# 8<sup>th</sup> Grade Science Placement



# **Background**

 New York State requires acceleration in two subjects in 8<sup>th</sup> 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 8<sup>th</sup> grade, they may be eligible to take an AP course as a junior.
- Students who take Advanced Science 8 in 8<sup>th</sup> 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:

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