



Rainbow Sailing School – Course Syllabus

Advanced Powerboat Course

Aim: To teach boat handling, seamanship, pilotage and navigation up to the standards required to drive a planning powerboat safely by day and night in tidal coastal waters with which the candidate may be familiar.

Ratio: should not exceed 6:1

Assumed Knowledge: Should be competent to the standard of intermediate powerboat certificate with a through knowledge of navigation and chartwork to the level of Day Skipper shorebased certificate. You are required to hold a first aid and VHF certificate.

Duration: 2 days

Minimum age: 17

Practical Preparation

Can:

- Prepare the powerboat
- Carry out fuel and engine checks
- Stow and secure gear

Boat handling Knowledge of:

Differences for a twin-engine vessel

Understands:

Characteristics of various hull forms and propeller configurations

Action to be taken in rough weather

Can:

- Demonstrate a practical understanding and correct use of power trim and trim tabs
- Demonstrate an awareness of the effects of wind and tide when manoeuvring, including;
- Steering to transits and in buoyed channels
- Tying in a confined space
- Berthing in various conditions of wind and tide.
- Picking up and leaving a mooring buoy
- Demonstrate the use of an appropriate length kill cord at all times

Passage making and responsibilities as skipper

Understands:

- The importance of pre-trip planning
- Planning and making coastal passage, taking into account the relevant navigational hazards, the type of boat and the strengths of the crew
- Chart plotters and radar, their advantages and limitations

Can:

- Organise the navigation, safety and welfare of the crew during a powerboat passage
- Navigate at higher speed using time/distance
- Use electronic navigational equipment for planning and undertaking a passage, including the use of waypoints, routes and XTE,SOG,COG,BTW,DTW

Pilotage:

Can:

- Carry out pilotage plans and pilotage for entry into or depart from harbour
- Use leading and clearing lines, transit, back bearings and soundings as aids to pilotage
- Use GPS and understand its limitations in pilotage
- Navigation using soundings

Meteorology Knowledge of:

Terms used in shipping forecast, including the Beaufort scale, and their significance to small craft

Understands:

- Sources of forecast information and interpretation of forecast including synoptic charts
- The significance of meteorological trends
- Can interpret a Synoptic chart

Rule of the road

Can:

Apply the international regulations for preventing collisions at sea

Use of engines

Knowledge of:

- How to change a propeller
- Propeller diameter and pitch
- Propeller ventilation and cavitations

Understands:

- Checks to be made before starting, during running, and after stopping for diesel and petrol engines
- Periodic checks on engines and electrical systems including spark plugs, water filters and pump impellers
- Transmission belts
- Spares to be carried

Emergency Situations

Understands:

- Correct action to take in emergency situations
- Fire prevention and fighting
- Hull damage/watertight integrity
- What to do in a medical emergency
- Towing and being towed
- Helicopter rescue procedures
- Use of flares
- Search patterns

Can:

- Pick up a man overboard in all available conditions

Night Cruising

Can:

- Take charge of a powerboat at night, including leaving and entering harbour
- Demonstrate ability at keeping proper lookout and identify lit and unlit marks by night.