ONLINE, OUTREACH, AND VIRTUAL EDUCATION PROGRAMS
2021 - 2022 School Year

All Programs 45 mins in length except for Pre-K (30 mins).

Animal Adaptations  5 Senses/Enviro Ed/Microscopes

**Grades Pre K-2**

Play in the Bay - Take a closer look at what lives in the Chesapeake Bay! Students will discover how marine animals use their senses and adaptations to survive. This experience will include a virtual animal encounter with some local species that are native to the bay and a Flip and Sense activity book that will help build Science, Math & Engineering skills.

*VA. Learning Blocks – Literacy 1. d-h 2. a-d 4.d, f Math 1.a, b 2.a, b 3.a, b, c 4.a, c 5.a, b Science 1.a-e, 2.a, 3.a, 5.a-c; VA. SOLs – k.1, k.3, k.5-7, 1.1, 1.4, 1.5, 2.1, 2.4, 2.5, 2.7, 2.8*

**Grades 3-12**

Living River, Hidden World - The Elizabeth River is full of marine life we can easily see, but there’s also a whole world too small to view with the naked eye. How do these flora & fauna fit into our local marine environment? What are some harmful pollutants that negatively affect them? Students will use a variety of technology to get a closer look at these hidden creatures.

*VA. SOLs – 3.1, 3.4, 3.5, 3.7, 3.8, 4.1, 4.2, 4.3, 4.7, 4.8, 5.1, 5.9*

www.nauticus.org
What Floats Your Boat - Battleships float while tiny pennies and pebbles sink to the bottom of the ocean. Students will put their design and engineering skills to work, while learning about buoyancy and other properties of water during this interactive experiment!

VA. SOLs – 3.1, 3.2, 5.1, 5.3, 5.7

Sink or Swim - How is it possible that a Navy ship floats, but a tiny penny sinks immediately? How do sharks and other animals travel through the water? Students will learn all about buoyancy through this interactive experiment that will allow our learners to test and explore for themselves!

VA. Learning Blocks - Literacy 1. d-h 2. a-d 4.d, f Math 1.a, b 2.a, b 3.a, b, c 4.a, c 5.a, b Science 1.a-e, 2.a, 3.d, 5-a-c; VA. SOLs – K.1- 4. 1.1-3, 1.5, 2.1, 2.2, 2.3,2.5

What Floats Your Boat - Battleships float while tiny pennies and pebbles sink to the bottom of the ocean. Students will put their design and engineering skills to work, while learning about buoyancy and other properties of water during this interactive experiment!

VA. SOLs – 3.1, 3.2, 5.1, 5.3, 5.7

Design. Build. Sail - BB64 and the other Iowa class battleships are impressive engineering feats. We will take time to dissect and discuss these features and the maritime engineering industry. Students will engage in our STEM to Stern activities that demonstrate basic principles of water and boat construction. The STEM challenge cycle will flex their critical & creative thinking, problem solving and collaboration skills.

VA. SOLs – 6.1,6.6, PS.1, PS.3, PH.1, PH.2, PH.3, PH.7

www.nauticus.org
Weather & History

Grades Pre K-12

Risky Wisky Weather - How cool would it be to forecast the weather on a Battleship? Students will explore weather, the instruments used to detect it and how to collect the data themselves. They will test these skills by creating their own weather instruments & using their knowledge to investigate a historical weather event on BB-64!

VA. SOLs K.1, K.9, 1.1, 1.7, 2.1, 2.6, 2.7, 3.1, 3.7, 4.1, 4.4, 6.1, 6.7, LS.1, LS.5, ES.1, ES.12

Climate Science

Grades Pre K-5

The Melt Down - What is climate change? How does it affect day-to-day life? How can even the littlest kid help stop climate change? Students will answer these questions by observing experiments & collecting data on thermal expansion, glacial melting, ocean acidification, and more. They will categorize the causes and effects of sea level rise and develop personal action plans to help their communities.

VA. SOLs – K.1, K.10 1.1, 1.7, 1.8, 2.1, 2.5, 2.7, 3.1, 3.4, 3.5, 3.8, 4.1, 4.3, 4.4, 4.5, 4.6, 4.8, 5.1, 5.9

Grades 6-12

The Climate Lab - What is the evidence of climate change? How is climate change effecting our community? What can we do to slow and eventually stop the increasing temperatures? Students will participate in interactive experiments on thermal expansion, glacial melting and more. Once they have analyzed Climate change's causes and effects, they will develop a plan to make a difference in their personal lives and in their school communities.

VA. SOLS - 6.1, 6.8, 6.9, LS.1, LS.8, LS.9, BIO.1, BIO.8, ES.1, ES.8, ES.12
**Math & History**

**Grades 3-8**

**Messy Math** - This interactive program will put students' math skills to the test, while they experience life as a WW2 mess-specialist on the Battleship Wisconsin! Students will analyze & interpret historical documents and discover how sailors lived and functioned aboard BB64. They will even walk away with their own WW2 recipe!

*VA. SOLs – Math 3.1-3.5, 3.7,3.10,4.1-4.6,4.8,4.9,5.1-5.6, 5.9, 5.17, 5.19, 6.1, 6.2, 6.4, 6.5, 6.8, 6.12, 6.14, 7.1 - 7.4, 7.12, 7.13, 8.1, 8.2, 8.8, 8.11, 8.14-8.16 History -3.1, 3.8, VS.1, VS.9, USI.1, USII.1 USII.5-9*

**Marine Debris**

**Grades 3-12**

**Pollution Solution** - We teach children not to litter, but plastic still gets into the ocean. How can we help the animals in the Chesapeake Bay? How can we make a change? Students will discover the impacts humans have on the environment and explore creative solutions for this issue, all while testing their engineering skills!

*VA. SOLs – 3.1, 3.5, 3.8, 4.1, 4.3, 4.7, 4.8, 5.1, 5.9, 6.1, 6.6, 6.8, 6.9, LS.1, LS.8, LS.9, BIO.1, BIO.8, ES.1, ES.6, ES.8, ES.10*

**Simple Machines**

**Grades K-8**

**Simply STEM** - Some machines that seem complicated can actually be very simple to make from everyday objects! Students will join us in recreating some of the machines of BB-64, examining their functions, and determining how they can be used to make life easier.

*VA. SOL’s – K.1, K.2, K.4, 1.1 - 1.3, 2.1 - 2.3, 3.1 – 3.3, 5.1 -5.4, 7.7 6.1, 6.6, PS.1, PS. 5, PS.8, PS.9*
Program Pricing

Onsite Programs: $2 per student in addition to General Admission ticket
Outreach Programs: $150 per 30 students
Virtual Programs: $75 up to 50 students

Schedule Your Workshop

Contact: Group Sales Manager
Email: Groups@Nauticus.org
Phone: 757-664-1034

For more information, please visit www.nauticus.org/programs