

Yes, I would like information regarding Environmental Cyber Schoolhouse Workshops:
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Would you like to receive our complementary newsletter *The Link?* (please circle) Yes No
Would you like information sent to you on other available environmental toxicology curriculum? (please circle) Yes No

Send to: Lisa Pietrantoni, Project Manager, Environmental Cyber Schoolhouse, Environmental Health Science Center,
Community Outreach and Education Program 2727 Second Avenue, Room 4000, Detroit, MI 48201-2654
Phone: 313/961-3348, Fax: 313/963-1946, Email: l.pietrantoni@wayne.edu.

Read updates on the Environmental Cyber Schoolhouse at our web site:
<http://www.ehscenter.org>



Environmental Health Curriculum on the World Wide Web For Grades 9 through 12

offered through the
Community Outreach and Education
Program of the Environmental Health
Science Center at WSU

www.cyberschoolhouse.org

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The Environmental Cyber Schoolhouse

www.cyberschoolhouse.org

What is The Environmental Cyber Schoolhouse?

The Environmental Cyber Schoolhouse is a new collection of innovative curriculum found on the World Wide Web that focuses on environmental health issues. The main goal of the lessons is to increase student's understanding of how basic scientific research provides information necessary to identify risk factors and safeguard human health.

Curriculum Key Points:

- ◆ Appropriate for grades 9 through 12
- ◆ Interactive, multimedia web based
- ◆ Aligned to National and State of Michigan Science Curriculum and Technology Standards
- ◆ Students are introduced to several science related careers
- ◆ Students are introduced to "cutting edge" scientific techniques and real clinical and research data
- ◆ Virtual experiments included in lessons
- ◆ Off-line investigations included

Evaluations & Outcomes

Student assessment is included on the web site. Teachers have access to student pre and post test scores as well as the ability to monitor their students' progress on the site. Each chapter has off-line student worksheets to reinforce the concepts presented in each lesson. Student and teacher feedback to the units is also systematically collected via the website and used to refine the Environmental Cyber Schoolhouse project.

The Quests

"Health Quest" is the first unit of the Environmental Cyber Schoolhouse curriculum. The focal point of the unit is the main character Maria, a young child who has a mildly elevated blood lead level (18µg/dL) that has been detected through routine screening at a local health fair. The students will collect information about lead poisoning and prevention by joining Maria at the health fair and at her subsequent visit to her pediatrician's office. The students will gather enough information to allow them to outline a protocol to decrease Maria's exposure to lead by providing a lead safe environment and subsequently lowering her blood lead level. For an introduction and preview in Adobe Acrobat format, go to www.cyberschoolhouse.org and click on Health Quest. *"Sports Quest"* is the second unit of the Environmental Cyber Schoolhouse curriculum. It explores asthma and environmental triggers of asthma. The central character is a thirteen- year-old male (Charlie Glenn) from a local suburb. Charlie is discovered to have asthma following a distressing several months of playing basketball. As his symptoms worsen, Charlie is sent to an asthma management physician to look at possible triggers of his asthma. The students are shown normal functioning of the lungs as well as the effects of environmental triggers of asthma on lung function. Also embedded in the unit is an epidemiology research study looking at the collection of data, analysis, and interpretation. Ultimately, the students will be asked to make choices about how the central character's external environment and use of medication could lead to a manageable asthma condition, and an increased quality of life.

Hardware Requirements (minimum)

- ◆ Pentium I processor 133 or better
- ◆ Win 95, Mac OS 7.5 or better
- ◆ Netscape Navigator 4.08 or
- ◆ Explorer 4.5
- ◆ 15 inch monitor (17 inch preferred)
- ◆ 56K modem connection or better
- ◆ 32MB memory or better

Teacher's Workshop

Utilization of the Environmental Cyber Schoolhouse is a **no cost** to teachers once they have participated in an ECS workshop. ECS staff will present this program as a no-charge in-service or workshop. A teacher's manual including off-line investigations, worksheets, curriculum alignment, and a CD-ROM of the plug-ins necessary to view portions of the web site is provided to each teacher. The ECS curriculum is also offered as a graduate short-course for one credit at Wayne State University during the summer months.

If you would like information sent to you regarding workshops please fill out the reverse side of this page.

Additional Information

Contact the Cyber Schoolhouse Offices at:

**Environmental Cyber Schoolhouse
Institute of Environmental Health Sciences
Wayne State University
272 Second Avenue, Room 4000
Voice: 313/961-7316, Fax: 313/963-1946**

**Lisa Pietrantoni
Project Manager
Email: l.pietrantoni@wayne.edu**

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