Sailing Weather Module E (Sample) - page 1 of 3. Steps 1-4.

Steps 1 - 4. Pre-readings and online activities done by each student **individually**.

1 Scenario / Narrative

It is a beautiful Spring day, so you decide to take 2 friends sailing with you in your sailboat. You depart Vancouver near Granville Island at 10 am to sail south to Sydney on Vancouver Island. When you are halfway across the Georgia Strait, you see a line of thunderstorms approaching from the northwest.

What should you do? Consider only the following options:

A) Continue sailing south to the destination.
B) Turn northwest (NW) directly toward the storm. After the storm passes, sail to Sydney.
C) Drop anchor. Drop all sails. Ride out the storm.
D) Return to the starting point.
E) Divert to the nearest safe haven.

To help you decide, access the Related Info linked below to better understand the situation and the weather that can affect the flight.

2 Access to Related Info

(Note: None of the links are active in this sample.)

Boat	Skipper Experience Level
Maps	Passengers & Cargo
Regulations & Limitations	Other Factors

3 Your Weather Queries

(Note: None of the links are active in this sample.)

Often, the first step to making a good decision is knowing what questions to ask regarding the weather.

Your assignment: What questions do YOU want to ask, to help you make the best decision?

Select the following quiz link in Canvas to enter your questions: Sailing E - Step 3.

For help on how to earn the most marks when you answer this question, see the Step-3 rubric.

4 Meteorological Concepts

Instructions: To help you make a wiser decision, please access each link below to learn how the weather works, and how it affects your activity.

- Start on row 1, and work left to right. After you have studied all the meteorological concepts on that row, do the quiz listed at the end of that row.
- Then do the same for row 2, etc.

Note, each quiz will take you out of this Module. When you finish the quiz for any row, you should return here to work on the next row. Do this in Canvas by clicking on "Modules", and selecting page-1 of the Module that you are currently working on.

Row	Topic (& learning goal) (Note: None of the links are active in this sample.)	Topic (& learning goal)	Quizzes Online
1	Wind Waves (8a)	Currents (9d)	Sail E - Quiz 1
2	Breaking Waves (8c)	Swell (8d)	Sail E - Quiz 2
3	Thunderstorm Gust Fronts (4d)	Thunderstorm Lightning (4e)	Sail E - Quiz 3

After you have completed all the quizzes AND after the deadline for page 1 is reached, you will be given access to page 2 (steps 5 & 6) in this module.

Decision Making

Click on each link below to get details of the specific weather situation for this particular scenario. Use this specific info, along with the general weather fundamentals you learned in Step 4, to help you make a decision in Step 6.

5 Data Available at Start of Trip

5a. Data Available at Start of Trip

Don't know how to interpret these data? Review the meteorological concepts back in Step 4.

(Note: None of the links are active in this sample.)

Canadian Marine Broadcast	Satellite Images
Tides	Radar Images
Currents	Your Own Observations

5b. Discuss your interpretation of these data with your classmates

We encourage you to interact with other students in this class, via the Canvas Discussion Board or on other social media. You can help each other understand the weather, understand this case study, and discuss the pros and cons of the various decision options in Step 6.

In real life, sometimes there is not a "perfect" decision, because of uncertainties in the weather. Your job is to try to understand the underlying principles at play and scrutinize the information provided to make the most reasonable decision, given the uncertainty.

6 Your Recommendations / Decision

Options to Consider:

A	Continue south to the destination.
B	Turn NW directly toward the storm. After it passes, sail to Sydney.
C	Drop anchor. Drop all sails. Ride out the storm.
D	Return to the starting point.
E	Divert to the nearest safe haven.

Reasoning: In this quiz, you are guided to think about how the weather situation could affect the planned sailing trip. **Sail E - Step 6 Reasoning - quiz.next .**

(Note: None of the links are active in this sample.)

Decision: Make your go / no-go decision regarding the options listed above.

Sail E - Step 6 Decision - quiz.next .

(Note: None of the links are active in this sample.)

(You can also find these two quizzes listed in the Assignments tab in Canvas.)

(After you have completed all the assignments AND after the deadline for page 2 is reached, you will be given access to page 3: steps 7 - 10.)

Readings and online activities done by each student **individually**.

7 Actual Outcome

This scenario was based on a real accident reported by the authorities.

The skipper continued toward the destination with reefed sails to reduce the chance of capsizing, but as a result the forward speed decreased. The gust front from the thunderstorm squall line reached the boat before making port, causing the boat to capsize in the Georgia Strait. The boat sunk. The skipper and one passenger drowned. The second passenger, who was wearing a wet suit, survived and was rescued by the Coast Guard.

8 Related Stories and Links

(Note: None of the links are active in this sample.)

- The Hobart race
- Round the World Race - UBC skipper wins.
  https://www.youtube.com/watch?v=qTIPAcerK1w
- Weather tips for sailors

9 Thoughts by Experts

(Note: None of the links are active in this sample.)

See: • Marine Safety Victoria
http://transportsafety.vic.gov.au/maritime-safety/recreational-vessel-operators/sailing-boats

• Transport Canada - Marine / weather warnings
https://www.tc.gc.ca/eng/marinesafety/tp-tp10038-73-wi-weather-warnings-922.htm

• Environment & Climate Change Canada - Marine forecasts & warnings
https://weather.gc.ca/marine/index_e.html

10 Apply & Reflect

(Note: None of the links are active in this sample.)

Apply and Reflect on What You Have Learned

To close this module, we ask you to apply your new meteorological knowledge to a different scenario. This gives you the opportunity to synthesize your learnings into a deeper understanding of the weather.

Find this brief new scenario at Sail C - Step 10 - quiz.next .

End of Sailing-Weather Module __(sample)__