



KEY DATES

September 20:
Applications due

September 26:
Notification
of acceptance
by e-mail

October 1
Tuition is due

October 1 & 5
Classes start

Apply on-line at
www.starschallenge.org

Questions:
(732) 609-2797

Mission

The Stars Challenge is a science enrichment program for top 6th, 7th, 8th, and 9th graders that began in 2006. Our goal is to involve more middle school students in science and technology. Developing top notch scientists, engineers, and mathematicians is critical to maintaining America's lead in technology and innovation.

Our goal is to nurture students' passion and curiosity about science. We start with excellent teachers who lead creative, hands-on classes. Working in small teams, students tackle real world problems and see how they can make a positive impact on society through science and technology.

Fall 2019 Courses

For 6th graders who love to solve mysteries we will be offering our popular **Forensics** course. It will be taught by Ms. Carleigh Engstrom.



Students design, build, and test underwater remotely-operated vehicles in Explore our Shore.

Ms. Burich of the NJ Sea Grant Consortium will be leading 6th and 7th graders in their investigations of the marine, coastal, and estuarine habitats of the New Jersey shoreline

in **Explore Our Shore Like Never Before**. You'll get to know first-hand some of the unique marine life of the Jersey Shore.

7th and 8th graders will be using their creativity and knowledge of physical science to design and build the winning solution to the challenges Mr. Valente will bring to **Olympics of the Mind**.

For 7th, 8th, and 9th graders, Mr. Roche, Ms Aimée Babbin & Dr. Dina Ellsworth will teach **Science, Creativity, and Experimental Design**. Students explore questions they wonder about in a scientific manner. Is it really dangerous to be



Students investigating overtones in various types of bass instruments.

texting while riding your bike? Come find out how to ask the question scientifically.

Fall 2019 Logistics

Classes typically meet from 6 p.m. to 8 p.m. for 10 weeks beginning in early October. Exact times and locations are on the reverse side. Tuition is \$500. Some needs-based scholarships are available. Please see our web site, www.starschallenge.org, for more details and to use our on-line application.

FORENSICS - 6TH GRADE

Did you ever wonder how investigators solve crimes? Do you enjoy watching episodes of CSI? Well, this course is for students who love solving mysteries. Each session will provide students an opportunity to build investigative skills and work like a crime scene investigator. Students take active roles as characters in the mysteries. Student-sleuths will analyze physical evidence and debate possible hypotheses. We will learn how to use evidence to reconstruct a crime scene. Labs will show students how to analyze lipstick samples, fiber samples, and mystery powders. If mysteries have always intrigued you, and you would rather be actively solving them than just reading about them, then this forensics course is perfect for you. This course will be taught by Ms. Carleigh Engstrom of Biotechnology High School on Tuesday evenings from 6 to 8 at Biotechnology High School beginning October 1.

EXPLORE OUR SHORE LIKE NEVER BEFORE - 6TH and 7TH GRADE

Summer may be over but you can still enjoy the beach and learn much more about it. This course provides hands-on and minds-on investigations of the marine, coastal and estuarine habitats of the New Jersey shoreline. For example, have you ever wondered why waves push your surfboard forward or how rip currents form? You'll get to know first-hand some of the unique marine life of the Jersey Shore from plankton to crabs, fish, reptiles and mollusks. You will also participate in several dissections. We'll meet at Sandy Hook on Saturdays where you will participate in hands-on investigations of the park's salt marsh, barrier beach, and maritime forest environments. This course will be taught by Ms. Diana Burich of the NJ Sea Grant Consortium at Sandy Hook. Classes will meet Saturdays from 9 am to 12 noon at the NJ Sea Grant Consortium building on Sandy Hook beginning October 5.

SCIENCE, CREATIVITY, AND EXPERIMENTAL DESIGN - 7TH, 8TH and 9TH GRADE

Perhaps you've wondered if you could somehow measure the intelligence of your pet? Or wondered if using headphones while gaming will drain your iPhone battery faster than using the built-in speakers? ... or how effective waterproof mascara is? ... or how computers can be programmed to perform all of the data collection for your science lab homework? You'll be challenged each week with opportunities to creatively investigate topics in a variety of scientific disciplines in this out of the ordinary science course. This course will be taught by Mr. Michael T. Roche. Mr. Roche will be assisted by Ms Aimée Babbin & Dr. Dina Ellsworth. All three teachers work cooperatively to help students meet their freshman and sophomore research requirements at High Technology High School in Lincroft. Classes will meet on Tuesday evenings from 6 to 8 PM beginning October 1 at High Technology High School.

OLYMPICS OF THE MIND - 7TH and 8TH GRADE

Creativity is the name of the game in this course! With your newly made friends, you'll use your creativity and knowledge of physical science to create solutions to design challenges. For example, one challenge will be to build a memorial tower to commemorate the 150th anniversary of the founding of your town. You'll need to design your tower out of a single sheet of copy paper. Winning towers typically reach heights greater than six feet! Another challenge is pulling your 5 year old daughter up out of a well using only wind power. Will your team win the challenge? This is your opportunity to innovate – to explore. This is Olympics for the mind! This course will be taught by Mr. John Valente of the Marine Academy of Science and Technology (MAST). Classes will meet on Tuesday evenings from 6 to 8 PM beginning October 1 at High Technology High School.