

The Environmental Science Academy Pathway



Introduction: Environmental Science is a diverse field with countless areas of specialization that require a strong background in the natural and physical sciences as well as knowledge of politics, globalization, economics, and environmental laws and regulations. The Environmental Science academy pathways takes into account these different perspectives and allows students to select their electives to fit their specific interests. For example, students interested in wildlife conservation could take Wildlife and Marine biology. On the other hand, a student interested in environmental law could take Introduction to Justice Law and Society.



Students Who Are Part of This Academy can count on the following:

- After taking Biology, a recommended Chemistry elective, Environmental Science classes and or AP Environmental Science classes , students will receive a solid background in the fundamentals of environmental science.
- A pathway of classes that is tailored to specific students interests. For examples: students interested in environmental law can take law classes as electives; students interested in green engineering can take technology electives; or students interested in wildlife conservation can take wildlife and marine biology as electives.
- Field experiences like, water testing or estimating the age of trees.
- An understanding of current events related to the field of environmental sciences.
- Community service opportunities addressing environmental concerns. For example: invasive species removal, woodland clean ups, trail maintenance or native habitat restoration projects.

Student Responsibilities: Students will meet the requirements of their selected pathway, complete a capstone project, and keep a reflection journal. Students will present their projects and reflections to a group of fellow students and academy teachers.

Teacher responsibilities: Teachers will provide quality instruction and keep students abreast concerning fieldwork, volunteer, and other opportunities. Fieldwork can include a variety of community-based activities such as invasive species removal, rain garden maintenance, native habitat restoration projects, and teaching members of the community at neighborhood recreational centers about the various ways they could help the environment. Students would also be encouraged to participate in related activities such as the environmental club or other projects related to the student's specific area of interest.

For more information please contact Mrs. Pomeroy at: Katherine_Pomeroy@mcpsmd.org

Possible Student Pathways

(Students could pick one or two science courses per year.)

	Grade 9	Grade 10	Grade 11	Grade 12
Courses offered	Biology; Honors Biology; Environmental Science; Honors Environmental Science; or Honors Physics	Biology; Honors Biology; Honors Chemistry Honors Environmental Science; or Honors Physics	Chemistry; Honors Chemistry; Honors Physics; AP Biology; Anatomy & Physiology; AP Physics; AP Chemistry; Forensic Science; or AP Environmental Science	AP Biology; Anatomy & Physiology; AP Physics; AP Chemistry; Forensic Science; AP Environmental Science; Marine Biology; Wildlife Biology, Horticulture; Astronomy; IAPS; or Internship

Capstone Project Options:

Prior to the student's junior year, students should meet with the academy head to discuss capstone options. Capstone projects should reflect the student's personal interest and provide an opportunity to gain experiences valuable to the college application process. Projects ideas are flexible and students are encouraged to be creative. Students will keep reflection journal and prepare a presentation. Some possible capstone projects are listed below:

- An Internship with an organization related to student interests (for example, U.S. Fish and Wildlife Service).
- Original field work, research, or project on a topic approved by an academy advisor (for example, native habitat restoration.)
- With prior approval from advisor: 20 hours of community service, extracurricular attendance of lectures/seminars, participating in clubs or other activities.

Internships:

http://www.towson.edu/ess/internship_announcements.asp