

## Curriculum Map

<b>Course Name</b>	Ecology
<b>SEPTEMBER</b>	Maps, Topography, GIS
<b>OCTOBER</b>	Soil
<b>NOVEMBER</b>	Soil profiles and land use
<b>DECEMBER</b>	General botany
<b>JANUARY</b>	Dendrology
<b>FEBRUARY</b>	Forest use and conservation
<b>MARCH</b>	Introduction to water cycle and oceanography
<b>APRIL</b>	Hydrology
<b>MAY</b>	Water studies

Course: Ecology

Ecology is a course that will introduce students to the interactions of living and nonliving parts of our environment. Students will survey topics ranging from: forestry, aquatics, wildlife, soils, human interactions, and current issues facing our environment.

The course will allow students to:

1. Understand the basic interactions of our environment.
2. Describe how living organisms develop to meet the needs of a changing world.
3. Explain how society is affected by current environmental issues.
4. Describe how technology is shaping our scientific knowledge of our world .

Course resources:

Biology: An Everyday Experience. Glencoe 2003 edition

Earth Science. McDougal Littell 2006 edition

Pa Envirothon website

Pa Dept of Natural resources website

Pa State Standards:

Standard - 4.1.12.C Research how humans affect energy flow within an ecosystem.

Standard - 4.1.12.E Research solutions addressing human impacts on ecosystems over time.

Standard - 4.2.12.A Examine environmental laws related to land use management and its impact on the water quality and flow within a watershed.

Standard - 4.3.12.B Analyze factors that influence the local, regional, national, and global availability of natural resources.

Standard - 4.4.12.B Research and evaluate laws and policies that affect the food and fiber system.

Standard - 4.5.12.D Evaluate waste management practices. Standard - 4.5.12.C Analyze the costs and benefits of means to control pollution.