

Forensic Science

Jump into the world of forensic science and solve a "Who Done It?" case. Investigate and analyze evidence from a mock crime scene set up in our newly renovated, state-of-the-art science labs. Campers will have the opportunity to develop their interest in the practice of scientific inquiry by analyzing fingerprints, ear prints, dental impressions, fake blood spatter, and other evidence from our mock crime scene. Using appropriate scientific tools and techniques, campers will gather, analyze, and interpret evidence and data. Campers will use both critical and logical thinking to communicate scientific procedures, explanations, and results, as well as employ some mathematics in order to solve this crime. On the last day of the program, campers will present their findings. Campers are asked to bring a cell phone or digital camera (to document the evidence), a flash drive (to store their final presentation) and lunch.

Dates: Monday, July 29th – Friday, August 2nd

Time: 9:00 AM– 3:00 PM

Cost \$425



All sessions will be held at St. Thomas Aquinas College: 125 Route 340, Sparkill, NY. Parents are responsible for transportation to and from the program. Families will receive further information on the specific location within the College upon acceptance into the program. Students are required to bring their own snacks/lunch and beverages. Please be considerate to fellow campers with severe allergies, and bring nut-free food.

Application forms may be completed online at www.stac.edu/stemcamps

A limited number of students will be accepted into each program, so parents are urged to complete the registration process as early as possible. Non-refundable fees are due within seven days after registration.

There is a \$50 early-bird deduction if the fee is paid by April 15th. There is also a \$50 deduction from the total registration for siblings and for any child who registers for more than one camp. Payment can be made by check or credit card. Checks should be made out to St. Thomas Aquinas College (put child's name on check) and mailed to:

Paula Hughes
School of Education
St. Thomas Aquinas College
125 Route 340
Sparkill, NY 10976

For more information contact:
Dr. Suzanne Reynolds at sreynold@stac.edu



2019 Summer STEAM Camps for Middle School Students

(entering grades 5-9)

These summer camps are made possible through the support of Orange and Rockland Utilities



Orange & Rockland

This year we are proud to announce that we will be running five summer camps:

- **Math of Games: Strategy & Influence**
 - Mathematics & Art
- **Adventures in App Development**
 - Forensic Science
- **Emerging Technologies: Robots, Drones, & Virtual Reality**

Students enrolled in any of these camps are also invited to join us on a field trip to the Buehler Challenger & Science Center (Paramus, NJ) on Thursday, July 25th.

Math of Games: Strategy & Influence

Have you ever wondered how to be that one person who always wins the game? Or how to argue your way into getting what you want? Or how to make someone act a certain way, while making them think it was all their idea? Game Theory is the answer! Come to math camp to learn the art of counting (combinatorics), guessing the correct answer (probability), and figuring out your opponent's moves (game theory), and learn how to apply this to not only your next game night, but in many other real-life situations.

Dates: Monday, July 8th—Friday, July 12th

Time: 9:00AM—2:00PM

Cost: \$250

Students are asked to bring a nutritious lunch (with no nuts).

Mathematics & Art

Students in this camp will explore key mathematical ideas such as symmetry, ratio, proportion and geometric reasoning through art. Students will be actively involved in hands-on activities, as well as technology-based activities designed to promote 2-D and 3-D spatial reasoning. Students will study art from diverse cultures to investigate topics such as tessellations, fractals, and origami. The camp is appropriate for upper elementary school students, as well as middle school students.

Dates: Monday, July 15th – Friday, July 19th

Time: 9:00AM– 3:00 PM

Cost: \$300

Students are asked to bring a nutritious lunch (with no nuts).

Adventures in App Development

Students will launch their career or imagination by creating applications for Apple devices like the iPhone and iPad. Students will gain hands-on experience by working with Apple's Software Development Kit (SDK) for iOS and building custom apps for Apple's best-selling mobile devices. Students will use Swift—Apple's programming language—as well as use tools like Xcode and Interface Builder to access iOS features like gyroscope, touchscreen, and more. Students will leave the camp with a functional application that they can load onto their iOS device to show their friends and family.

Students must bring an iOS device (phone, tablet, or computer). Students are also asked to bring a nutritious lunch (with no nuts).

Dates: Monday, July 22nd—Thursday, July 25th

Time: 9:00AM—3:00PM

Cost: \$250



Emerging Technologies: Robots, Drones, & Virtual Reality

Campers will explore robotics, virtual reality (VR) and unmanned aerial vehicles (drones) while having fun and experiencing the world of science and engineering. By applying computer science, engineering, and creative skills to innovative projects, campers will gain insight into all three of these areas through hands-on experiences. Campers will build and program their robots, which they will take home. Campers will create a 3D virtual world that can be experienced with state-of-the-art 3D headsets, and will learn to pilot drones and explore the capabilities of aerial photography. These activities will enable campers to have a meaningful introduction to some of the fundamental principles of science and engineering, improve their critical and computational thinking abilities, and advance their teamwork skills by collaborating with their fellow campers to create solutions.

Dates: Monday, July 29th – Friday, August 2nd

Time: 9:00AM– 3:00PM

Cost: \$425

Students are asked to bring a nutritious lunch (with no nuts).

