# Recreational Sailing & Boating Education

Marco Heitz, Instructor Port Hope, Ontario, Canada +1-289-251-8797 marco@luckymesailing.com www.luckymesailing.com

Private & Tailored Programs on:

#### **Coastal & Offshore Navigation**

- ✓ For private & tailored programs Choose topics of interest from the full list of topics
- ✓ Or choose a pre-established program level
- ✓ Each level contains additional topics and delves deeper into the topics
- ✓ Learn practical information from the first-hand experiences of the instructor
- ✓ Receive information on useful links & apps

LIST OF TOPICS	LEVEL 1	LEVEL 2	LEVEL 3
Nautical Charts - Information Contained in Charts	✓	✓	<b>✓</b>
Nautical Charts - Symbols, Abbreviations, & Terms	✓	✓	✓
Nautical Charts - Latitude & Longitude System	✓	✓	✓
Nautical Charts - Projections, Types, & Electronic	✓	✓	✓
Nautical Charts - Datums	✓	✓	✓
Navig. Publications – Chart #1	✓	✓	✓
Navig. Publications – Sailing Directions	✓	✓	✓
Navig. Publications – Tide & Current Tables / Atlases	✓	✓	✓
Navig. Publications – Int'l Collision Regs, Local Rules	✓	✓	✓
Navig. Publications – List of Lights, Buoys, Fog Sig.	✓	✓	✓
Radio Aids to Marine Navigation	✓	✓	✓
Safe Boating Guide (Canadian Coast Guard)	✓	✓	✓
Canadian/Int'l Aids to Navigation	✓	✓	✓
IALA Regions A & B	✓	✓	✓
Notices to Mariners	✓	✓	✓
Navigation Warnings	✓	✓	✓

## **Coastal & Offshore Navigation**

Navigation Tools & Equipment	<b>√</b>	✓	✓
Compass – Corrections for Deviation & Variation	✓	<b>√</b>	<b>√</b>
Compass – Types: Magnetic, Fluxgate, Gyro, Satellite			<b>√</b>
Compass – Creating a Deviation Card		✓	✓
Compass - Hand Bearing / Pelorus	✓	✓	✓
Depth Sounder, Calibration, & Use of Lead Lines	✓	✓	✓
Speed - Impeller, Walker, Pitometer, Electromagnetic, & Doppler		<b>√</b>	<b>✓</b>
Global Positioning System "GPS" & its variations	✓	✓	✓
GPS - Operational Systems, Quality, Availability, Pros & Cons		✓	<b>√</b>
Chart Plotters & Integrated Navigation Systems			✓
Automatic Identification System "AIS"		✓	✓
Tides – Times, Heights, Reference Ports, & Secondary Ports	✓	✓	✓
Tidal Currents - Times, Directions, & Speed	✓	✓	✓
Tidal Current Atlases	✓	✓	✓
Tidal Diamonds	✓	✓	✓
Tides - Rule Of Twelfths & Rule Of Tenths		✓	✓
Tides – Determining Height of Tide & Speed / Direction of Current at Anytime			<b>√</b>
Plotting on Paper Charts, Electronic Charts	✓	✓	✓
Plotting – Dead Reckoning "DR"	✓	✓	✓
Fixing a position – Two and Three Bearing Fixes	✓	✓	✓
Fixing a position – Running Fix		✓	✓
Fixing a position – Using a Transit	✓	✓	✓
Fixing a position – Horizontal Angles (Relative or Sextant)			<b>√</b>
Fixing a position – Using Circles of Position			✓
Danger & Clearing Bearings	✓	✓	✓
Determining Clearing Distances		✓	✓
Adjustments for Currents & Leeway	✓	✓	✓
Estimated Time of Arrival "ETA" Calculations	✓	✓	✓

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### **Coastal & Offshore Navigation**

Navigating with GPS / Chart Plotter		✓	✓
Creating Waypoints & Routes - Manual & Automatic		✓	✓
Executing & Monitoring a Navigational Plan		✓	✓
Navigating with RADAR	N/A	N/A	N/A
(see RADAR Operation & Navigation Program)			

#### **Coastal & Offshore Navigation Program Fee Schedule**

Program	Format	Hours	Schedule	Cost	Max People
Level 1	Online Live	16	8 x 2 hrs	\$399 pp	8
Level 2	Online Live	24	12 x 2 hrs	\$599 pp	8
Level 3	Online Live	32	16 x 2 hrs	\$799 pp	8
Additional Tutoring (students)	Online Live	TBD	As Requested	\$45/hr	2
Private / Tailored	Online Live	TBD	As Requested	\$60/hr/1 pers. \$45/hr/pp/2+ppl	4

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