Eligibility

STEAM Camp is open to all students entering grades 2 through 8 who are interested in exploring science, technology, engineering, art/design and mathematics. Our goal is to provide a fun, safe and enriching environment through which students can explore and learn.

Tuition

$250 for the one week camp, 9AM – 3PM if registered on or before April 26.

$275 if registration is received after April 26.

Registration

- Our camp has a limited number of seats. Seats will be filled on a first-come, first-served basis.

- Registration is not complete until the Spotswood BOE has received a completed application and payment in the form of a check or money order. Make checks payable to Spotswood BOE.

- Applications will be available from the Spotswood School District website starting in April 2019.

- Registration fee does not include lunch. Students may want to bring snacks as well.

Refund Policy

No refunds will be made once camp begins. All students withdrawing before camp begins will incur a $25 processing fee. If minimum number of enrollees is not reached, STEAM camp will be cancelled, and all money will be refunded.

What is STEAM Camp?

STEAM stands for Science, Technology, Engineering, Art & Design and Mathematics and is a nationwide effort to close the skills gap identified by US business and industry. During camp, students will learn by participating in relevant hands-on activities and engineering challenges. Our program will also promote collaboration and teamwork.

Benefits

- Explore STEAM related fields and gain valuable experiences.

- Experience real-life application of math, science and design principles

- Meet students who share similar interests

- Gain exposure and experience in today's top career fields

- Have fun!

Want to know more?

Applications are available at www.spsd.us.

For more information about 2019 Spotswood STEAM Camp contact:

Gary Hull, ghull@spsd.us,

Martin Dempsey, mdempsey@spsd.us
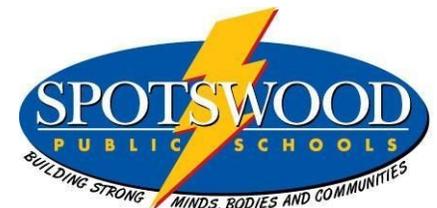
Chris Talish, ctalish@spsd.us or

Paige Besthoff, pbesthoff@spsd.us

STEAM CAMP 2019

a learning opportunity for grade 2 through 8 students

AUGUST 19-23

SPOTSWOOD
PUBLIC SCHOOLS
BUILDING STRONG MINDS, BODIES AND COMMUNITIES

Daily Camp Program

Students will move through three different learning stations each day, with fun and interactive age appropriate activities at each.

Time	Activity
9:00–9:20 AM	Morning STEM Challenge
9:20–10:40 AM	Station 1
10:45–12:05PM	Station 2
12:05–12:35PM	Lunch
12:35–1:55 PM	Station 3
1:55–3:00PM	Afternoon STEM Activity

Students will split out by grade levels (2nd–3rd, 4th–5th and 6th–8th) and groups will be assigned to a camp counsellor, who will lead students from area to area and supervise them on breaks.

At the end of each day, we will gather for fun and interactive engineering and/or team activities and by the end of the week, students should be able to showcase their work in each area.

In addition to working at our learning stations, there will be a period of open, unstructured play at lunch-time.

Our Camp Activities:

Note: These activities are tentative plans, and are subject to change based on enrollment numbers and staff availability.

Capturing Light - Images and Photography

Grades 2–3 campers will experiment with capturing images through light sensitive papers, creating their own vivid blue diazo-prints and finally experimenting with stop motion animation.

Grades 4–5 and 6–8 campers will create pinhole cameras, capture their own images and develop their photographs using traditional darkroom techniques. Grades 6–8 students will also experiment with tinting their prints using a variety of salts to see how the photographer can use subtle changes in tone to change the mood of the print.

Robot Rovers

Grades 2–3 campers will work with a variety of robot and toy kits, including Ozobots, Cubelets, littleBits & Hess trucks as they learn to control their creations and meet a variety of challenges.

Grades 4–5 campers will build robots using Lego NXT Mindstorms kits. This years' challenge will have them competing to see whose robot can navigate a maze the fastest, and we will of course end the week with a classic robot battle.

Grades 6–8 campers will build their own "smart" robot kits using Arduino microcontrollers and will learn basic electronics and programming. After their robots navigate the maze, they will be able to take their creations home to keep experimenting.

Computer Programming

Want to learn to create, rather than just use, technology? If so, your first step is to learn to speak to computers in a language they understand. All students will learn the foundational concepts of computer programming, with an emphasis on building games, creating mobile applications, constructing physical computing devices, and/or developing websites.

Daily STEM and Engineering Challenges

We begin each day with a short Engineering and Design challenge and end the day with a STEM-based group activity. These activities cover basic electronics, soldering, rocketry and other topics that are educational, fun and interactive.

Our Lead Instructors

Gary Hull
Gary Hull has taught Computer Science at Spotswood High School since 2003. He is the former president of the Central NJ Computer Science Teachers' Association (CSTA) and was one of twelve teachers selected to represent the United States at the first annual Microsoft Innovative Teachers Worldwide Forum. He is currently the co-adviser of the Spotswood High School Hackspace Club, which allows students to explore their interests in technology, programming, and electronics.

Martin Dempsey
Martin Dempsey has worked as an Earth Science and Physics teacher in Spotswood High School since 1996, and currently serves as district Science Department Chair. He co-founded our school's Heavy Metal Robotics competition team, and is currently the advisor of the Spotswood High School Hackspace Club, which allows students to explore their interests in technology, programming and electronics.

Chris Talish
Chris Talish has taught Forensic Science, Chemistry and Physics at Spotswood High School since 2001. He created our school's first Forensic Science course and serves as advisor to our school's TEAMS engineering competition team.

Paige Besthoff
Paige Besthoff has been teaching computers and business in the Spotswood School District since 2005 and currently teaches computers and technology at Appleby School. She has been named a PBS Digital Innovator and is a member of the PBS Teachers' Advisory Group.