

Syllabus Outline of 2-day Marine Weather 1 (formerly Basic Marine Meteorology)

The two-day course syllabus will specially cover the following:

- The language of weather (specifically important definitions);
- An introduction to "Weather 101" principles(e.g. the importance of temperature, moisture, radiation, and the principle forces that drives the wind);
- Clouds, and what it means to a mariner's short term weather forecasting;
- Common surface weather systems & their features (e.g., lows, highs, fronts, troughs, ridges, squall lines),the typical graphical weather symbols commonly found on Atlantic(& Pacific) Ocean surface pressure weather charts(e.g. "L's", "H's"; dashed, dotted, & solid lines);
- The breakdown of an alpha-numeric text forecast & voice VHF broadcasts (the synopsis & forecast portion that follows);
- Local weather affecting the inland waters & temperature differences in the nearby coastline influences (e.g. Chesapeake Bay as well as nearby Virginia and Maryland land-sea coastal influences);
- There will be practical hands on exercise scenarios for reinforcement of what has been discussed in previous sessions;
- What goes into a human intelligence originated forecast (e.g., the professional meteorologists input into a weather forecast);
- How to document and verify all surface weather forecasts for confidence building in a mariner's determining their own weather forecast(e.g. comparing 48/96 Hour Surface Forecasts and the validation of them with the most current Surface Analyses having the same Valid Date & Time);
- We end by injecting the following questions with practical answers: How will the weather impact your trip? What choices will you make? What do you need do to assemble the weather forecast products you will need?
- Q & A, and what the next step going forward should be;
- There will be supplemental handout material. In class however, be prepared to take notes, ask questions, and be interactive with both the instructor and classmates. Copies of the presentation modules conducted in class will be made for available in an electronic format for later review.