

Resources for teaching Earth System Science

GEO-teach funded teacher-training programs

These are two training programs recently funded by the National Science Foundation's GEO-teach program. There are also summer programs offered through NASA that focus on teacher training in the Earth and space sciences.

UNH-based TESSE program: <http://www.leitzelcenter.unh.edu/geo-teach/index.html>

In-service teacher application (for Summer 2009, due Winter 2009):

http://www.leitzelcenter.unh.edu/geo-teach/pdf/unh_inservice.pdf

Earth System Science Education Alliance:

<http://essea.strategies.org/>

Related resources:

GLOBE, project-based investigations of the Earth System:

http://www.globe.gov/globe_flash.html

Textbooks- Earth System

Kump, Kasting and Crane (2003) *The Earth System*. ISBN 0131420593

Skinner, Porter and Botkin (1999), *The Blue Planet: An Introduction to Earth System Science*, 2nd Edition, ISBN 0471161144 (there is an associated lab manual and study guide).

Spencer (2002) *Earth Science: Understanding Environmental Systems*, ISBN 0072341467

Classroom Resources – this listing is by no means exhaustive!

DLESE – Digital Library for Earth System Education

<http://www.dlese.org/>

Plate Boundary Lab - <http://terra.rice.edu/plateboundary/tg.html>

Teaching resources in Earth Science:

<http://serc.carleton.edu/>

<http://www.terc.edu/work/936.html>

Earth Exploration Toolkit (computer-based science activities):

<http://serc.carleton.edu/eet/>

Gulf of Maine exercise: <http://serc.carleton.edu/eet/phytoplankton/primer.html>

An Earth Systems approach:

<http://serc.carleton.edu/teachearth/topics.html#ess>

Google Earth: earth.google.com

Google Mars: <http://www.google.com/mars/>

Google Moon <http://www.google.com/moon/>

NASA resources: <http://science.hq.nasa.gov/education/catalog/index.html>

European Space Agency: <http://www.esa.int/esaED/index.html>

NASA "Earth System" data: <http://nasadaacs.eos.nasa.gov/>