Nanotechnology

Engineering of Tiny Machines

(Rising High School Sophomores, Juniors, and Seniors)

Description
This course is designed to introduce students to the world of nanotechnology and its biomedical applications. Students will learn the positive and negative impacts of nanotechnology on society with units on nanoscale, nanotools, nanostructures in natures, and the role of nanotechnology in medicine and other health-care developments.

Highlights
- Hands-on laboratory work
- Work with a dyad partner
- Establish a research study
- Collect and analyze data
- Perform database searches on-line and at the Levy Library
- Integrate background reading into project
- Get to know the Mount Sinai campus and its facilities
- Meet Mount Sinai Research faculty

Requirements
- Full attendance
- Maintain a detailed logbook
- Regular oral and written progress reports
- Completion of pre/post tests
- Completion of a final written and oral research report

Eligibility
- Demonstrated interest in biomedical sciences and research.
- Must be an under-represented minority and/or economically disadvantaged
- Must be a rising high school sophomore, junior, or senior with a minimum GPA of 85

The application must include:
- At least one letter of recommendation from a science teacher, math teacher, or other applicable professional
- A personal essay expressing how this course will help the student pursue a specific career in the health field and help the student reach his or her goals
- A fully completed application form (including signed consent forms: parental/medical/publicity)
- Copy of student's latest transcript