



PURE & APPLIED SCIENCE

Possible Science Pathways

Grade	Student A	Student B	Student C
9	Physics	Physics	Physics Honors
10	Chemistry Foundations Intro to Engineering*	Chemistry, Chemistry Honors* Intro to Engineering*	Chemistry, Chemistry Honors* Intro to Engineering*
11	Biology, Biology Honors*, Intro to Engineering, Trimester Electives	Biology, Biology Honors*, Intro to Engineering, Trimester Electives (some trimester electives required for SRP**)	Biology, Biology Honors*, Intro to Engineering, Trimester Electives (some trimester electives required for SRP**)
12	Intro to Engineering, Trimester Electives, Advanced Global Applications in Environmental Science*	Intro to Engineering, Trimester Electives, Advanced Analytical Chemistry*, Advanced Analytical Physics*, Advanced Topics in Biology*, Advanced Global Applications in Environmental Science*	Intro to Engineering, Trimester Electives, Advanced Analytical Chemistry*, Advanced Analytical Physics*, Advanced Topics in Biology*, Advanced Global Applications in Environmental Science*

^(*)Any honors or Advanced (senior level) class requires department permission

At the end of Sophomore year, students may wish to apply to the science research program. The application process begins at course registration when students select the science research program. Students who wish to pursue research in the physical sciences or engineering also register for **Computer Programming and 1 additional trimester elective(see below)**, while students who are interested in biomedical research register for **Microbiology and Molecular Biology**. The process also includes teacher recommendations and an interview process. The program is limited to up to twelve students per year, with students equally distributed between Biology and Engineering Labs.

^{**}SRP= Science Research Program (An 8 week research internship program to be done the summer between junior and senior year)

Science Electives (open to Juniors and Seniors):

Full Year:

• Introduction to Engineering * (open to 10th, 11th, 12th grade students with permission of the department – priority is given to 12th grade students)

Fall Electives:

- Forensics I
- Astronomy

Winter Electives:

- Microbiology
- Earth Structure and Phenomena
- Computer Programming and Robotics

Spring Electives:

- Science Literacy
- Environmental Science
- Molecular Biology

Senior Electives (open only to seniors with department approval required):

- Advanced Analytical Chemistry
- Advanced Analytical Physics
- Advanced Topics in Biology
- Advanced Global Applications in Environmental Science

Note: Chemistry Honors in the Sophomore year prepares students for the SAT Subject test in Chemistry. Biology/Biology Honors in the Junior year prepares students for the SAT Subject test in Biology E/M

Ms. Elizabeth Davis

Chair, Department of Pure and Applied Sciences