SCIENCE

FUSE LAB: Summer Steam Experience

Designed by Northwestern University, FUSE Lab is a fun and hands-on way for students to explore science, technology, engineering, arts/design and mathematics (STEAM) topics while fostering the development of important 21st century skills. The curriculum features more than 20 real world STEAM challenges that students select to work on during the class period. Each challenge uses a leveling up model from gaming and is designed to engage students in different STEAM topics and skill sets. Students can pursue challenges in areas such as robotics, electronics, biotechnology, graphic design, 3D printing and jewelry/clothing design utilizing technology. FUSE Lab appeals to the interests of all young people, those who are self-proclaimed "tech geeks" and those who don't think of themselves as good at math or science. The individualized and self-directed nature of this program, will provide challenging experiences for all learners.

Open to: Current 8th through 12th graders

Credit: 1 Elective Credit. It does not meet a graduation requirement.

Cost: \$335 (\$435 Out of District), There is a \$45 non-refundable materials fee included in the tuition.

3 weeks, half day, Choose either 1st OR 2nd Term.

Course - Choose only one	Period	Hours	Term	Dates
050252-11	2	11:40-2:10	1	6/10 - 6/27
050254-11	2	11:40-2:10	2	7/1 - 7/18

Neuroscience

Neuroscience is a unique scientific discipline in how the student will use his/her own brain to understand itself. Students enrolled in neuroscience will explore the anatomical form, function and evolution of the brain, spinal cord and sensory organs (eye, ear, nose, etc.). In addition, students will learn about the unique and often bizarre case studies that developed our understanding of how the nervous system works (and often, how it fails to work properly). The neuroscience curriculum utilizes hands-on laboratory experiences such as dissection of brains, eyes and spinal cords. Cutting edge technologies, such as microsurgical enhancement are combined with online simulations of neuron function. Students will utilize microscopy in their research into the genetics of sensory organs. Critical and current societal issues in neurology (i.e. concussions, Alzheimer's, addiction and pharmacology) will be explored through various readings and media. Neuroscience is a topic that appeals not only to students interested in science or engineering but those students interested in psychology, social science or just any student interested about their own thoughts, emotions and memories.

Open to: Current 9th through 12th grade students who are academically strong.

Credit: 1 Elective Credit. It does not meet a graduation requirement.

Cost: \$395 (\$495 Out of District). Includes a \$95 non-refundable laboratory fee, 1 Term, 3 weeks, full day.

Course	Period	Hours	Term	Dates
656052-11	1 & 2	8:50 - 2:10	1	6/10 - 6/27