

Summer 2011



Join the Baruch College STEP Academy this summer. Choose one of our all day tracks in *Human Psychology*, *Engineering Principles of Bridges*, or the *Understanding of Physics*.

The summer program meets from Tuesday, July 5th through Thursday July 28th. All courses meet from 9:30am to 2pm at Baruch College.

Course descriptions are provided below. More information at our website: www.baruch.cuny.edu/step

(A)

Human Psychology

Instructor – Mr. Russo

9:30 am → 2:00 pm

(Note: all day session)



This lecture series course introduces students to the scientific study of human behavior. Topics discussed will be the following: learning, cognition, memory, dreams, and emotions, and disorders of the nervous and endocrine systems. The course includes a lab component of dissecting various animal and or human brains. Possible field trips include a visit to American Museum of Natural History's [Brain Exhibition](#).

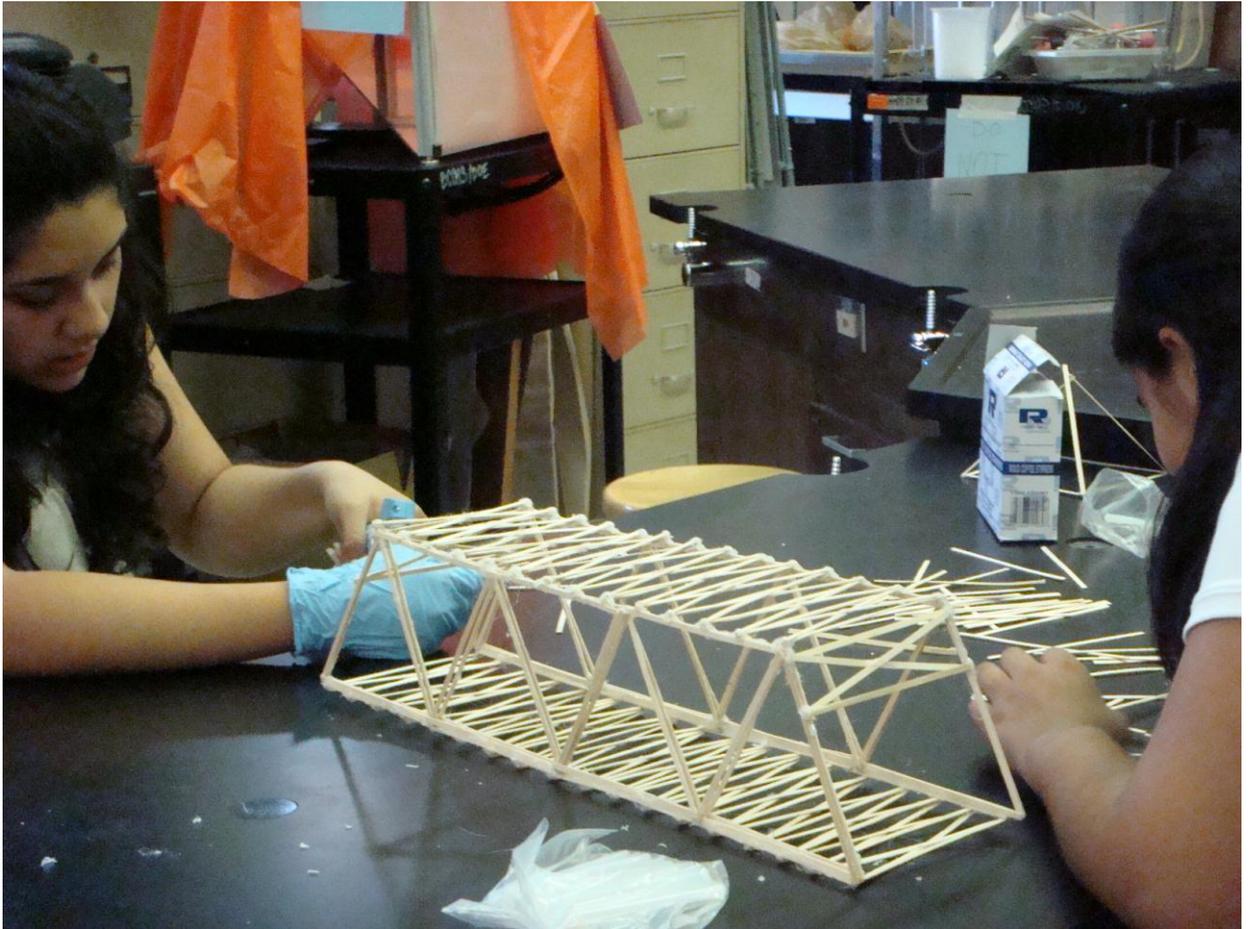
(B)

Engineering Principles of Bridges

Instructor – Mr. Tobias

9:30 am → 2:00 pm

(Note: all day session)



Engineering and mathematical concepts will be explored to help understand the marvel of bridges and specifically the [Brooklyn Bridge](#). Students will then construct their own prototype bridges that will be tested for usability and strength. This course involves trips to the Brooklyn Bridge as well as [Central Park](#) to study the architecture and engineering of bridges.

(C)

Understanding Physics
Instructor – Kirill Tysba (Alex)
9:30 am → 2:00 pm
(Note: all day session)



Week One: Electrical Physics: Students become knowledgeable of basic electrical components, what they do and how they are used. Students will learn how electricity is generated and alternative sources for generating electricity.

Week Two: The Physics of Optics: Students will study how light is controlled in telescopes, microscopes and cameras (i.e. construction of a pinhole camera or a simple telescope)

Week Three: Physics of Rocket Propulsion: Explore how thrust is generated and controlled by building model air rockets and/or water rockets similar to [*Myth Busters*](#)

Week Four: Special Interest Topic: The final week will explore students' interests based on group consensus.