Geospatial Technology for Educators

COURSE GOAL

Geospatial technologies, just like real estate, are all about location, location, location. Remote sensing (RS) allows us to gather information about a location at a great distance from that location. Global positioning systems (GPS) make it possible for us to know where we are — anytime, anywhere. Geographic information systems (GIS) are used to display and analyze various layers of location information. Because location is involved in many science, math, geography and social science concepts taught in K-12 classrooms, geospatial technologies have great potential to enhance the learning experience. This course will demonstrate how geospatial technologies — RS, GPS and GIS — can be integrated into existing curriculum and provide students with skills and knowledge that will enhance their career potential as well.

Pre-registration for this course is required. Enrollment will be limited to the first 20 applicants. You can enroll on-line at www.sdstate.edu (search keyword: SDSU GTE). Alternatively, you can send a completed application form to:

Mary O’Neill
Water Resources Institute
Box 2120, Ag Engineering
South Dakota State University
Brookings, SD 57007-0650
Phone: (605) 688-5597
Fax: (605) 688-4917
E-mail: mary.oneill@sdstate.edu

Please share this brochure with other Math, Science, Social Science, Geography, and Technology teachers!

WHEN AND WHERE
May 29-June 1, Sioux Falls, SD (USGS National Center for EROS)

HOURS
8:00 a.m.-4:30 p.m.

WHO
K-12 Science, Math, Geography, Social Science and Technology teachers and administrators. Teams of two or more from the same school district are encouraged but not mandatory.

FEE
$250 per participant. Payment (or arrangements for payment) must be made on the first day of the workshop. Please make checks payable to Water Resources Institute, SDSU.

CREDIT
Two university credits are available for this course.

STIPEND
Participants will receive a $175 stipend that may be used for university credit and other course-related expenses.

HOUSING
For those who need overnight lodging, dormitory rooms are provided at no cost at the University of Sioux Falls (May 28-31).
South Dakota State University
Water Resources Institute
Box 2120, Ag Engineering
Brookings, SD  57007-0650

RETURN SERVICE REQUESTED

COURSE ACTIVITIES

Participants will:

- Examine topics related to remote sensing (RS), global positioning systems (GPS), geographic information systems (GIS), earth science, and geospatial data.
- Learn how to access and download geospatial data from various Internet sites.
- Hear from professionals who use RS, GPS, and GIS in their everyday work activities.
- Practice a “hands-on” instructional approach.
- Work cooperatively in groups to use new knowledge and skills.
- Receive and learn how to use a GPS unit.
- Learn about geospatial software including ArcGIS, OziExplorer, MultiSpec, and Google Earth.
- Receive a GIS textbook and software.
- Develop his/her own RS/GPS/GIS lesson plan.

Note: Personal computers with Windows operating system software will be used for this course.

May 29 - June 1, 2012
USGS National Center for EROS
An intensive four-day course for K-12 educators interested in learning about:

- Remote Sensing (RS)
- Geographic Positioning Systems (GPS)
- Geographic Information Systems (GIS)
- Curriculum Integration and Standards