8th Grade Science Placement



Background

 New York State requires acceleration in two subjects in 8th Grade.

AMS chose math & science to be those courses.

 With our current criteria, Ardsley students score high on the Regents Earth Science exams (2/3 of students score 85 or higher).

Science Courses for 8th Graders

Science 8 (Co-Taught)

Advanced Science 8

Regents Earth Science

Science 8 (Co-Taught)

The integrated curriculum is as follows:

- -- Human Body
 - -- Ecology
 - -- Genetics
- -- Physical Science
- -- Introduction to Earth Science

** There is a lab component to this class (called LTI) which develops lab skills through units on technology/engineering, human body systems, energy, forces/motion and sustainability/human impact. **

Science 8 (Co-Taught)

Taught by two teachers (a general educator and a special educator)

The course is modified in how the instruction is delivered – small group work/chunking of material but **NOT** for content.

Advanced Science 8

More rigorous than Science 8:

- Extensive note-taking
- Increased workload
- More student-based learning (independent work)
- Supplemental activities that enrich the curriculum
- Announced and unannounced quizzes

** Students in both the Science 8 and Advanced Science 8 courses take the NYS Intermediate Level Science (ILS) Exam at the end of the school year.

Starting next school year (2023-2024): 1 day for the written portion - 4 investigations will be built into the curriculum

(new science standards)

REGENTS Earth Science

The curriculum is as follows:

Geology
Astronomy
Meteorology
Human Impact

All students placed into the Regents Earth Science course take the Regents Exam at the end of the school year.

This is a two-part/2 day exam:

1 day for the lab portion and 1 day for the written portion.

State Testing

Each student will take the state exam based on the science course in which they are enrolled.

Advanced Science 8 Facts

 This course completes a well-rounded study of science concepts needed for success on the New York State ILS Exam.

 An additional year provides time for student maturation – before beginning the high school curriculum. Some students benefit from the additional year to develop their study skills.

Advanced Science 8 Facts

- There is more time for ideas and concepts to be developed since the material is presented at a slower pace than in Earth Science.
- The rigor of this course appropriately challenges students, preparing them for their high school science classes.
- The lab course is preparatory for future high school lab experiences.

Regents Earth Science Facts

- In addition to the challenging content, students will be asked to meet higher expectations:
 - -- extensive note-taking
 - -- memorization of content
 - -- application & analysis of complex concepts

** There is also a lab component to this course.

Opportunities to Take AP courses (Advanced Placement)

- If your child takes Earth Science in 8th grade, they may be eligible to take an AP course as a junior.
- Students who take Advanced Science 8 in 8th grade may also be eligible for AP courses.
 - As a senior, some students elect to take two sciences in one year.

High School Science Opportunities

Recommended Sequence:

Earth Sci→ Biology→ Chemistry→ Physics (3 levels)

10th **11th** 8th 9th

11th 10th 12th 9th

College Level Courses

AP Biology

AP Chemistry

AP Physics

AP Environmental

SUPA Forensics

Electives

Human Physiology

Forensics

Astronomy

Marine Biology

Meteorology

Learning Sequences

Science Research (3 year)

Engineering (3 courses)

Introduction to Engineering (IED)

Principles of Engineering (POE)

Computer Integrated Manufacturing (CIM)

STEM Themed Clubs: Science Olympiad

Ardsley Innovate

Science Bowl Girls Who Code

Robotics

Olympiad Exams

Placement Criteria

Students will be selected for Earth Science based on their middle school academic performance taking into consideration grades, courses, and classroom behaviors, with science being the emphasis.

Placement Decisions

Letters will be sent home the second week in June.

If there are questions regarding your child's placement, please contact:

<u>Enjoli Joseph</u> –

AMS Science Curriculum Leader ejoseph@ardsleyschools.org

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