

Summer Programs 2009

High Technology High School • 732-842-8444 • Fax 732-219-9418

Global Conquest is No Game ... but it CAN be!

Session 1:	June 29 th – July 3 rd	8:00 AM – 1:00 PM	Grades 6, 7, & 8	Cost: \$185
Session 2:	July 13 th – July 17 th	8:00 AM – 1:00 PM	Grades 6, 7, & 8	Cost: \$185

Using teacher-led instruction, film, computer technology, and games, students will examine and simulate pivotal moments in world history and determine their immediate causes and long-term effects. Topics can include the Battles of Marathon and Thermopylae, Second Punic War, the rise of Alexander the Great, success of the Mongol Empire, Medieval conflicts, World War I & II, and others. Students will use various popular computer and board games throughout the week to simulate conflicts and compete against each other in tournaments. Participants will develop and enhance not only their understanding of history, but also their collaborative abilities and analytical thinking skills.

Flash Animation and Web Design

Session 1:	July 6 th – July 10 th	8:00 AM – 1:00 PM	Grades 6, 7, & 8	Cost: \$185
Session 2:	July 13 th – July 17 th	8:00 AM – 1:00 PM	Grades 6, 7, & 8	Cost: \$185

Students will learn how to create animated movies using the Flash programming language. Participants will learn the proper use of storyboards to plan the creation of their project. Students will then transfer their storyboards to animated Flash movies utilizing animation techniques such as shape and motion tweening. Additionally, students will learn about web site creation and design. The participants will construct a web site that incorporates the flash project they created in the earlier part of the week. All participants will transfer their projects onto a CD supplied by the school that they can take home. The course will balance analytic thinking skills with artistic creativity.

Magnetic Levitation Technology

July 6 th – July 10 th	8:00 AM – 1:00 PM	Grades 6, 7, & 8	Cost: \$185
--	-------------------	------------------	--------------------

Maglev vehicles are intended to provide the high-speed transportation of people and goods. To move rapidly and efficiently along the magnetic guide-ways the aerodynamic efficiency of the vehicle shape is very important. An aerodynamically efficient body shape reduces friction between the air and the vehicle. In this one week summer course in Magnetic Levitation Technology, students will be able to design, build, test and race a Maglev vehicle across a track.

Boys & girls entering 6th, 7th, & 8th grade who are curious, creative and wish to enhance their technical skills are eligible for this new one week program at High Technology High School located on Brookdale Community College Campus. The only requirement is the willingness to develop their technical skills and be prepared to race. Using state-of -the-art technology 3D modeling software and Research & Development laboratory girls & boys will design and build Maglev racecars. Students are not required to have any previous computer knowledge or drawing skills.

Solar Electric Technology

July 13 th – July 17 th	8:00 AM – 1:00 PM	Grades 6, 7, & 8	Cost: \$185
---	-------------------	------------------	--------------------

Learn about solar electric technology with scientific theory and hands on activities using solar plates to electrify electric motors. Using 3D modeling software and mechanical parts design and build your own mechanical product.

Boys & girls entering 6th, 7th, & 8th grade who are curious, creative and wish to enhance their technical skills are eligible for this new one week program at High Technology High School located on Brookdale Community College Campus. The only requirement is the willingness to enhance their creativity and develop their technical skills. Using state-of -the-art technology 3D modeling software and Research & Development laboratory girls & boys will design and build solar products. Students are not required to have any previous computer knowledge or drawing skills.

Continued on back ...

Summer Programs 2009

High Technology High School • 732-842-8444 • Fax 732-219-9418

CO₂ Car Technology

July 20th – July 24th 8:00 AM – 1:00 PM Grades 6, 7, & 8 **Cost: \$185**

Learn about how to use compressed air to propel a small racecar. Using 3D modeling software and mechanical parts design & build your own racecar and compete with your classmates. No experience is necessary for this one week summer enrichment program.

Boys & girls entering 6th, 7th, & 8th grade who are curious, creative and wish to enhance their technical skills are eligible for this new one week program at High Technology High School located on Brookdale Community College Campus. The only requirement is the willingness to develop their technical skills and be prepared to race. Using state-of-the-art technology 3D modeling software and Research & Development laboratory girls & boys will design and build CO₂ racecars. Students are not required to have any previous computer knowledge or drawing skills.

America's Rise to Power is not Fun ... Actually, It Is !

Session 1: July 20th – July 24th 8:00 AM – 1:00 PM Grades 6, 7, & 8 **Cost: \$185**

Session 2: July 27th – July 31st 8:00 AM – 1:00 PM Grades 6, 7, & 8 **Cost: \$185**

Using teacher-led instruction, film, computer technology, and games, students will examine and simulate pivotal moments in American history and determine their immediate causes and long-term effects. Topics can include the Revolutionary War, War of 1812, Mexican War, Civil War, Spanish-American War, World War I & II, and others. Students will use various popular computer and board games throughout the week to simulate conflicts and compete against each other in tournaments. Participants will develop and enhance not only their understanding of history, but also their collaborative abilities and analytical thinking skills.

Problem Solving in the Environment

August 3rd – August 7th 8:00 AM – 1:00 PM Grades 6, 7, & 8 **Cost: \$185**

Problem Solving in the Environment is an integrated science enrichment course developed and taught by HTHS science teacher Michael T. Roche. It will be offered to students entering the 6th, 7th, and 8th grade for one week during the summer of 2009. The course will make use of the laboratories and technology available at High Technology High School, located on the campus of Brookdale Community College.

The course will challenge students to engage actively in problem solving by providing them with the opportunity to apply scientific processes (e.g. qualitative and quantitative observation, measurement, experimentation, inference, communication of findings, etc...) to a modeled environmental problem involving water resources. The course will stress research skills, experimental design, collection and interpretation of data, recognition of patterns, modeling of systems, prediction of outcomes and use of technology as students examine issues related to environmental engineering. Activities will also emphasize the integration and interdependence of science and mathematics as mutually reinforcing subjects, especially as they apply to environmental issues and engineering. Due to the complex nature of environmental problems and their solutions, the course will provide opportunity for study in both the physical and biological sciences. Students will also be exposed to fundamentals of html programming as they document their progress on our web site.

Building Digital Circuits

August 10th – August 14th 8:00 AM – 1:00 PM Grades 6, 7, & 8 **Cost: \$185**

This summer program is designed to introduce the participant to the world of electronics through the building of electronic circuits. Students will first solder a beginner's project to learn basics of proper soldering technique. The class will move onto more elaborate projects with a higher degree of difficulty. By the end of the week students will have a foundation of knowledge to build upon to further pursue an interest in electronics. Participants will have so much fun building they will not even realize that they are learning. Completed projects will be brought home at the end of the week so students can further explore on their own.

For a detailed brochure and application, call (732) 842-8444 to request a mailing or visit <http://www.hths.mcvsd.org> and select "Summer Enrichment Programs."