

# LEVEL 1 INTRODUCTION TO SAILING

Minimum 14 hours,  
recommended 2 days

The aim of this course is to provide a brief experience of dinghy sailing for someone who has never sailed before. By the end of the course, participants will have had a short introduction to the sport of dinghy sailing, including basic boat handling techniques and essential background knowledge. Certificate is awarded based on attendance.

It is recommended that all participants consolidate this short introduction with the Basic Skills Course – Level 2 as soon as possible after completion of Level 1.

- 1. Personal Preparation**
  - Appropriate clothing & footwear
  - Personal buoyancy including choosing and adjusting a correctly fitting buoyancy aid
  - Sun protection (sun tan lotion, sunglasses, head wear),
  - Water / water bottle (dehydration)
  
- 2. Rigging**
  - Wind awareness
  - Basic parts of boat and rig
  - Sail controls
  - Centerboard / dagger-board and rudder
  
- 3. Rope work**
  - Figure of eight knot
  
- 4. Launching & Recovery**
  - Wind awareness ashore
  - Can safely move a dinghy onshore and secure it on a trolley
  - Knows how to control a dinghy safely on a slipway
  - Can launch and recover a dinghy with assistance (Techniques appropriate to the location should be taught practically)
  
- 5. Basic Controls**
  - Has knowledge of all the basic controls, i.e. rudder, main-sheet / jib sheet, dagger-board / centreboard
  - Knows where to sit and how to balance the dinghy

- 6. Basic Sailing Techniques & Maneuvers**
  - Wind awareness afloat
  - Can steer in a straight line looking ahead
  - Knows how to stop the boat, and control speed (slow down)
  - Sailing across the wind - Reaching
  - Turning the boat through the wind - tacking
  - Getting out of irons
  - Sailing upwind. Sailing downwind
  - Turning the back of the boat through the wind - gybing
  - Importance of effective Communication in double handed dinghies (if appropriate)
  - Understands how to be towed safely
  
- 7. Capsize Recovery**
  - Swimming in a buoyancy aid / life jacket
  - Has taken part in a capsize recovery drill with mast head floatation
  - Knows about inversion and to always stay with the boat
  
- 8. Sailing Theory**
  - Awareness of other water users
  - Basic rule to always avoid collision
  
- 9. Meteorology**
  - Sources of weather information and their relevance

# 第一級 風帆入門

訓練時數最少 14 小時

建議 2 天

本課程的目的，是讓從未接觸風帆的初學者嘗試駕駛風帆的滋味。在完成本課程後，參加者將對風帆運動有一個簡單的認識，包括駕駛風帆的初步技術及一些必須的基礎知識。本課程的証書以參加者須達到課程要求出席率方可獲頒發証書。

本會建議參加者在完成本課程後儘快參與着重實習的第二級基本技巧課程，以鞏固駕駛風帆之技術及知識。

## 1. 個人裝備

- 穿著適當的衣物及鞋
- 挑選、穿上及調整稱身的助浮衣
- 防曬保護 (防曬霜、太陽眼鏡及遮陽帽等)
- 補充足夠水份及帶備水瓶以防脫水

## 2. 裝置船隻

- 留意風向及風力
- 認識船隻的各部份及操作索具
- 帆的操控
- 定水板和舵

## 3. 繩藝

- 8 字結

## 4. 出航及回航

- 留意岸上的風向及風力
- 繫緊帆船於拖架上在岸上移動帆船的安全要點
- 如何在下水坡道上安全控制船隻
- 能在他人幫助下出航及回航  
(以上技術應配合個別中心的地理環境而教授和實踐)

## 5. 基本控制技術

- 對舵、主帆繩、前帆繩、定水板等裝備有基本認識
- 認識在船上所坐的位置及如何保持船隻平衡

## 6. 基本航行技巧及 操控

- 留意水上的風向及風力
- 眼望前方保持直線航行
- 如何停船及控制速度 (減速)

- 橫風航行
  - 迎風轉向
  - 駛離不能航行的角度
  - 迎風航行及順風航行
  - 順風轉向
  - 在雙人船上船員之間溝通的重要性 (如適用)
  - 如何使船隻安全地被拖行
- 7. 覆船扶正**
- 穿著助浮衣游泳
  - 實習扶正有杆頂浮物的傾覆的風帆
  - 認識何為帆船完全傾覆及謹記不要離開船隻
- 8. 航行理論**
- 留意在同一水域的其他使用者
  - 基本「避碰」規則
- 9. 氣象知識**
- 天氣資料的來源，及其對航行的影響

# LEVEL 2

## BASIC SKILLS

Minimum 28 hours,  
recommended 4 days

By the end of the course the successful sailor will be safety conscious, have a basic knowledge of sailing and be capable of sailing a dinghy without an Instructor on board in light / medium winds.

A conventional beginners' course covers both Level 1 and 2 and can be taught consecutively as a single course with a minimum duration of 35 hours or as two separate courses, with the Level 2 unit scheduled as soon as possible after completion of Level 1.

To successfully demonstrate the required skills, it is required that at least part of the course will be taught in double-handed dinghies.

The syllabus below details those items not listed in Level 1. The emphasis of this course will be largely practical.

### 1. Personal Preparation

- Choice of clothing for different weather conditions / seasons
- Buoyancy Aid vs life jacket
- The importance of informing someone ashore and the risks of sailing alone
- Dangers of Dehydration, heat stroke, hypothermia
- The limitations of mobile phones afloat
- Visual methods of attracting attention

### 2. Rigging

- Rigging a dinghy according to weather conditions including head to wind positioning

### 3. Ropework

- Figure of eight, reef knot, bowline

### 4. Launching & Recovery

- Can safely store and move a dinghy ashore
- Launching and recovery basic techniques and safety considerations
- Understands the effect of different wind directions on launch and recovery

- 5. Sailing Techniques & Maneuvers**
  - Application of the Five Essentials
  - Tacking & gybing
  - Basic stop / Head to wind / Hove-to
  - Sailing around a course that includes upwind and downwind legs using all points of sailing
  - Leaving and returning to a slipway, pontoon, or beach
  - Coming alongside
  - Crew overboard recovery (MOB)
  - Being towed by a powerboat
  - Reefing ashore
  
- 6. Capsize Recovery**
  - Can right a single-handed dinghy from capsize position without outside assistance
  - Can use the scoop method to right a double-handed dinghy (as both helm and crew)
  - Is aware of dangers of entrapment
  
- 7. Introduction To Racing**
  - Has participated in a fun race
  - Basic rules of the road
  
- 8. Sailing Theory & Background**
  - Knows the names of all common parts of a dinghy
  - Points of Sailing and No-Go Zone
  - Understanding of the Five Essentials
  - Basic principles of how a sail works and how a sailing boat moves
  - Club or center regulations, local bylaws & maritime regulations as appropriate
  - Awareness of lee shore dangers
  - Awareness of other water users
  
- 9. Meteorology**
  - Sources of weather information
  - How the weather forecast relates to local dinghy sailing
  - The Beaufort wind scale
  - Awareness of changing weather conditions
  - When not to sail and when to reef
  
- 10. Boating & The Environment**
  - Disposal of rubbish
  - Re-usable drinking bottles
  - "Reduce, reuse, recycle"

## 第二級 基本技巧

訓練時數最少 28 小時

建議 4 天

成功完成本級課程的參加者，將能掌握駕駛風帆的基本技術及應注意之安全事項，並能在輕微至和緩的風力下，無須教練在旁指導而能夠駕駛風帆。

如訓練中心舉辦之課程為第1 級和第 2 級合併課程，則訓練時數不得少於 35小時。如非合併課程，完成第一級的學生應儘快上第二級課程。課程內部份訓練須以雙人帆船教學，以帶出相關技巧。

### 1. 個人裝備

- 因應天氣狀況 穿著適當的衣物
- 認識助浮衣與救生衣的分別
- 告知岸上人士航行計劃的重要性，及認識獨自航行的風險
- 認識脫水、中暑及低溫症之危險
- 手提電話在水上使用時的局限性
- 各種能引起別人注意的求救方法

### 2. 裝置船隻

- 根據天氣情況裝置船隻和帆 包括要注意裝置船隻時船頭須迎風

### 3. 繩藝

- 八字結、平結和稱人結

### 4. 出航及回航

- 在岸上安全地移動及存放帆船
- 掌握出航及回航基本技巧及安全要點
- 認識不同風向對出航及回航的影響

### 5. 航行技巧及操控

- 「航行五要訣」的應用
- 迎風轉向及順風轉向
- 基本停船法、迎風停船法、橫風放帆停船法
- 以不同的航向航行，包括迎風和順風的航線
- 駛離及返回下水坡道、浮橋或沙灘的方法
- 靠泊於另一艘船隻
- 拯救墜海人員
- 被機動船拖帶
- 在岸上縮帆

- 6. 覆船扶正**
  - 能獨自扶正傾覆的單人帆船
  - 能用「舀起方法」扶正傾覆的雙人帆船
  - 了解船員受困的危險
  
- 7. 競賽技巧入門**
  - 參加小帆船競賽
  - 認識基本航海避讓守則
  
- 8. 航行理論及其背景資料**
  - 帆船各部份的名稱及功用
  - 航行方向及不能航行區域
  - 「航行五要訣」
  - 帆的原理及如何推動帆船
  - 訓練中心的規條、本地法規及適用的海事條例
  - 意識到駛近下風岸可能遇到的危險
  - 留意其他水上使用者
  
- 9. 氣象知識**
  - 天氣資料的來源
  - 查看與航行相關的天氣預報資料
  - 蒲福氏風級表
  - 了解天氣變化對航行的影響
  - 什麼情況下不應該出航，及何時需要縮帆
  
- 10. 船藝及海洋保護**
  - 垃圾棄置
  - 循環及可再用物料的水樽
  - 減少、重用及循環再造



# **LEVEL 2 EXPERIENCED SAILOR'S ONE DAY ASSESSMENT**

The candidate must present logged evidence of at least a recommended minimum of 35 sailing hours in a dinghy. They will satisfactorily answer questions on the HKSF Level 2 theory and demonstrate the practical skills required in the course outline; in particular they must show proficiency in proper Capsize Recovery and Crew Overboard recovery (MOB). The One Day Assessment must be run by a recognized HKSF Senior Instructor and take place in a double-handed dinghy.

## 第二級 一天評核 (供有經驗學員)

本評核為時一天，供已有駕駛小帆船經驗的學員參加。本會建議參加者須具備最少35小時學習航行經驗，航行時數以紀錄在出航日誌上為準。學員必須能回答有關第二級課程大綱下的理論知識問題，並能示範第二級課程大綱所需的實用技能；學員必須能熟練執行覆船扶正和拯救墜海人員。評核必須由本會認可的高級教練進行並以雙人帆船教學。

# LEVEL 3

## IMPROVING TECHNIQUES

Minimum 35 hours,  
recommended 5 days

By the end of the course, the successful sailor will have a competent, safe, practical approach to dinghy sailing and be capable of sailing and making seamanlike decisions in moderate conditions. To successfully demonstrate the required skills, it is required that at least part of the course will be taught in double-handed dinghies.

It will be assumed that every student starting this course has already mastered the practical skills and absorbed the background knowledge required for Level 2. In practical terms, a minimum of 40 sailing hours (minimum 20 hours as helm) logged in the HKSF logbook is recommended since successful completion of a Level 2 Course.

- 1. Rigging**
  - Rigging single-handed and double-handed dinghies according to weather conditions
  - A basic understanding of the proper use of sail controls, kicker / vang, cunningham, outhaul, and how they affect sail shape according to different wind strengths
  
- 2. Ropework**
  - Level 2 knots revised together with round turn & 2 half hitches and clove hitch
  
- 3. Launching & Recovery**
  - Leaving and returning to beach, jetty or mooring
  - Windward and leeward shores – different techniques according to boat type
  
- 4. Sailing Techniques & Maneuvers**
  - Efficient use of 5 Essentials
  - Use of sail tell tales
  - Handling gusts – signs on the water and pinching
  - Demonstration of the following tasks:
    - Beating, reaching and running
    - Follow-my-leader
    - Crew overboard recovery (MOB)
    - Tacking and gybing in a controlled manner
    - Tacking and gybing on whistle drills

- Sailing backwards
  - Sailing a tight circular course
  - Reefing afloat
  - Coming alongside free-floating and anchored boats
  - Right a fully inverted dinghy
- 5. Capsize Recovery**
- Can right a single-handed dinghy from capsize position without outside assistance
  - Can use the scoop method to right a double-handed dinghy (as both helm and crew)
  - Can right a fully inverted dinghy without outside assistance
  - Can perform a dry capsize and knows its limitations and dangers
  - Is aware of dangers of entrapment
  - Is aware of the reduced effectiveness of mast head floatation when reefed
- 6. Sailing Theory & Background**
- Understands the following terminology: - port & starboard, fore & aft, amidships, windward, leeward, abeam, downwind, pinching, sailing by the lee, luff up, bear away, planing, broaching, being in irons
  - Basic aerodynamic theory – how a sail works.
  - A basic introduction to the International Rules for the Prevention of Collision at Sea (IRPCS)
- 7. Meteorology**
- Sources of weather information, forecasts & mobile phone apps
  - Can interpret forecasts and understand local effects.
  - Onshore and offshore winds. Typhoon and monsoon signals and other warnings. Awareness of changing weather conditions
- 8. Tides**
- A basic understanding of tides including the use of local tables / apps / web sites
- 9. Safety**
- Basic checks and setup before going afloat, eg bailer, tow rope, boat buoyancy, hatch covers, bungs, stopper knots, rudder retaining clip, when to have a paddle
- 10. Introduction To Racing**
- Types of course, start and finishing procedures
  - A basic introduction to the Racing Rules of Sailing (RRS) including port / starboard, when boats meet on the same tack, windward boat, overtaking boat
- 11. Boating & The Environment**
- Sources of pollution at sea & rubbish disposal
  - Biodegradable pollution & non-degradable pollution
  - Recycled & re-usable materials
  - Toxic-free cleaning materials & “WOW - Water Only

# 第三級 技術改良

訓練時數最少 35 小時

建議 5 天

成功完成本課程的參加者，將有足夠能力在中等風力的情況下，安全地駕駛小帆船，並能在適當的時候，作出航海者應有的正確判斷。課程部份訓練須以雙人帆船教學。

在參加本課程前，參加者應已充分掌握第二級課程所要求的技巧及知識。在實踐方面，在完成第二級課程與參加本課程之間，參加者必須具備最少 40 小時航行經驗 當中包括舵手時數最少 20 小時。航行經驗以紀錄在香港帆船運動總會的出航日誌上為準。

## 1. 裝置船隻

- 根據天氣情況裝置單人和雙人帆船
- 帆的操控在不同的風力下，明白如何正確地以斜拉或支索、主帆下拉索、和主帆後拉索來調校帆型

## 2. 繩藝

- 重溫第二級課程所學的繩結；及學習繫木結及雙套結

## 3. 出航及回航

- 駛離及返回沙灘、碼頭或浮泡的方法
- 根據不同的船種採取相應上風岸和下風岸的出航及回航技巧

## 4. 航行技巧及操控

- 有效運用「航行五要訣」
- 使用風向指示帶
- 陣風的處理 —— 觀察水面跡象及搶風行駛
- 能示範以下操作
  - 向上風航行、橫風航行、順風航行
  - 跟隨前船航行
  - 拯救墜海人員
  - 在良好控制下迎風轉向及順風轉向
  - 按哨子指示執行迎風轉向及順風轉向
  - 倒後航行
  - 在一狹窄的圓形航道航行
  - 在海上縮帆
  - 靠泊一艘漂流中或下錨的船隻
  - 扶正一艘完全傾覆的小船

- 5. 覆船扶正**
  - 能獨自扶正傾覆的單人帆船
  - 能分別以舵手和水手角色用「舀起方法」扶正傾覆的帆船
  - 能扶正完全傾覆的帆船
  - 能執行乾式傾覆扶正，明白此方法的限制及潛在危險
  - 意識到船員被困的危險
  - 明白在縮帆情況下杆頂浮物會減少效力
  
- 6. 航行理論及其背景資料**
  - 認識下列術語：左舷、右舷、船頭、船尾、船中部、上風、下風、正橫方向、順風、搶風、以下風舷航行、轉向迎風、轉向下風、搶風航行、滑行、失控轉向頂風、迎風停滯
  - 基本空氣動力學原理
  - 國際海上避碰規則簡介
  
- 7. 氣象知識**
  - 天氣資料來源、天氣預報、及手機應用程式
  - 解讀天氣預報及明白其對所在地區的天氣影響
  - 向岸風和離岸風、颱風信號和強烈季候風信號、各種氣象警告、及意識到天氣的轉變
  
- 8. 潮汐**
  - 對潮汐的基本認識，檢視潮汐漲退表，包括使用出版物、應用程式和有關網頁
  
- 9. 安全知識**
  - 航行前基本檢查和設置，包括水勺、拖繩、船上浮水裝置、船艙蓋、船尾氣塞、繩尾結、舵固定插針、及何時須要帶划槳
  
- 10. 競賽入門**
  - 賽道的種類、起航及衝線的程序
  - 帆船競賽規則之簡介：左右舷、同舷、上下風、超越船
  
- 11. 船藝及海洋保護**
  - 認識海上污染來源及垃圾棄置
  - 可生物降解及不可降解的污染
  - 循環及可再用物料
  - 無毒性清潔劑以及純清水洗滌法

# **LEVEL 3 EXPERIENCED SAILOR'S ONE DAY ASSESSMENT**

The candidate must present logged evidence of at least a recommended minimum of 110 sailing hours in a dinghy. They will satisfactorily answer questions on the HKSF Level 3 theory and demonstrate the practical skills required in the course outline; in particular they must show proficiency in proper Capsize Recovery for a fully inverted dinghy and also Crew Overboard recovery (MOB). The One Day Assessment must be run by a recognized HKSF Senior Instructor and take place in a double-handed dinghy.

## 第三級 一天評核 (供有經驗學員)

本評核為時一天，供已有駕駛小帆船經驗的學員參加。本會建議參加者須具備最少110小時學習航行經驗，航行時數以紀錄在出航日誌上為準。學員必須能回答有關第三級課程大綱下的理論知識問題，並能示範第3級課程大綱所需的實用技能；學員必須能熟練執行完全傾覆的覆船扶正和拯救墜海人員。評核必須由本會認可的高級教練進行，並以雙人帆船進行。



# SPINNAKERS

Minimum 14 hours,  
recommended 2 days

The aim of the course is to provide a basic introduction to the use of the downwind asymmetric or symmetrical spinnaker / gennaker. On completion of the course, the successful sailor should be able to rig, hoist, sail, gybe and recover a spinnaker in moderate conditions. Note that candidates can complete this course using a spinnaker or gennaker equipped dinghy, and any certificate issued will specify the class of dinghy used. Participants may (and are recommended to) repeat the course to gain experience and knowledge with different boat and sail types.

It will be assumed that every student starting this course has already mastered the practical skills and absorbed the background knowledge required for Level 3. In practical terms, a minimum of 40 sailing hours (minimum 20 hours as helm) logged in the HKSF logbook is recommended since successful completion of a Level 3 course.

## 1. Rigging

- Stowage & rigging one or more high performance dinghies including spinnaker or gennaker.
- Differences between chute / sock / bag

## 2. Launching & Recovery

- Can launch and recover a dinghy safely and efficiently and is aware of extra considerations required regarding High Performance boats (open transom / wings / racks)

## 3. Sailing Techniques & Maneuvers

- Demonstrate an ability to sail in a variety of wind conditions to a high standard using all the boat's equipment to best advantage
- Can sail with & trim a spinnaker / gennaker as either helm or crew and can perform a proper hoist, gybe (reach to reach and run to run) and drop
- Windward & leeward hoist & drop
- Use of reaching hook / cleat / twinning line
- Can make full use of spinnaker pole with symmetrical sail if fitted
- Can sail a proper course downwind in the chosen dinghy

- 4. Capsize Recovery**
  - Spinnaker capsize recovery, including full inversion
  - Knows about additional dangers during capsize with a spinnaker
  - Entrapment dangers and “air pocket” under capsized boat
  
- 5. Sailing Theory & Background**
  - Understands:
    - The difference between asymmetric and symmetrical sail
    - The importance of the hoist-drop and power zones when using an asymmetric gennaker
    - Understands effect of pole height on spinnaker shape
    - Blanketing by mainsail and luff collapse
    - Apparent wind
    - Boat balance
  
- 6. Clothing & Equipment**
  - Suitability of boat, equipment and crew for proposed task / sailing area
  - Personal and boat buoyancy, clothing (including gloves and appropriate footwear)
  - Boat safety checks – hull, spars, rigging, buoyancy, foils, sails

# 球型帆技巧

訓練時數最少 14 小時

建議 2 天

本課程旨在提供使用球型帆 (包括對稱和不對稱球型帆) 於下風航行的簡介，參加者在成功完成本課程後，將能在中等風力下設置、升起、在航行中使用、順風轉向、及收起球型帆。此課程可使用對稱球型帆或不對稱球型帆進行訓練，唯本會發出的證書將會列明所使用的船種及其球型帆種類。本會建議參加者重修本課程以獲取不同船種和球型帆種類的經驗和資歷。

為使本課程能達至應有的效果，參加者必須對風帆運動具有足夠的認識及流暢的技巧，並已完成第三級的課程。並且在完成第三級課程後，必須具備最少 40 小時的航行經驗 (其中舵手時數最少為 20 小時)，方可參加本課程。航行經驗以紀錄在香港帆船運動總會的出航日誌上為準。

## 1. 裝置船隻

在一艘高性能的帆船上設置並收起球型帆，及認識各式球型帆存放袋：管式、袜式和袋式。

## 2. 出航及回航

能掌握高性能帆船出航及回航的技巧及安全要點，認識開放式船尾和各壓舷裝置

## 3. 航行技巧及操控

- 在不同風速下，以高水準的技巧駕駛風帆，並能善用船上的所有裝備
- 分別以舵手及水手的角色執行：在水上升起球型帆，使用球型帆航行及能適當調較，並使用球型帆航行時作順風轉向 (包括橫風至橫風及順風至順風的轉向)，下降球型帆 (對稱式球型帆) 並收起
- 於上風舷及下風舷昇降球型帆
- 使用橫風鈎、夾繩器、和球型帆繩調節器 (對稱式球型帆)
- 使用球帆桿 (對稱式球型帆)
- 能駕駛所選的帆船，航行指定的順風航線

## 4. 覆船扶正

- 扶正使用球型帆時的覆船，包括在完全傾覆的情況
- 認識在使用球型帆時覆船的危險

- 船員被困的危險，及在完全傾覆船身內可供呼吸的空氣

## 5. 航行理論及其背景資料

- 明白對稱球型帆和不對稱球型帆的分別
- 明白在昇降不對稱球型帆時受風角度的重要性
- 明白對稱球型帆桿懸掛高度和傾斜角度及其影響
- 了解以主帆遮擋球型帆受風，來降下球型帆
- 假風(感覺風)
- 船的平衡

## 6. 衣物及裝備

- 因應航行的水域和目的選擇合適的船種、裝備和水手
- 個人及船上助浮裝置、合適衣物，包括手套和鞋
- 船隻安全檢查清單：船身、支架、繩索、助浮裝置、定水板、舵、帆等

# TRAPEZE TECHNIQUE

Minimum 14 hours,  
recommended 2 days

The aim of the course is to provide a basic introduction to the use of a trapeze on a suitably equipped high performance dinghy. On completion of the course, the successful sailor should be able to use a trapeze in moderate wind conditions. It will be assumed that every student starting this course has already mastered the practical skills and absorbed the background knowledge required for Level 3. In practical terms, a minimum of 40 sailing hours (minimum 20 hours as helm) logged in the HKSF logbook is recommended since successful completion of a Level 3 Course. A minimum wind strength of Beaufort Force 3 will be required to complete a successful assessment.

## 1. Rigging

- Rigging one or more high performance dinghies that are equipped with a trapeze
- Trapeze components including trapeze cleats, ring, adjustment system (2:1 or 1:1), elastic

## 2. Launching & Recovery

- Can launch and recover a dinghy safely and efficiently and is aware of extra considerations required regarding High Performance boats (open transom / wings / racks)

## 3. Sailing Techniques & Maneuvers

- Demonstrate an ability to sail in a variety of wind conditions to a high standard using all the boat's equipment to best advantage, including use of the trapeze
- Can helm a dinghy with the crew on the trapeze
- Basic hook on technique (whilst sitting / standing)
- Get out on the trapeze (including hand & foot position)
- Adjustment of trapeze height as appropriate (leverage)
- Body positioning while on trapeze
- Maintain boat balance by adapting movement on trapeze for reduced and for increased wind speeds
- Adjustment of fore / aft positioning to effect boat trim (walking gunwales)
- How to come in from trapeze position

- Tacking & gybing trapeze to trapeze
- Use of spinnaker or gennaker while on trapeze (optional)

#### **4. Capsize Recovery**

- Can right a capsized dinghy fitted with trapeze; including righting after full inversion. Knows about additional dangers during capsize with a trapeze.
- Entrapment dangers and “air pocket” under capsized boat

#### **5. Sailing Theory & Background**

- Has carried out a Trapeze drill
- Understands righting-moment and trapeze height. Can put on harness correctly.
- Importance of non-slip surfaces
- Importance of team work / helm & crew communication
- Actions to take on a capsize (unhook first, helm to check crew) Risks associated with trapeze hook (boat damage, entrapment, catapult effect)
- Tea-bagging

#### **6. Clothing & Equipment**

- Suitability of boat, equipment and crew for proposed task/ sailing area
- Personal and boat buoyancy, clothing (including gloves, appropriate footwear, rash-vests, sailing bibs etc)
- Boat safety checks – hull, spars, rigging, buoyancy, foils, sails.
- Types of harness; types of hook including quick release hooks
- Understands the safety importance of wearing buoyancy aid under harness

# 吊掛式壓舷技巧

訓練時數最少 14 小時

建議 2 天

本課程旨在提供在高性能帆船上使用吊掛式壓舷技巧的基本訓練。參加者在成功完成本課程後，將能在中等風力下進行吊掛式壓舷航行。

為使本課程能達至應有的效果，參加者必須對風帆運動具有較全面的認識及流暢的技巧，並已完成第三級課程。及在完成第三級課程後，具備最少 40 小時的航行經驗（其中舵手時數最少為 20 小時），方可參加本課程。航行時數以紀錄在香港帆船運動總會的出航日誌上為準。本課程的評核必須在蒲福氏風級三級或以上進行。

## 1. 裝置船隻

- 設置一艘或多艘具有吊掛式壓舷裝置的高性能帆船
- 吊掛式壓舷裝置的組件：吊掛夾繩器、吊環、調較系統 (2:1 或 1:1)、橡筋繩

## 2. 出航及回航

- 有效率地掌握高性能帆船的出航及回航技巧及安全要點，並能兼顧到開放式船尾及各壓舷裝置

## 3. 航行技巧及操控

- 在各種不同風速下，以高水準的航行技巧駕駛風帆，並善用船上的所有裝備包括吊掛式壓舷
- 以舵手角色航行 配合水手吊掛壓舷
- 基本上扣技巧分別從坐下時或站立時上扣
- 吊出技巧 手和腳的動作及位置
- 吊掛時調較掛吊高度
- 吊掛時的正確身體姿勢
- 在風力變化下如何移動身體以平衡船隻
- 前後移動以平衡船隻
- 從吊掛位置回到船內
- 吊掛時進行迎風轉向和順風轉向
- 使用球型帆時同時進行吊掛壓舷 (選項)

- 4. 覆船扶正**
  - 扶正設有吊掛裝置的傾覆帆船，包括完全傾覆的帆船，認識在執行吊掛壓舷時傾覆的各種危險
  - 船員被困的危險，及完全傾覆船身內可供呼吸的空氣
  
- 5. 航行理論及其背景資料**
  - 何時吊出和吊掛高度
  - 能正確穿上吊掛衣
  - 船面防滑材料的重要性
  - 舵手和水手之間的合作及溝通的重要性
  - 傾覆時應即採取的行動 (即時解扣，舵手查問水手的安全)
  - 吊掛鈎的危險，包括有可能損壞船身、被困、彈出的危險
  - 吊掛時被拖行於水中 (吊茶包)
  
- 6. 衣物及裝備**
  - 因應航行的水域和目的選擇合適的船種、器材和水手
  - 個人及船上助浮裝置，合適衣物包括手套、鞋、防晒衣、保護背心等等
  - 船隻安全檢查清單：船身、支索、繩索、助浮裝置、定水板、舵及帆
  - 壓舷吊掛衣的種類及掛鈎的種類 (包括快速放開掛鈎)
  - 明白在吊掛衣下穿著助浮衣的重要性



# DAY SAILING

Minimum 28 hours,  
recommended 4 days

By the end of the course, the successful sailor will have a confident, safe approach to planning and executing a short cruise in a dinghy. Practical application of skills will be enhanced by comprehensive shore based sessions. It is expected that each course will normally include two theory and practical practice days, and two organised “sailing trips”

It will be assumed that every student starting this course has already mastered the practical skills and absorbed the background knowledge required for Level 3. In practical terms, a minimum of 40 sailing hours (minimum 20 hours as helm) logged in the HKSF logbook is recommended since successful completion of a Level 3 Course. It is recommended that participants who have not yet completed the Spinnaker and Trapeze courses do not use dinghies equipped with spinnakers or trapeze)

## 1. Rigging

- Preparation and equipping a boat for cruising including safety;
- Navigation equipment, clothing and food
- Can stow gear correctly

## 2. Ropework

Level 3 knots revised, together with additional practical tasks such as mooring to a jetty or buoy. A knowledge of the care of cordage e.g. whipping and heat sealing.

## 3. Sailing Techniques & Maneuvers

- Revision of Level 3 skills including:
  - Hove to
  - Crew overboard recovery
  - Coming alongside a jetty or pontoon
- Picking up a mooring
- Planning and undertaking a day sail including considerations of safety, pilotage, navigation and collision avoidance
- Anchoring, theory & practical
- Knowledge of use of anchor to effect lee shore landing and departure

- Launching and recovery, limitations & dangers
- Using stern and bow lines and knowledge of aft and fore springs
- Approaching a mooring under sail. Leaving a mooring under sail
- Reefing afloat
- Towing another sailing dinghy

#### **4. Handling A Dinghy In Adverse Conditions**

- Capable of self-rescue following total inversion.
- Knowledge of how to improvise in the event of gear failure;
- Boat handling in strong winds / squalls / rough seas, reducing sail area, seeking shelter (dealing with emergencies)

#### **5. Navigation**

- Charts, tide tables, tidal stream atlases
- Twelfths Rule. Springs & Neaps
- Navigational instruments and limitations afloat
- Pilotage – buoyage, transits
- Use of electronic and magnetic compasses, deviation & variation
- Interpretation of important chart symbols.
- Use of latitude / longitude & scale
- Position fixing by transits and bearing
- Steering a compass course
- Difference between Estimated Position (EP) and Dead Reckoning (DR) position (boat speed & leeway)
- Principles of dead reckoning
- Planning chartwork before departure
- Knowledge of waypoints
- Aware of advantages of GPS

#### **6. Meteorology**

- Sources of weather information and interpretation of forecasts
- HK Observatory services including weather radar, regional weather and marine forecasts, typhoon and monsoon signals and other warnings
- Beaufort wind scale
- Apps, wind-flow forecasts and weather patterns
- Awareness of changing weather conditions.
- Onshore and offshore winds
- Simple interpretation of synoptic chart
- Main characteristics of high and low-pressure areas
- Local conditions, observation afloat

**7. International Regulations For Preventing Collision At Sea**

- Meeting other sailing vessels
- Meeting power-driven vessels
- Following or crossing channels
- Meeting vessels restricted in their ability to manoeuvre, i.e. tows, barges, deep draught
- Action by stand-on vessel
- Traffic separation schemes
- Other dangers

**8. Planning Of A Days' Cruise**

- Planning of and participation in a day's cruise in coastal waters, including:
- Planning of the route
  - alternatives and safe shelters
  - preparation of clothing, equipment and food
  - Safety precautions (e.g. telling someone where you are going and expected time of return etc.)
  - Dehydration. Heat stroke, Heat Exhaustion and Hypothermia.
  - Weather forecasting & Tidal information
  - Calling for help and distress signals
  - Limitations of the use of mobile phones

**9. Boating & The Environment**

- Disposal or take-home rubbish – securing items in dinghy
- Appropriate storage and transport containers
- Beach clean-up programmes and environmental organisations
- Noise & exhaust fumes, oil & fuel
- Invasive species & wildlife

# 日間航行

訓練時數最少 28 小時

建議 4 天

在成功完成本課程後，參加者應有足夠信心並能以安全為前提下，計劃及實行一個短程的日間航程。課程包括兩天理論和實習課，及兩個航程計劃以提升實際技巧的應用。

為使本課程能達至應有的效果，參加者必須對帆帆運動具有較全面的認識及流暢的技巧，並已完成第 3 級或相等的課程，以及在完成第 3 級課程後，具備最少 40 小時的航行經驗（其中最少 20 小時為舵手時數），方可參加本課程。航行經驗以紀錄在香港帆船運動總會的出航日誌上的為準。參加者須完成球型帆技巧及吊掛式壓舷技巧課程，方可使用設有球型帆及吊掛式壓舷裝置的帆船。

## 1. 裝置船隻

準備及裝備一艘供日間航程的帆船，包括安全及導航設備、衣物及食物；適當地儲藏此等設備於船上。

## 2. 繩藝

- 重溫第 3 級課程所學的繩結
- 靠泊碼頭或浮標的實習
- 繩索的保養, 包括處理扭繩和熱收縮封口

## 3. 航行技巧及操控

- 重溫第 3 級課程所學的技術，包括：橫風放帆停船法、拯救墜海人員、靠泊碼頭或浮橋
- 繫泊浮標
- 計劃及進行一個日間航程，包括考慮安全、領航、導航，及避免碰撞等措施
- 下錨的理論及實習
- 利用錨具協助駛達及駛離下風岸
- 離岸出航及回航上岸，了解現場環境的各種限制及危險
- 如何使用船尾纜、船頭纜、後側纜、和前側纜
- 如何在揚帆情況下駛近及駛離一繫泊浮標
- 在水上縮帆
- 拖另一艘帆船行駛

#### 4. 惡劣環境下操控船隻的知識

- 有能力在船隻完全傾覆後自行拯救及脫險
- 學習如何在裝備失靈或損壞時採取臨時應變措施
- 在強風、巨浪，及惡劣環境下操控船隻、縮帆、找安全的躲避處 (處理緊急情況)

#### 5. 導航

- 海圖、潮汐表、海流圖
- 十二分法則、大潮及小潮
- 導航儀器及在海上使用時的限制
- 領航標誌 —— 浮標及疊標
- 如何使用電子及磁力指南針，偏差和自差
- 海圖上重要標記的認識
- 經緯度與比例尺
- 利用疊標方法及羅盤方位測定位置
- 行駛於以指南針定向的航線
- 估計位置 (EP) 和以航速及航向推算定位(DR)的分別
- 以航速及航向推算定位的原則
- 出航前利用海圖計劃航程
- 設定航點
- 全球衛星定位系統的使用及好處

#### 6. 氣象知識

- 天氣資料來源和天氣預告的解析
- 香港天文台提供的天氣資料，包括：雷達資訊、地區性天氣資料、船舶天氣預告、颱風及季候風信號及其他警告
- 蒲福氏風級表
- 智能裝置應用程式可提供的資訊：風向預測及天氣模式
- 了解天氣情況的變化
- 向岸風和離岸風
- 天氣圖的簡單解析
- 高壓區和低壓區的主要特徵
- 本地情況、海面觀察

#### 7. 國際海上避碰規則

- 與帆船相遇
- 與機動船相遇
- 跟隨航道的航行方向或橫過航道
- 遇到操縱能力受到限制的船隻 (包括拖行中、駁船、受吃水深度限制者)
- 保持航行的船隻應採取的舉動
- 分道航行制
- 其它危險

- 8. 日間航程的計劃** 計劃近岸日間航程，包括：
- 航線的計劃
  - 後備航程及安全躲避處
  - 預備適用的衣物、裝備和食物
  - 安全措施(包括通知他人出航計劃及預計回航時間等)
  - 脫水、中暑、熱衰竭及低溫症
  - 天氣和潮汐資料
  - 如何求救及緊急求救信號
  - 手提電話的有限作用
- 9. 船藝及海洋保護**
- 把將棄置或帶回的垃圾固定於船內
  - 船上的貯存空間及合適的貯存容器
  - 沙灘清潔活動及有關環境保護組織
  - 噪音、廢氣排放、油污對環境的影響
  - 入侵物種及野生動物的保護

# INTRODUCTION TO MULTIHULLS

Minimum 14 hours,  
recommended 2 days

By the end of the course the successful sailor will be safety conscious, have a basic knowledge of sailing a multihulls and be capable of sailing without an Instructor on board in light winds.

It will be assumed that every student starting this course has already mastered the practical skills and absorbed the background knowledge required for Level 3. In practical terms, a minimum of 40 sailing hours (minimum 20 hours as helm) logged in the HKSF logbook is recommended since successful completion of a Level 3 Course.

Certificate is awarded based on attendance.

## 1. Rigging

Rigging a multihull including reefing ashore (if appropriate)

## 2. Ropework

Figure of eight, reef knot, bowline, round turn & 2 half hitches, clove hitch and other knots as appropriate

## 3. Launching and Recovery

- Can safely manoeuvre the boat ashore, including use of wheels and chocks
- Can launch and recover a catamaran (including lee shore) safely and efficiently and is aware of extra considerations required regarding multihulls.(rudders / dagger-boards / trampoline)

## 4. Sailing Techniques & Manoeuvres

- Tacking and gybing and is aware of specific techniques for multihulls
- Knows how to avoid getting into irons (trim / backing jib / boat-speed )
- Basic trapeze techniques
- Can sail all points of sail and can control the speed of the boat
- Can use the traveller effectively

## 5. Capsize and Recovery

Can right a multihull dinghy from capsize position without outside assistance;

- 6. Sailing Theory & Background**
  - Aware of common types of multihull fleets in Hong Kong
  - Aware of the points of sailing, correct sail trim
  - Setting the traveller and mainsheet
  - Understand the dangers of burying the leeward bow and what causes a pitch-pole
  
- 7. Introduction To Racing**
  - Has participated in a fun race
  
- 8. Clothing & Equipment**
  - Wears suitable clothing including PFD and harness correctly.
  - Aware of dangers of trapezing and how to deal with possible entrapment
  - Suitability of boat, equipment and crew for proposed task/sailing area
  - Personal buoyancy, clothing (including gloves and suitable and appropriate footwear)
  - Boat safety checks – hull, shrouds, forestay, hull buoyancy (hatch covers /bungs), foils, sails



# 雙體船入門

訓練時數最少 14 小時

建議 2 天

成功完成本課程的參加者，將能掌握駕駛雙體帆船的基本技術及應注意之安全事項，並能在輕微至和緩的風力下，無須教練同船指導而能夠駕駛雙體帆船。

在參加本課程前，參加者應已充分掌握第 3 級課程所要求的技巧及知識。在實踐方面，在完成第 3 級課程與參加本課程之間，參加者必須具備最少 40 小時航行經驗（當中包括最少 20 小時舵手時數）。航行經驗以紀錄在香港帆船運動總會的出航日誌上為準。本課程的證書以參加者須達到課程要求出席率方可獲頒發證書。

## 1. 裝置船隻

在岸上裝置雙體帆船，縮帆(如適用)

## 2. 繩藝

八字結，平結，稱人結，雙半結（一個圈兩個半結），繫木結及其它適用繩結

## 3. 出航及回航

- 如何在岸上安全移動及控制船隻，正確使用輪架和楔子
- 能安全有效地出航及回航(包括返回下風岸)，並能小心處理雙體船的舵，定水板和彈網

## 4. 基本航行技巧及操控

- 以雙體船特有的技巧進行迎風轉向及順風轉向
- 如何避免進入不能航行的角度(帆的調較，以前帆頂風，船速控制)
- 基本吊掛式壓舷技巧
- 各種航向的航行及控制船速
- 能有效使用主帆繩滑軌

## 5. 覆船扶正

- 能自行扶正傾覆的雙體船

## 6. 航行理論及其背景資料

- 了解在香港常見的雙體船型
- 各種航行方向及帆的調較
- 主帆繩滑軌的設置
- 了解順風下船頭插水及雙體帆船向前翻滾的危險

## 7. 競賽技巧入門

- 參加小型競賽

## 8. 個人裝備

- 穿著適當的衣物，助浮衣及吊掛衣
- 了解吊掛式壓舷可能發生的危險及被困時如何脫險
- 因應航行的目標和範圍，選擇合適的船程，器材及船員
- 個人助浮衣，衣物 (包括手套和鞋)
- 安全檢查: 船身，側支索，前支索，船身浮力 (艙蓋，船尾塞)，定水板和舵，帆

# MULTIHULLS HELMSMAN

Minimum 14 hours,  
recommended 2 days

By the end of the course, the successful sailor will have a competent, safe, practical approach to the sailing of multihulls and will be capable of sailing and making seamanlike decisions in moderate conditions.

It will be assumed that every student starting this course has already mastered the practical skills and absorbed the background knowledge required for the Introduction to Multihull Course. A minimum wind strength of Beaufort Force 3 will be required to complete a successful assessment.

## 1. Rigging

- Can correctly rig a multihull without assistance and is able to reef afloat (if appropriate)
- Awareness of halyard lock / mast rotator / zipped jib luff - jib hanks / fully battened mainsails / righting-line / dolphin striker

## 2. Ropework

Revision of Introduction to Multihull course content, plus additional knots as appropriate

## 3. Launching & Recovery

- Can launch and recover a catamaran safely and efficiently from beach or slip-way

## 4. Techniques & Manoeuvres

- Can tack and gybe efficiently
- Is able to use the trapeze effectively
- Demonstrate crew control of mainsheet (as appropriate)
- Can maintain stability while flying a windward hull (skimming the water)
- Demonstrate controlled and steady helming at speed
- Understands power zone and use of asymmetric spinnaker (if fitted)
- Can perform the crew overboard recovery (MOB) drill.
- Can effectively stop the boat while coming alongside the safety boat
- Can use the 5 essentials to control the boat's speed.

**5. Introduction To Racing**

- Has participated in multihull races and understands windward / leeward courses, offset marks, gates, downwind finish.
- Understands the basic Racing Rules of Sailing (RRS)

**6. Capsize & Recovery**

- Capable of self-rescue following total inversion.
- Understands techniques and equipment to avoid inverted capsize
- Understands the risks of entrapment.

**7. Sailing Theory & Background**

- Understands the 5 essentials and how they apply to multihull sailing
- Is aware of the effect of apparent wind on multihull sailing
- Boat handling in strong winds / squalls / rough seas, reducing sail area, seeking shelter (dealing with emergencies)
- Knowledge of how to improvise in the event of gear failure

# 雙體船舵手

訓練時數最少 14 小時

建議 2 天

成功完成本課程的參加者，將有足夠能力在中等風力的情況下，安全有技巧地駕駛雙體帆船，並能在適當的時候，作出航海者應有的正確判斷。

在參加本課程前，參加者應已充分掌握雙體船入門課程所要求的技巧及知識。本課程的評核必須在蒲福氏風級 3 級或以上進行。

## 1. 裝置船隻

- 能自行設置一艘雙體帆船，並能進行岸上縮帆(如適用)
- 昇帆索的鎖繩器，桅桿的轉動，前帆邊 (zipped jib luff - jib hanks)，全帆骨的主帆，覆船扶正拉索，橫支索 (dolphin striker)

## 2. 繩藝

溫習雙體船入門課程內學習的繩結，及其它課程需要的繩結

## 3. 出航及回航

能安全有效地從沙灘或下水坡道出航及回航

## 4. 基本航行技巧及操控

- 能有效地迎風轉向及順風轉向
- 能有效地進行吊掛式壓舷
- 示範由水手控制主帆繩(如適用)
- 能使上風船身昇起在水面滑行，並保持船穩定航行
- 在船速高時，維持船的穩定性及保持控制
- 了解動力區(power zone)及使用不對稱球帆(如備有)
- 能執行拯救墜海人員
- 能把船停靠在安全支援船側
- 能以「航行五要訣」(四要訣)控制船速

## 5. 競賽入門

- 參加雙體船的競賽，了解上下風賽道、偏移泡，泡閘，向下風衝線
- 帆船競賽規則之簡介

## 6. 覆船扶正

- 能自行扶正完全傾覆的雙體船
- 掌握有關的技巧和器材的使用以避免傾覆
- 了解可能被困的危險

## 7. 航行理論及其背景資料

- 掌握並應用「航行五要訣」(四要訣)
- 認識航行雙體船時所感覺到假風
- 各種情況下的控船技術: 強風，風暴，高浪湧，減少帆的受風面積，緊急情況下找避護處
- 面對器材破損的應付辦法

# ADVANCED SKILLS

Minimum 28 hours,  
recommended 4 days

By the end of the course, the successful sailor will have a competent, safe, practical approach to the sailing of small open boats and will be capable of sailing and making seamanlike decisions in strong wind conditions.

It will be assumed that every student starting this course has already mastered the practical skills and absorbed the background knowledge required for the HKSF Level 3, Spinnaker and Trapeze Courses.

A minimum wind strength of Beaufort Force 4 will be required to complete a successful assessment.

- 1. Rigging**  
Rigging any type of dinghy including spinnaker and trapeze (if carried)
- 2. Ropework**
  - Revision of knots from Levels 2 & 3
  - A knowledge of the care of cordage e.g. whipping and heat sealing, splicing.
- 3. Launching & Recovery**
  - Efficient and safe launching & recovery in strong wind conditions
  - Recovery including lee shore recovery
- 4. Sailing Techniques & Manoeuvres**
  - Demonstrate an ability to sail in strong wind conditions to a high standard using all the boats equipment to best advantage, including Spinnaker and Trapeze (if carried)
  - Revision of Level 3 skills including:
    - Efficient follow-my-leader
    - Basic 'hove-to' position
    - Crew overboard recovery (MOB)
    - tacking & gybing to a high standard
    - Sailing backwards
    - Sailing a tight circular course
    - Mooring & coming alongside

- reefing afloat (as appropriate)
- Demonstrate efficient and precise technique on all points of sailing on a restricted course
- Sailing without a rudder
- Sailing without a dagger board / centreboard
- Towing another sailing dinghy
- Anchoring, theory & practical
- Understands how to improvise in the event of gear failure

**5. Capsize Recovery**

- Can right a fully inverted dinghy without outside assistance
- Is aware of dangers of entrapment

**6. Sail & Mast Controls**

- Revision of Level 3 knowledge including kicker / vang, cunningham, outhaul, traveller and how they affect sail shape according to different wind strengths
- Luff tension, sheeting positions, control of mast bend, mast struts & chocks, mast rake & spreaders

**7. Boat Maintenance & Repair**

- A knowledge of GRP fibreglass / foam sandwich thermoplastic repairs, quick fix solutions
- Running rigging
- Appropriate types of control rope and cord and replacement
- Foils



# 深造技巧

訓練時數最少 28 小時

建議 4 天

在成功完成本課程後，參加者在進行風帆運動時應具備足夠信心和安全意識，以航海者應有的態度駕駛帆船，並有能力於和緩至清勁風速的情況下，駕駛一艘開放式的小型帆船。

為使本課程能達至應有的效果，參加者必須對風帆運動具有足夠的認識及流暢的技巧，並已完成第 3 級課程、球型帆技巧課程及吊掛式壓舷技巧課程。

本課程的評核必須在蒲福氏風級 4 級或以上進行。

## 1. 裝置船隻

因應船上不同的裝備而裝置任何一種風帆，可包括球型帆及吊掛式壓舷裝置。

## 2. 繩藝

- 溫習第 2 級和第 3 級課程教授的繩結
- 繩索的保養，包括處理扭繩，熱收縮封口和編接

## 3. 出航及回航

- 在和緩至清勁風速下有效及安全地出航及回航
- 向下風岸回航

## 4. 航行理論及其背景資料

- 能在和緩至清勁風速下以高水準的航行技巧示範使用船上所有適用裝置，包括球型帆和吊掛壓舷裝置(如設有)
- 溫習第 3 級的技巧，包括：
  - 有效地跟「我」航行
  - 橫風放帆停船法
  - 拯救墜海人員
  - 高水平的迎風轉向及順風轉向
  - 倒後航行
  - 航行狹窄的圓形航道
  - 繫泊浮泡及靠泊船隻
  - 水上縮帆(如適用)
- 在包括各種不同航向的指定的航道上，示範能有效及精確地航行
- 無舵航行

- 無定水板航行
- 拖另一隻帆船
- 下錨: 理論和實踐
- 發生故障時如何即時處理

## 5. 傾覆扶正

- 能自行扶正一艘完全傾覆的帆船
- 明白船員被困的危險

## 6. 帆和桅桿的控制

- 溫習第3級的技巧，包括斜拉器/支索、主帆下拉索、主帆後拉索、滑軌及它們如何在不同的風力下影響帆的形狀
- 帆前緣的下拉力、帆拉索的位置、桅桿的彎曲、桅桿支索和桅桿矯角墊、桅桿後傾及橫支索

## 7. 船隻維護、保養及維修

- 了解玻璃纖維增強聚酯(GRP)玻璃纖維/泡沫夾層熱塑性修復，及快速修復方案
- 運行索具
- 使用適當類型的控制繩索及其更換
- 定水板及舵

# GO RACING

Minimum 35 hours,  
recommended 5 days

By the end of the course, the successful sailor will have a good understanding and ability in dinghy racing in moderate wind conditions and be equipped to compete in open events and regattas. Practical application of skills will be enhanced by comprehensive shore based sessions.

It will be assumed that every student starting this course has already mastered the practical skills and absorbed the background knowledge required for HKSF Level 3. In practical terms, a minimum of 40 sailing hours (minimum 20 hours as helm) logged in the HKSF logbook is recommended since successful completion of a Level 3 Course.

## 1. Rigging

- Preparation of boat and equipment for prevailing wind conditions
- Use of rig tension gauge and tape measure to set up mast-rake, spreader deflection and rig tension
- Use of class tuning guide

## 2. Boat Speed

- How to power-up / de-power the rig
- Use of kicking strap / vang, cunningham, clew outhaul, traveller, bridle or mainsheet strops, jib fairleads and barber haulers, mast ram or strut/chocks (if fitted)
- Can alter sail controls both round the course and according to weather conditions
- An understanding of weather helm and lee helm
- Centreboard & rudder positions

## 3. Racing Techniques & Manoeuvres

- Understands slow speed handling, stopping, starting accelerating, & sailing backwards
- Making best use of the 5 essentials including proper hiking technique
- Roll tacking & Roll gybing
- Tacking and gybing in strong winds
- Knowledge of how boat balance effects steering
- Skilful use of tell tales

- Lifts and headers
- Using clear wind, understanding wind shifts – both oscillating and persistent
- Gusts and Lulls (ease – hike – trim)
- How to hold a lane upwind
- Mark rounding, other boats, rounding position, wide in narrow out
- Understanding of gates and offset marks

#### 4. Racing Tactics

- Starting fundamentals including positioning, speed control, and appropriate tack.
- Starting techniques; understands bias (favoured end) and how to assess it
- Use of transits to establish start line position.
- Boat-on-boat tactics: covering & breaking cover; tight & loose covering, clean air & wind shadow
- Lee bow situation
- Gates & Mark Rounding's
- Finish – how to select the correct end of the line.

#### 5. Racing Theory

- Handicap versus Class racing
- Measurement rules
- Notice of Race, Sailing Instructions, Amendments (L notice), Class Rules
- International Racing Flags & sound signals
- Starting penalties
- Progress of a race from warning signal to finish
- Types of courses

#### 6. Meteorology

- Sources of information relevant to venue
- Apps & wind-flow forecasts
- Local weather patterns for each day and planning of appropriate rig set up
- Effect of local topography
- The sea breeze

#### 7. Boat Preparation

- Hull - exterior finish and protection, weight & stiff
- Foils – maintenance and finish
- Sails – care and maintenance
- Spars – aluminium / carbon
- Standing and running rigging – inspection and maintenance, erosion / galvanic action
- Fittings – inspection regime
- Ropes – whipping & splicing, age and degradation, effect of UV

#### 8. Crew Preparation

- Diet, fitness, warming up & cool down
- Being mentally prepared

- Communication & teamwork (with crew and / or coach)
- Sportsmanship, fair sailing and misconduct
- Familiarization with venue & local conditions
- Tidal flow & use of charts & almanac

### 9. Race Strategy

- Starts: starting plan
- Line: bias, favoured end
- The windward legs: playing the wind shifts. Choosing the lay line for the windward mark.
- Avoidance of sailing in “Dirty Air” or “Bad Air”
- Clear Air, gusts and lulls
- The reaching/running legs, the rhumb line
- The finish – covering the opposition, half ahead – half upwind, nearest part of the finish line.
- Use of waves and current

### 10. Rules

- Has an understanding of Part 1 section A and the definitions of the current Racing Rules of Sailing (RRS)
- Has a basic knowledge of sections B, C and D of the current Racing Rules
- Illegal Propulsion
- Penalties
- Protests and Appeals

### 11. Safety

- Practical revision of Level 3 capsize recovery
- Individual safety - when not to race & outside assistance
- Assisting other boats in distress

# 競賽技巧

訓練時數最少 35 小時

建議 5 天

在成功完成本課程後，參加者將會對小帆船競賽有相當程度的理解和技巧，能勝任在中等風力情況下進行比賽，及具備參加公開比賽的能力。本課程包括岸上理論以補充海上的比賽實習。

為使本課程能達至應有的效果，參加者必須對風帆運動具有足夠的認識及流暢的技巧，並已完成第 3 級課程。

在實踐方面，在完成第 3 級課程與參加本課程之間，參加者必須具備最少 40 小時航行經驗 (當中包括最少 20 小時舵手時數)。航行經驗以紀錄在香港帆船運動總會的出航日誌上為準。

## 1. 裝置船隻

- 根據當時的風速及風向，預備及裝置一艘帆船
- 根據帆廠提供的調較指南，使用拉力量度器和量度尺，設定桅桿的後傾角度、橫支桿的角度及固定繫索的拉力

## 2. 船速

- 如何增強及減少動力
- 使用斜拉索 / 支索、主帆下拉索、主帆後拉索、滑軌、韁繩或主帆帶索、前帆導纜器、前帆繞滑軌、桅桿底部前後調整器、桅桿矯角墊 (如合適)
- 能因應天氣情況及航行路線來控制帆
- 了解上風舵傾和下風舵傾
- 定水板和舵的位置

## 3. 比賽技巧及操作

- 控制慢駛、停船、比賽起航、加速、和倒後航行
- 「航行五要訣」及壓舷技巧
- 傾滾式迎風轉向及傾滾式順風轉向
- 強風下作迎風轉向及順風轉向
- 了解船的平衡如何影響轉向
- 風向指示帶
- 提升風和迎頭風
- 使用暢通無阻的風，了解風向的變化：擺動和持續
- 陣風和間歇無風 (放帆 - 壓舷 - 收帆)
- 如何向上風航行

- 繞泡，留意其他船隻，繞泡的位置，寬入窄出
- 了解泡閘和偏移泡

#### 4. 比賽戰術

- 起航基本知識，包括起航位置，速度控制和適當的迎風轉向
- 起航技巧，了解起航線的偏斜(及有優勢的一端)，以及如何評估情況
- 利用豐標來找出啟航線的位置
- 船對船的戰術：覆蓋和打破覆蓋；緊密／鬆散地覆蓋，暢通無遮擋的風和風影
- 置於他船的下風船頭位置
- 繞泡和泡閘
- 衝線 – 如何選擇正確的衝線位置

#### 5. 比賽理論

- 多船種讓分制及單一船種級別比賽
- 仲量規則
- 比賽通告、航行指引、給賽手的通知、級別規則
- 國際比賽旗號和聲音信號
- 起航時的處罰
- 比賽的過程：從警告信號到完成比賽
- 賽道的種類

#### 6. 氣象

- 與場地有關的信息來源
- 應用程式及風的預測
- 根據當天的氣象模式，計劃船和帆的設置
- 地形的影響
- 海風

#### 7. 船隻的準備

- 船身：船殼的外表和保護，重量和硬度
- 定水板和舵：維修及表面保護
- 帆：保養和維修
- 桅桿：鋁 / 碳
- 支索和操作索具 — 檢查和維修，侵蝕 / 電偶腐蝕
- 配件 — 檢查的程序
- 繩索 — 編紐和拼接、老化和退化、紫外線的影響

#### 8. 船員的準備

- 飲食、健身、熱身和緩和運動
- 心理準備
- 溝通和團隊精神(水手之間和與教練)
- 體育精神、公平競爭，及不端行為
- 熟悉比賽場地和當地環境
- 潮汐漲退表、海圖，和天文年曆的使用

## 9. 比賽策略

- 起航和起航計劃
- 起航線：偏差，有優勢的一端
- 迎風賽道：如何利用風的擺動，選擇分界線（駛向上風泡的航線）
- 避免在被遮擋的風或不暢通的風中航行
- 暢通無阻的風、陣風和間歇無風
- 橫風賽道、順風賽道、等角線
- 衝線 — 覆蓋對手，領先船如何覆蓋對手，選擇最接近的一段終點線
- 利用湧浪和水流

## 10. 賽例

- 對現行帆船競賽規則中第一部份的 A 節及有關定義的部份有所認識，並知道何為現行比賽規則
- 帆船競賽規則中第 B、C，及 D 節有基本認識
- 違規推進
- 處罰
- 抗議及提出上訴

## 11. 安全

- 重溫及實習第 3 級的傾覆扶正
- 個人安全考慮，何時決定退出比賽及向外求救
- 幫助其他遇險船隻