing boats: propeller angle and immersion, shallow drive, planing and displacement speed handling, tiller/console steering.

### Can:

- Carry out pre-start checks, engine starting and stopping
- Demonstrate the use of an appropriate length kill cord at all times
- Carry out low speed manoeuvres including: turning in a confined area, effect of wind on bow and holding off. Demonstrate an awareness of the danger of flooding when going astern.
- Handle a boat at planing speed

## Securing to a buoy

### Understands:

- Preparation of mooring warp
- Use of a boat hook
- Direction of approach
- Taking way off
- Crew communication
- Making fast
- Procedure when overshooting

### Can:

- Approach and secure a buoy

## Anchoring

### Knowledge of:

- Types of anchor
- Stowage and attachment to boat
- Preparation of anchor, chain and warp
- Weighing anchor

### Understands:

- Correct approach in various conditions
- Taking way off
- Crew communication

- Check holding
- Depth of water, holding ground, scope required

**Can:**

- Approach and anchor correctly
- Weigh anchor correctly

## **Leaving and coming alongside**

**Understands:**

- Preparation and use of lines and fenders- attachment to boat and stowage under way
- Speed and angle of approach
- Wind effect
- Method of approach in tidal stream or current

**Can:**

- Make fast alongside
- Use springs
- Leave – ahead or astern

## **Man Overboard**

**Knowledge of:**

- Recovery of man overboard

**Can:**

- Take immediate action
- Observe the man overboard
- Carry out the correct return with awareness of propeller
- Approach and recover the 'man' in the water
- Demonstrate both the drift down and into wind approach method
- Switch engine off

## THEORY (Section B)

### Knowledge of:

- Types of craft: advantages and disadvantages of different hull forms with respect to sea keeping ability
- Seating arrangements
- Stepped hulls
- Engines and drives: advantages and disadvantages of outboard, inboard and outdrive units, single and twin shaft drives, choice and use of fuels
- Siting of fuel tanks, fuel lines, batteries, wiring and fire extinguishers
- Routine engine maintenance checks, basic fault diagnosis
- Close down procedure
- Advice to inland drivers about coastal waters
- Use and limitations of GPS/Chartplotters
- Application of local byelaws, especially around commercial shipping
- Sources of weather information

### Understands:

- Awareness of other water users
- Communication with other craft
- Disabled craft
- Emergency action, preventing sinking
- Adrift – alternative means of propulsion
- Actions to be taken by disabled craft and being towed
- Fire precautions and fire fighting
- Distress signals, means of issuing distress, DSC and the Mayday call
- Advice for vessels in restricted visibility

### Can:

- Apply IRPCS, principally rules 5,7,8,9, 12-18

## COASTAL (Section C)

### Knowledge of:

- Byelaws and local regulations
- Insurance
- Boat registration schemes

### Understands:

- Pilotage and passage planning
- Charts, chart symbols, buoyage systems
- Tides and tidal streams

### Can:

- Use steering and hand bearing compasses
- Apply Section A on coastal waters