

MS Magnet – Environmental and Life Science Magnet

Now includes PLTW Gateway (Design and Modeling, Energy and the Environment, Medical Detectives) - Hands-on, technology-based STEM curriculum that encourages problem solving and creativity

Students take 12 weeks of Environmental Science and 12 weeks of PLTW each school year

Environmental Science Courses:

Environmental Science – Students are introduced to the fundamentals of Environmental Science, including environmental law, the history of wildlife conservation, and influential conservationists

Biomes and Ecology – Students discover the biomes and the flora and fauna encompassed in each and learn about principles of ecology, including population control, food chains and food webs, and interactions between organisms and the environment

Air, Water, and Soil – Students are introduced to air, water, and soil studies and participate in a variety of citizen science projects including air pollution testing and stream water studies.

Project Lead the Way Courses:

Design and Modeling – Students are introduced to engineering careers and learn the basics of the engineering design process and apply it to solve problems and understand the influence of creativity and innovation in their own lives

Energy and the Environment – Students look toward the future as they explore sustainable solutions to our energy needs and investigate the impact of energy on our lives and the world. They design and model alternative energy sources and evaluate options for reducing energy consumption.

Medical Detectives – Students become real-life medical detectives as they solve medical mysteries by analyzing genetic testing, diagnose disease, and study DNA evidence found at a “crime scene” in hands-on projects and labs, investigate how to measure and interpret vital signs, and learn about the systems of the human body.

Fieldtrips:

6th grade Zoo Overnight Safari

6th grade Camping Trip

7th grade Week at the Zoo

8th grade Cincinnati Zoo Fieldtrip

Outdoor Classroom / Outdoor Education:

Certified Wildlife Habitat – includes half-mile nature trail, meadow, and spring-fed stream used as an outdoor classroom

Certified Butterfly Garden – provides habitat for butterflies and other pollinators from egg to larvae to adult stages of life

Fruit and Vegetable Garden – students plant, tend, and harvest a variety of spring and fall vegetables and perennial fruits such as berry bushes; opportunities to work in the garden over the summer and take home a share of the harvest

Birdwatching Area – birdwatching and identification area, bird feeding stations, and birdhouses allow students to participate in the citizen science program Feeder Watch through Cornell University

Tree Nursery and Arboretum – students raise a variety of native trees from seed and sapling, learn about the life cycle of deciduous and evergreen trees, and transplant and care for trees on school grounds

Nature Club – After school club that allows students to participate in trail maintenance, gardening, bird watching, and more

PLTW Connections:

GO3 (Global Ozone Project) – Citizen science project with environmental science where students collect air pollution data, send it to the international organization, and write blog posts about their treks. We are the only school in Kentucky to ever have been selected to participate in this program.

CPR & First Aid Certifications – Students have the opportunity to obtain CPR and First Aid certification

Student Mentoring – Seniors in the HS Medical Magnet program work with middle school students to teach them valuable skills such as treating sports injuries, balance testing, basic first aid, CPR, identifying heat exhaustion, and procedures for saving a choking victim.