8th Grade Science Placement



Background

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

- AMS chose math & science to be those courses.

- *In previous years*, with the old Regents exam, Ardsley students traditionally scored high on the Regents Earth Science exams (2/3 of students scored 85 or higher).

*** This is the second year the NEW Regents exam is being administered.**

Science Courses for 8th Graders

Advanced Science 8

Regents Earth and Space Science

Advanced Science 8

The integrated curriculum is as follows:

-- Human Body

-- Ecology

-- Genetics

-- Earth & Space Sciences

(Astronomy, Plate Tectonics, Rocks and Minerals, Climate, Meteorology, & Human Sustainability)

(MUCH more Earth & Space Science content covered than in previous years)

** There is a lab component to this class (called LTI - *Learning Through Inquiry*) which develops lab skills mostly through the execution of the new state mandated investigations (labs).

Please note: This course is a seperate period and *could* be taught by a different teacher.

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:

1 day - computer-based test

4 investigations are now built into the curriculum - completed in LTI

(new science standards)

Regents Earth and Space Science

The curriculum is as follows:

Human Sustainability

Plate Tectonics

Rocks and Minerals

Earth and Surface Processes

Astronomy

Meteorology (Weather and Climate/Climate Change)

Human Impact

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

1 day for the written portion

3 investigations are now built into the curriculum

(new science standards)

State Testing

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

VERY IMPORTANT - There is a **NEW** Earth & Space Science Regents exam that will be administered for the ***second*** time.

Things to Consider - Advanced Science 8

- 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.

Things to Consider - Advanced Science 8

- There is more time for ideas and concepts to be developed since the material is presented at a slower pace than in Earth & Space 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.

Things to Consider -
Regents Earth & Space Science

- In addition to the challenging content, students will be asked to meet higher expectations:
  -- extensive note-taking
  -- application & analysis of complex concepts
  -- strong literacy and numeracy skills
  -- ability to work independently

** There is also a lab component to this course (1200 minutes -which includes the investigations).

Opportunities to Take AP courses (Advanced Placement)

- If your child takes Earth & Space 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 & Space Sci→ Biology→ Chemistry→ Physics (3 levels)

8th 9th 10th 11th

9th 10th 11th 12th

College Level Courses
AP Biology
AP Chemistry
AP Physics
AP Environmental
SUPA Forensics

Electives
Human Physiology
Forensics
Astronomy
Marine Biology
Ecology

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

Regents Earth & Space Science based on their middle school academic performance taking into consideration grades **in all academic** courses, and classroom behaviors, with science being the emphasis.

Placement Decisions

An email will be sent in June once the recommendations are completed. Once the email is sent, check the portal for the science recommendation.

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

Your child's science teacher **FIRST.**

Enjoli Joseph –
AMS Science Curriculum Leader
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Questions