

Environmental Science Topics
Fond du Lac High School
Margie Winter

Length of Course: 1 year (may be changed to two 1 semester courses in the future)

Text: Living In The Environment, by G. Tyler Miller, 13th edition

Additional Required Reading:

- A Sand County Almanac, by Aldo Leopold (monthly essays throughout the year, additional essays such as Odyessy and Thinking Like a Mountain, Marshland Elegy, Cheat, when they fit in)
They fit in with the topic of study)
- Desert Solitaire, by Edward Abbey

Journaling: scientific journaling with reflections throughout the year, all students
Keep a journal, monthly assignments

Field Trip: Leopold Reserve (Shack and Legacy Center tour) and International Crane Foundation

Would Like to Add Field trip to: Wind Generator, Farm with Biodigester, Kettle Moraine State Forest and Horicon Marsh (have done this one previously)

Units:

- Overview of Environmental Problems, includes population growth
- Aldo Leopold – Life History
- Environmental History – (Ch. 2), includes human and political events, policies, and important individuals in Env. History
- Ed Abbey and Desert Solitaire
- Ecology: Ecological function, laws, processes – in depth (long unit)
- Ecosystems: Terrestrial Ecosystems, Aquatic Ecosystems
- Ecosystems of Wisconsin – present and past, tension zone
- Invasive Species and their impacts
- Ecosystems in Danger: Tropical Rainforests, Coral Reefs, Tallgrass Prairie, Desertification
- Soils – types and identification of soils, soil conservation
- Water – water management, water issues (point and nonpoint pollution), water quality
- Field Study: water quality parameters and ecological assessment of school ponds
- Air – air components, quality, and pollution issues
- Energy – nonrenewables & fossils fuels, renewable energy (KEEP)
- Environmental Ethics, personal assesement and Personal Land Ethic
- If time: Environmental Organizations/ Env. Action

Previously: did restoration project with my classes (not at present)