Environmental Science Resources

Wisconsin Environmental Science Teacher Summit 2008

Wisconsin Environmental Science Teacher Network Web Site

http://www.uwsp.edu/cnr/wcee/EnvSci/index.htm

Syllabi
http://www.uwsp.edu/cnr/wcee/envsci/syllabi.htm
Sample course syllabi from environmental science course instructors around Wisconsin.

UWSP College of Natural Resources Syllabi
http://www.uwsp.edu/cnr/wcee/envsci/college.htm
Syllabi from the four core courses all UWSP College of Natural Resources students take.

Textbook List
http://www.uwsp.edu/cnr/wcee/envsci/texts.htm
List of environmental science textbooks including author, title, publisher, and description.

Contests and Conferences

Envirothon
http://www.wlwca.org/Pages/EnvirothonInfo.htm
The Envirothon is a problem-solving natural resource competition for high school students. Teams of students are tested, on "in the field" stations, their knowledge of soils, forestry, wildlife, water and a current environmental issue. The teams are also required to give an oral presentation on the current environmental issue. Participants gain teamwork skills, public speaking skills and are able to learn about careers in the environmental field. The winning team from the state competition then moves on to North America's largest high school environmental education competition, where they compete with teams from throughout the U.S. and Canada for scholarships and Canon products.

- Wisconsin Envirothon is held at the Central Wisconsin Environmental Station in April. Trees For Tomorrow is hosting an Envirothon Team Preparatory Workshop November 14-16, 2008 in Eagle River.

Solar Olympics
http://www.wisconsinpublicservice.com/news/solarwise/olympics.aspx
Solar Olympics is a one-day renewable energy event that culminates the school year for participating SolarWise (SolarWise is a solar energy and education program offered to high schools served by Wisconsin Public Service Corporation) schools. This program gives high school students hands-on experience with renewable energy. Students prepare solar projects in categories that draw on various disciplines, including science, mathematics, English, communications, art and business. In Solar Olympics, student teams (with up to 10 members each), led by a teacher/coach, compete in twelve "events" related to solar energy.

- Held in May at a different university each year.

National Ocean Sciences Bowl - Great Lakes Bowl
National Ocean Sciences Bowl: http://www.nosb.org/
Great Lakes Bowl: http://www.glerl.noaa.gov/pr/nosb/cur/
The NOSB is a nationwide academic competition on topics related to the study of the oceans among teams of high school students. Regional competitions are held around the U.S. in February with the final national competition held in April.

- 2009 Great Lakes Bowl is in Ann Arbor, MI at the University of MI, Feb., 2009

Lake Superior Youth Symposium
http://www.lakesuperioryouth.org/
Bi-annual multi-day conference for high school students in the great lakes region held in May at a different location each year. Features field experiences, hands-on activities, and student workshops.

- 2009 theme is global climate change and Lake Superior, Duluth, MN, May 14-17, 2009

Governor's High School Conference on the Environment
http://www.uwsp.edu/cnr/wcee/youthconference/
Annual one-day environmental action conference for high school students held at UWSP in November. Event features keynote speakers, concurrent sessions from students and professionals, exhibits, and careers information. Participants bring a poster exhibit showcasing what is being done in their school related to the given topic that year.

- 2008 is renewable energy theme, November 12, 2008

Comprehensive Environmental Science Web Sites

Environmental Literacy Council
http://www.enviroliteracy.org/
The Environmental Literacy Council is an independent non-profit made up of scientists, economists, and educators striving to connect teachers and students to science-based information on environmental issues. Their web site contains over 1000 pages of background information and resources on many environmental topics.

National Repository of Online Courses: Environmental Science & AP Environmental Science
http://www.montereyinstitute.org/nroc/nrocdemos.html
NROC is a library of online courses for students and faculty in higher education, high school, and advanced placement. (There is both an ES and AP ES course but they contain the same content.)
Environmental Science course description: This course is designed to acquaint you with the physical, ecological, social, and political principles of environmental science. The scientific method is used to analyze and understand the inter-relationships between humans and the natural environment. The course shows how ecological realities and the material desires of humans often clash, leading to environmental degradation and pollution. The course covers the following topics: Earth's Systems, Human Population Dynamics, Natural Resources, Environmental Quality, Global Changes, and Environment and Society.

The Habitable Planet
http://www.learner.org/channel/courses/envsci/index.html
The Habitable Planet is a multimedia course for high school teachers and adult learners interested in studying environmental science. The Web site provides access to course content and activities developed by leading scientists and researchers in the field.

Field Trips

Nature Net
http://www.naturenet.com/directory.asp
Online interactive directory of nature centers and programs in Wisconsin. Use the search features to locate a site by location, topic, or type of program desired.

EE in Wisconsin
http://www.eeinwisconsin.org
An online guide to Wisconsin's environmental education organizations, programs, and resources. Search the site for field trip sites by location or topic. Search the calendar by location, date, or topic to find environmental programs. Search for teaching resources by topic. Comprehensive list of environmental education organizations in the state. Highlights schools with strong environmental programs. Also includes background information on many natural resources topics and an environmental quiz.

Books

Environmental Connections
By Environmental Literacy Council; 2008; Kendall/Hunt Publishing; ISBN: 978-0-7575-5196-3
A guide that will assist you in teaching about the environment. This guide will help you and your students find resources that enable you to examine environmental issues in greater depth. For each summary, the authors have located a range of resources that will be helpful in researching the topic, including textbooks that cover the scientific concept in depth; online and print articles that explain the topic in clear, simple terms; sources of data for further analysis; and articles from scientific journals that present the current state of scientific understanding.

Taking Sides: Clashing Views on Environmental Issues
By Thomas A Easton, 2008 (yearly) McGraw Hill Higher Education
Brings together the arguments of leading social and behavioral scientists, educators, and contemporary commentators to forming 18 to 20 debates, or issues, that present the pros and cons of current controversies in an area of study. An Issue Introduction that provides students with proper context and historical background to each debate precedes the two opposing viewpoints. After reading the debate, students are given other viewpoints to consider in the Issue Postscript, which also offers recommendations for further reading. Through this combination--the Issue Introduction, the Yes side to the issue, the No side to the issue, and the Issue Postscript--Taking Sides fosters critical thinking in students and encourages them to develop a concern for serious social dialogue.