

# United States Naval Academy STEM Center for Education and Outreach



## USNA STEM Center

Rickover Hall, Room 303  
590 Holloway Road  
Annapolis, MD 21402  
usnastem@usna.edu  
410.293.6534

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Spring 2015



UNITED STATES NAVAL ACADEMY



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## USNA STEM Center for Education and Outreach

### Mission of the STEM Center

- ▶ The mission of the STEM Center is to address the urgent Navy and national need for more young people to pursue careers in science and engineering.
- ▶ The Center acts as a resource available within USNA to help introduce midshipmen to the rewarding aspects of existing STEM majors at USNA, and to encourage retention of STEM majors by engaging them in their own studies, often through project-based learning as well as in educational outreach to others.
- ▶ STEM outreach is provided by the Center to others, including local and national communities, to better engage students and teachers in exciting engineering and science studies.
- ▶ The STEM Center provides programs that prepare midshipmen participants for various intellectual challenges by creating opportunities for them to learn STEM theory and application, as well as by reinforcing lessons learned in the classroom.
- ▶ The STEM Center offers midshipmen a chance to lead in the classroom; involvement in Center programs includes learning how to design, set up, and execute experiments, field challenging questions, and develop an understanding of the underlying theory, all of which strengthens creative problem solving skills and the ability to respond to unanticipated situations.
- ▶ The STEM Center supports all programs that contribute to the knowledge, study, and research of STEM education at the Naval Academy.





# USNA STEM Center for Education and Outreach

**60  
USNA  
Faculty**



**Angela Moran**  
Director,  
Odgers Professor for STEM

**Sarah Durkin**  
Professor of the  
Practice



**MEET OUR  
TEAM**



**Mark Murray**  
STEM Faculty



**Timothy Shivok**  
MSTEM Officer  
Representative



**Janice Rice**  
MSTEM Officer  
Representative

**Rachel Hetlyn**  
Instructor of Practical  
Applications



**Jennifer da Rosa**  
Instructor of Practical  
Applications



**Beth Mutch**  
STEM Faculty



**270  
Midshipmen**



## USNA STEM Center for Education and Outreach



### Spring 2015 Events

#### January

- FIRST Robotics League Competition
- NESAs Merit Badge Jamboree
- SeaPerch/NOAA Educator Workshop in Dayton, OH
- SeaPerch Educator Training for Prince George's County Public School
- STEM Educator Training for Fairfax County Public School in Fairfax, VA



#### February

- STEM Day at Perot Museum of Nature & Science in Dallas, TX
- SET Sail STEM Educator Training Workshop
- Educator Training Workshop at USS Hornet Museum in Alameda, CA



#### March

- Girls Only STEM Day
- Best Practices in STEM Workshop II for Naval Scientists & Engineers
- San Diego Festival for Science & Engineering in San Diego, CA
- "Cool Women/Hot Jobs" STEM Fair at Southwest Academy, Baltimore



#### April

- SeaPerch Educator Training for Baltimore County Public Schools
- STEM Educator Training in Tulsa, OK
- Maryland Regional SeaPerch Challenge
- Sea-Air-Space STEM Expo in National Harbour, MD
- X-STEM Symposium in Washington, D.C.



#### May

- SeaPerch Showcase for Anne Arundel County Public Schools
- STEMing Event for Girls at St. Mary's College of Maryland
- Fleet Week, New York City

# STEM insights

“My involvement with STEM outreach has proved to be one of the most enriching experiences during my time at USNA. It has afforded me the opportunity to practice my leadership and public speaking skills while giving back to the community and sharing my knowledge and experiences with youth from all over the country.”

- MIDN 2/C RACHEL BUSIEK, President of MSTEM ECA.



“The DoD STEM Diversity Campaign looks to the USNA STEM Center as a great partner to expand STEM awareness, build skills, and create pathways for underrepresented groups in the greater DC metropolitan area.”

- KAREN HARPER, Executive Coordinator, Building Engineering and Science Talent (BEST); DoD STEM Diversity Campaign

“From my training at SET Sail to our first SeaPerch workshop, to the first SeaPerch Challenge, to STEM outreach, and most recently to STEM professional development for the Tulsa area as well as rural Oklahoma educators – the USNA STEM Center has been the spark and the relentless support that we needed in this work.”



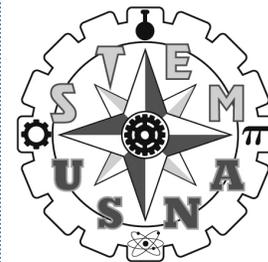
- XAN BLACK, Program Director, Tulsa Regional STEM Alliance

“A major part of the Naval STEM mission is to provide for the safety and security of the U.S. and its allies, today and into the future, through people and technologies with superior STEM dimensions. The people and work of the USNA STEM Center vitally contribute to the accomplishment of the Naval STEM mission by enhancing the education and outreach skills of current Naval scientists and engineers, who through their augmented capabilities in turn enhance the STEM skills of future scientists and engineers.”

- DR. MICHAEL M. SIMPSON, Director of Education and Workforce, Office of Naval Research

“The USNA STEM Center has promoted amazing STEM outreach to stimulate the interest of thousands of young people in engineering who live in the Baltimore, Washington, D.C. area over the past years.”

- MARY HARTMAN, STEM Department Chair, Old Mill Middle South, Anne Arundel County



“Our corporate and foundation partners understand just how vital it is to increase the number of young people studying and pursuing careers in the STEM disciplines. The STEM Center’s outreach programs to schools, educators and students across the country play an important role in increasing interest in the sciences as well as in the opportunities available with a Naval Academy education, and our partners are eager to show their support in helping these programs grow.”

- NATALIE BRIANAS, Assistant Director of Corporate & Foundation Relations, U.S. Naval Academy Foundation

“STEM Day gave me the opportunity to learn something new.”

- IREZURE BARNES, 5th grade student at Sisters Academy.



USNA STEM Center  
for Education and Outreach

# Thank You to our supporters



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