Scholars Prep Guide

Environmental Science

Description:

The purpose of this course is to help students develop an understanding of the interactions of organisms with each other and the environment, improve scientific literacy skills, and gain an appreciation for the natural world and local community. Environmental Science is explored from the single species through the ecosystem level and the year concludes with applications to conservation and preservation of our ecosystems. Students improve field and laboratory research skills from data collection to experimental design and problem solving skills. Students learn how to identify and classify organisms, use scientific tools and techniques, and work as a team to investigate their own scientific questions.

As a student you will be exposed to new scientific language and concepts, technology, and research. You will actively participate in laboratory investigations using the scientific methods to help you develop or strengthen scientific attitudes and interests. You will be encouraged and guided towards taking an independent responsibility in your own learning, which will prepare you for college, technical school, and/or the work place.

The major disciplinary core ideas utilized for Environmental Science include:

- Interdependent relationships in ecosystems
- Cycles of matter and energy transfer in ecosystems
- Ecosystems dynamics, functioning, and resilience
- Earth materials and systems
- Plate tectonics and large scale system interactions
- The roles of water in Earth's surface processes
- Weather and climate
- Natural resources
- Natural hazards
- Human impacts on Earth systems
- Global climate change
- Natural selection
- Adaptation
- Biodiversity and humans

Tennessee Academic Science Standards. https://www.tn.gov/education/instruction/academic-standards/science-standards.html

Tips for preparing for Environmental Science:

- Basic Math skills (multiply, divide, add, subtract, percent)
- Prerequisite of Biology I (some topics will be covered in more detail)

Tips for being successful in Environmental Science:

- Take responsibility for your learning.
- Ask questions.
- Listen.
- Take notes.
- Review your notes from class.
- Do your own work. Do not copy from someone else's work.
- Study for tests.