

# Vessel Operations – Learn & Do!

A Career Simulation Activity for High School (Grades 9-12)



Additional modules can be found at:  
[www.maritime-technology.org](http://www.maritime-technology.org)



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## **Purpose**

The goal of this SMART activity is to expose students to the educational requirements as well as the duties and responsibilities of vessel operators. Ideally this activity would occur after students have explored vessel operations careers using the SMART Maritime and Transportation Career Guide. Students will take the state boater safety course for their home state to earn a State approved educational certificate. After earning the certification, students will gain a better understanding of the duties of vessel operators by using online simulators to maneuver virtual boats.

## **Duration**

Two class periods

## **Materials**

- Computer with internet access for each student
- SMART Career Guide
- Student Note-taking guide
- Printer access (for certificates of completion)

## **Task**

- Conduct an overview of vessel operations portion of the SMART Career Guide
- Learn about basic education requirements of vessel operators by taking an online boating safety course
- Use virtual tools to simulator operating computer generated boats

## **Process**

### ***Day One***

- Whole group – Show the video clip “Make the SMART Choice: Maritime and Transportation Industry Careers” (<http://www.maritime-technology.org/smart-make-the-smart-choice-career-videos/>)
  - While watching have the students identify the careers in the video that are classified as VESSEL OPERATIONS.
  - Discuss with the class the careers that they observed in the video.
  - Ask the students what makes Vessel Operations unique (answers may vary)

- Let the students know that this lesson will focus on learning like a vessel operator.
- Allow the students to log into their computers/laptops using school sanctioned methods.
- Once online, have students go to [www.boatus.org](http://www.boatus.org)
  - a. Click on FREE BOATING SAFETY COURSE (upper right corner)
  - b. Click on the state name
  - c. Follow the prompts to create an account (suggestion – use school issued email or request parent permission for students to create an online account).
    - Registration information is used to track course completion and print certificate.
    - The online boating course is FREE and will satisfy the state required educational component for boaters. The purpose of the activity is to expose students to the types of safety information learned by vessel operators NOT to get a legal certification.
  - d. After creating the registration, click on the apple icon to begin. (There is also a video tutorial on how to take the course that can be accessed from the website)
  - e. Click on MY ACCOUNT to begin the course. The class can be saved and completed in more than one session if needed.
  - f. After completing the course, students can take the test for the certification. If earned, certificates can be printed.

**HOMEWORK** – Have students create a poster to share with others rules to remember when operating a marine vessel.

### ***Day Two***

1. Open the class by asking students to share two (2) rules that vessel operators need to know in order to work safely.
2. Ask for volunteers to share their posters from the homework assignment with the class. Collect all work (can be posted or shared with other classes).
3. Have student to log into their computers/laptops using school sanctioned methods.
  - Have students click on the icon for BoatUS\_Simulator (previously installed) OR
  - Once online, have students go to [www.boatus.org](http://www.boatus.org) (for students to install)
  - From the task bar (across the top) -
    - Click on the BOATING SAFETY tab.
    - Click on GAMES AND SIMULATORS (under the resources tab).

*Teacher notes (from [www.boatus.org/games](http://www.boatus.org/games))  
49 MB file, must be unzipped and installed before playing*

**BoatUS Simulator System Requirements**

- Processor: 2 Ghz
- RAM: 1GB
- Disk Space: 360MB
- Video: DirectX 9.0 compatible video card
- Operating System: Windows XP, Vista or Windows 7

*Teachers may want to download the simulators **BEFORE** classes to make sure that the installation is successful on school machines.*

4. After beginning the program students will follow the prompts to operate a virtual boat.
5. Encourage students to continue until they master the simulation tasks.
6. After the simulation has been mastered, have students demonstrate mastery for classwork completion credit.
  - Once credit has been earned, have students go back to [www.boatus.org](http://www.boatus.org)
  - From the task bar (across the top) -
  - Click on the BOATING SAFETY tab.
  - Click on GAMES AND SIMULATORS (under the resources tab).
  - Allow students to simulate duties and responsibilities of other vessel operators by playing the DOCK IT! Game and NAVIGATE IT! Game.
    - Each game gives students the opportunity to operate a virtual boat
    - Students can test their ability to handle virtual vehicles
7. As a follow up assessment, have students write a journal entry journal to compare the simulator activity with the duties and responsibilities learned from the SMART Career Guide.