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

Course Profile: Science Research 9

Department	Science
Course Name	Research 9th Grade
Course Length	1 year
High School Credits	1 Science Credit
Description	Research 9 is devoted entirely to teaching 9th grade students basic research skills. In teams, students will design and implement a research project and will learn how to properly control scientific experiments, how to keep a detailed experimental notebook, how to search the professional literature, how to statistically analyze data, and how to present findings to the public in the forms of: a scientific paper, presentations, and a poster board display
Target/eligible students	Students who have strong student skills, good time management, are self-motivated, and are strong in both math and science should consider this additional elective course. Students must apply while at North or South Middle School and will be accepted by the Department Chair and/or High School Science Research Director
State Learning Standards Link(s)	http://www.nysed.gov/common/nysed/files/programs/curriculum-instruction/hs-science-learning-standards.pdf
Primary texts and materials	https://www.sciencenews.org/snhs/home https://pubmed.ncbi.nlm.nih.gov https://www.sciencedirect.com https://scholar.google.com https://eric.ed.gov http://vassarstats.net
Scope/Sequence	Draw evidence from informational texts to support analysis, reflection, and research
What Will Be Expected of Me?	You will be expected to meet regularly with the science research teacher during class time. You will be expected to complete specific assignments including a research paper and drafts, statistics assignments, PowerPoint presentations, and a poster board. You will be required to present your work at Celebrate Science Night or the Science Symposium; presenting the poster board in the event is mandatory. You will be expected to do most of the work for the Research Project with a partner and your teacher will be there to help guide you along the way.
How Is the Course Taught?	Students meet regularly with the science research teacher to discuss their ongoing work and to discuss the process of developing and executing a research project. Students will also be taught statistics, skills in paper writing, and how to properly conduct an experiment.
Conducting Research	Students will learn the scientific method and implement it into their own research project. Students are expected to do background research and use previous studies to help create their own.
Parts of a Research Paper	Students will learn how to write different parts of a research paper. This includes the abstract, introduction, methods, results, discussion, and appendix.
Statistical Analysis	Students learn how to use different statistical tests in order to analyze data collected during the experiment.

What Are the Completion Requirements?	To complete the course, a student must submit and display a significant research project in science and/or engineering and meet all other course requirements.
Additional Notes	During class time students are conducting their research for most of the year. The teachers are a resource that students will turn to during the year to help answer questions.