

## Society for Underwater Technology (SUT)

# School Touring and Educational Outreach – 2018 / 2019 Middle School Program

A volunteer program bringing science subjects and scientists to classrooms across the Greater Houston area.

At middle school level the program offers interactive 40 to 50min presentations and classroom exercises that focus on reinforcing STEM subjects being taught in class and showing these subjects in action exploring our world and beyond.

#### **OCEAN SCIENCE**

## Seeing with Sound - Exploring the oceans and seas

- STEM highlights: Exploration, discovery, ocean science, acoustic waves, remote sensing, physics, math, robotics, environmental, oceanography, marine biology, marine archaeology, history, career opportunities. Includes a historic ship wreck mapping exercise.
- Taught by Marine Geophysicists, Ocean Scientists, Geotechnical Engineers, Marine Archaeologists,
   Marine Project Managers

## Design or Destroy – Engineering for the ocean

- STEM highlights: Coastal defense, surface and sub-surface engineering design, hard and soft engineering, detailed design, case histories, robotics, physics, math, chemistry, career opportunities
- Taught by Marine Geophysicists, Oceanic Engineers

## Roving Robots – Underwater Robotics

- STEM highlights: Engineering design, exploration, physics, case histories, robotics, physics, math, discovery, leading edge science, out of this world possibilities, career opportunities
- o Taught by Marine Geophysicists, Oceanic Engineers

#### **EARTH SCIENCE**

## Geology Rocks

- STEM highlights: Geology, seismicity, volcanics, mineralogy, chemistry, physics, paleontology, career opportunities. Includes video and interactive discussion of the Great Tohoku Earthquake and Tsunami
- Taught by Geologists, Civil Engineers, Earth Scientists, Archaeologists

#### **SPACE SCIENCE**

#### Are We There Yet? – A journey across the universe in 40min

- STEM highlights Math, physics, astronomy, robotics, conceptualizing space, history, future vision, career opportunities
- o Taught by Interplanetary Geologists, Earth Scientists, Astronomers



Brought to you by a volunteer team this 'pay-it-forward' program is an opportunity for schools and students to engage with industry scientists & academic professionals, who come to your classrooms, introduce themselves, talk about their personal career paths and then engage students on ocean, earth, and space science topics. The aim of the program is to enthuse students about STEM subjects and to guide students along pathways towards some amazing opportunities in science and discovery.

If you would like to discuss these opportunities further, or are interested in volunteers presenting to your students then please contact the outreach program team lead:

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Somewhere, something incredible is just waiting to be known, C Sagan