



A Selection of Recommended Web Sites for Research and/or Teaching Mathematics and Natural Sciences

Mathematics

- AMSER (Applied Math and Science Education Repository) <http://amser.org>

AMSER is a portal of educational resources compiled especially for community and technical colleges, but free for anyone to use. *AMSER* is funded by the National Science Foundation. Copyright information is provided under the "About Us" link. The resources range from web pages to articles, presentations, and book excerpts. This site is intended for faculty use.

- The Math Forum/ Ask Dr. Math <http://mathforum.org/dr.math/>

Ask Dr. Math is a question and answer service for math students and their teachers. A searchable archive is also available, as well as summaries of Frequently Asked Questions.

- Tools for Understanding: A Resource Guide for Extending Mathematical Understanding in Secondary Schools <http://www2.ups.edu/community/tofu/>

Attempting to make the study of mathematics more meaningful and move beyond rote learning, this site is divided into three strands: Math Concepts, Integrated Lessons, and Journaling. Although the focus is on secondary school curriculum, much of the site's content may be applied to some community college math courses.

General Science

Inside Science <http://www.insidescience.org>

This website provides "independent research news and information on science, technology, engineering, mathematics, and related fields through news articles, videos, guest columns, and other media." All content is free. Students who are exploring possible topics for research papers will find this resource useful.

Astronomy

- Herschel Space Observatory <http://www.herschel.caltech.edu/>

This site is a portal to the telescope that studies the universe from the light of the "far- infrared and sub-millimeter portions of the spectrum." There are sections explaining the missions and the instruments, as well as news releases and public information sheets. Importantly, researchers gain access to information as it is generated from observations.

Biology

- Action Bioscience <http://www.actionbioscience.org/>

Published by the American Institute of Biological Sciences, this free site is divided into several major areas: Biodiversity, Biotechnology, Environment, Evolution, Genomics, and Science Policy. Within each section are original articles which have been peer-reviewed before publication. Articles by students have been reviewed and approved as well. Articles include bibliographies.

- Exploring Life's Origins <http://exploringorigins.org/>

Funded by the National Science Foundation to help “describe origins of life research and theories,” the site is divided into three parts: A Timeline of Life's Evolution, Understanding the RNA World, and Building a Protocell.

Chemistry

- Chemistry@Nature.com Podcasts <http://www.nature.com/chemistry/podcast.html>

“Every other month the *Nature* journals are publishing a free audio show, 'ChemPod', specifically for the chemistry community, from interviews with Nobel Prize winners, to discussions on nanotechnology research and much, much more...” Podcasts from 2006 to 2009 are available.

Environmental Sciences

- UNEP: United Nations Environment Programme <http://unep.org>

The mission of the UNEP is to provide leadership in global environmental concerns. The website offers publications assessing national and international environmental conditions and trends, related news reports, and multimedia resources.

Physics

- Project TUVA: The Messenger Series <http://research.microsoft.com/apps/tools/tuva/index.html#>

Sponsored by Microsoft, this web site uses Microsoft's enhanced video player to offer an acclaimed science lecture series, the 1964 Messenger Lectures, given by Richard Feynman at Cornell University before he won the Nobel Prize in Physics. The video player allows users to perform various tasks while viewing the videos, such as taking notes and interacting with hyperlinks to related Web content.

Zoology

- Audubon's *Birds of America* at the University of Pittsburgh <http://digital.library.pitt.edu/a/audubon/>

Only 120 complete sets of *Birds of America* (1827 – 1838) are believed to exist. This site presents a digital version of the University of Pittsburgh's set. It is searchable (basic and advanced). Images can be enlarged. The text of Audubon's *Ornithological Biography* is also available.