

# 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](http://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](mailto: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).



## REGISTRATION FORM

Mail or FAX the form below OR register online at [www.sdstate.edu](http://www.sdstate.edu) (search keyword: SDSU GTE)

Please complete an application form for each person attending.

Name \_\_\_\_\_

Home Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Home Phone \_\_\_\_\_

School \_\_\_\_\_

School Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

School Phone \_\_\_\_\_ Fax \_\_\_\_\_

E-mail \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

## SCHOOL TYPE (mark all that apply):

- Public  Private  Urban  Suburban  
 Rural  Elementary  Middle School  
 High School

## GRADES YOU CURRENTLY TEACH (mark all that apply):

- K  1  2  3  4  5  6  7  8  
 9  10  11  12  >12

## CURRENT POSITION/TITLE (mark all that apply):

- Teacher  Media Specialist  
 Resource Teacher  Curriculum Specialist  
 Other (specify) \_\_\_\_\_

## MAJOR EDUCATIONAL FOCUS (mark all that apply):

- Science  Math  Geography  
 Technology  Other (specify) \_\_\_\_\_



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## 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 integrating science, mathematics, geography and technology.
- 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.

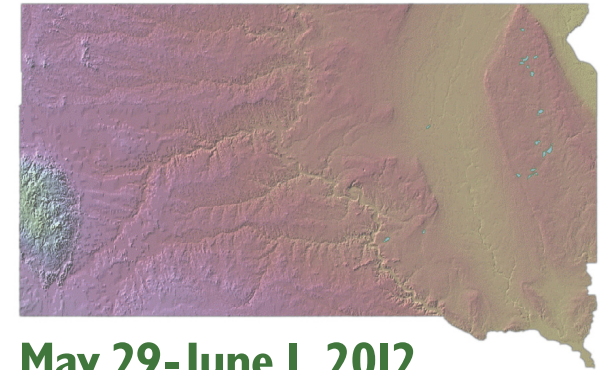
*Note: Personal computers with Windows operating system software will be used for this course.*

South Dakota State University  
Water Resources Institute  
Box 2120, Ag Engineering  
Brookings, SD 57007-0650

**RETURN SERVICE REQUESTED**



# Geospatial Technology for Educators



**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)**
- **Global Positioning Systems (GPS)**
- **Geographic Information Systems (GIS)**
- **Curriculum Integration and Standards**



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