



GREAT NECK PUBLIC SCHOOLS

"Where Discovery Leads to Greatness"

#DiscoverGreatness

Phipps Administration Building
Office of Instruction
345 Lakeville Road
Great Neck, New York 11020

516.441.4009
516.441.4010
Fax 516.441.4992

Curriculum Profile: Makerspace (MS)

Department	Technology	
Course Name	Makerspace	
Course Length	Twenty weeks - every other day	
High School Credits	N/A	
Description	South Middle's Makerspace Lab technology elective will combine collaboration, design, engineering, fabrication and education. Makerspaces are creative, do-it-yourself spaces where students will gather to create, invent, and learn. Students will be programming FIRST robots, writing code, designing new inventions, and building them in wood, plastic, paper and using our 3D printer. It will be blasts of imagination, invention and creativity put together. Students should be passionate about do-it-yourself, hands-on projects; STEM learning! It will run every other day for one full semester.	
Target/eligible students	Students in grade 8	
State Learning Standards Link(s)	http://www.nysed.gov/career-technical-education/technology-education-learning-standards	
Primary texts and materials	Various species of wood, tools, hand tools, screws, glue, nails, various construction materials , computers, adobe photoshop , large scale plotter printer, cameras, iPad.	
Scope/Sequence		
Introduction Makerspace	Students will learn about the wide variety of projects that will be explored. These range from problem solving puzzles to robotics. Students have much autonomy when selecting projects.	
Safety	New York State MST standards - standard 5 - 2 Tools , resources and technological processes	Prior to working in the technology lab, students must go through a comprehensive safety unit. Safety rules are distributed, signed by legal guardians of the student, a safety video is viewed, and a safety test is taken.
Photo editing	New York State MST standards - standard 5 - 5 computer technology	Students will get a brief description of how to use adobe photoshop. They will explore the program to learn more as the semester goes on.
Photo printing	New York State MST standards - standard 5 - 5 computer technology	Students will use our large-scale plotter printer to print their own original art work from adobe photoshop. Projects range from original cereal boxes to original band posters, to family photo restoration/ portrait printing.
Hands on learning	New York State MST standards - standard 5 - 1 engineering design	Students will do a variety of hands-on projects- utilizing traditional and cutting-edge equipment. Students will do the following : a. design 'soma' cube puzzles and laser engrave them on our CO2 laser b. Use cameras to take high speed pictures c. Build robots utilizing Lego robotics kits d. Construct a perpetual motion machine e. 3D printing f. Fiber laser engraving
Additional Notes		