NETWATCH

edited by JOCELYN KAISER

EDUCATION

An Explosive Experience

Why does one volcano blow its top while another merely oozes lava? How do eruptions affect the ozone layer and global climate? Find out by plunging into descriptive volcanology at How Volcanoes Work.

Writing for teachers and college and graduate students, geologist Vic Camp of San Diego State University methodically explains volcano taxonomy and terminology. The site describes what happens during an eruption and tells why some eruptions are explosive and others aren't. (Magma viscosity and temperature are key.) Spectacular illustrations include photographs, maps, and animations of eruptions that take you into the belly of a volcano. Also worth a look are the vivid descriptions of historical eruptions, spiced by firsthand accounts from survivors.

Another section ventures off our planet to explore extraterrestrial volcanoes, such as the sulfur-spurting "pimples" on the pockmarked face of Io, one of Jupiter's moons. Links to webcams allow you to keep tabs on active volcanoes such as Mount St. Helens and Mount Etna.

www.geology.sdsu.edu/how_volcanoes_work

NET NEWS

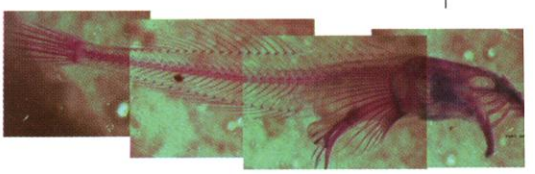
MIT to Give Away Class Materials

The Massachusetts Institute of Technology (MIT) announced last week that it plans to post materials for nearly all its courses on a free Web site. The move marks a departure from the frenzy among universities to make money from distance education.

The plan grew out of the faculty's "concern over the growing privatization of knowledge," says Patti Richards, spokesperson for the MIT OpenCourseWare project. Materials from most of the 2000 MIT courses—from assignments to tests and video lectures—will be posted over the next 10 years, starting with about 500 courses in fall 2003. Professors at other schools will be free to download and use the content, as long as they don't attempt to sell it. But MIT won't award any class credits or degrees. Instead, says Richards, the idea is simply to give students and teachers worldwide, especially those in developing countries, access to its educational resources. The university is seeking donors to help fund the plan, which could cost $100 million.

MIT electrical engineering professor Paul Penfield Jr. says most faculty members supported the project at MIT, home of the open source software movement. Stephen Ehrmann of the Teaching, Learning, and Technology Group, a Washington, D.C.–based nonprofit that helps colleges use technologies, applauds MIT's move: "I hope other universities will find a cheaper way to do this," he says.

DIRECTORIES



It's a Keeper

Instead of fishing around on the Internet for ichthyology information, try your luck at Ichthyology Web Resources, hosted by graduate student Keith L. Jackson at the University of Alberta, Canada.

The site is well stocked with links on fish anatomy, behavior, systematics, distribution, biodiversity, and other topics—from Fishbase, an online catalog, to a how-to on determining the age of a cod. An expanding section organized by taxa covers groups from hagfish to swordtails. Jackson himself has written pages on subjects such as how fish talk to each other (you can even hear sound bites) and the mechanics of their jaws. Looking for someone to swap fish tales with? Flip through directories of ichthyology researchers and museums around the globe.

www.biology.ualberta.ca/jackson.hp/IWR/index.php

DISTRIBUTED COMPUTING

Cancer Research at Home

If your personal computer isn't already combing radio data for signals from intelligent aliens in its spare time, then here's another worthy scientific cause along the lines of SETI@home. Oxford University computational chemists invite you to help find potential cancer drugs by downloading a screensaver that computes how virtual molecules interact with target proteins.

members.ud.com/vypc/cancer/think.htm

RESOURCES

Guess Who's Coming to Dinner

Summer's on its way, bringing with it the usual rash of foodborne illnesses caused by bacteria, viruses, and other stomach-turning nasties. To find out more about the pathogens and poisons that can lurk in your lunch, check out the Bad Bug Book, a rogues' gallery that combines information on food safety from the Food and Drug Administration and other federal agencies.

All the familiar villains are here—hepatitis A virus, *Salmonella*, *Clostridium botulinum*, the vicious *Escherichia coli* strain O157:H7—as well as lesser known pathogens, such as the Norwalk viruses. Coverage also includes protozoa, parasitic worms, and toxins such as the aflatoxins, liver-wrecking poisons exuded by fungi that grow on peanuts and corn. For each kind of food poisoning, a just-the-facts chapter describes symptoms, transmission, infective dose, treatments, and recent outbreaks. Those seeking more detailed info can follow links to GenBank, PubMed, and the Centers for Disease Control and Prevention's *Morbidity and Mortality Weekly Report*.

vm.cfsan.fda.gov/~mow/intro.html

Send great Web site suggestions to netwatch@aaas.org

CREDITS: (CLOCKWISE FROM TOP LEFT) USGS; KEITH JACKSON; (ELECTRON MICROGRAPHS) HAIM SOLOMON