Investigating Nature through Science Teacher Active Research

Project INSTAR 2001 Theme

Hydrology and Ecology of Coastal North Carolina

Interested in engaging in real scientific research activities in Coastal North Carolina that you can use back in your classroom? Participants will apply the scientific method to actively examine the hydrology, ecology, and human impact on coastal watershed processes. The program will combine intensive field and laboratory components designed to integrate biological, chemical, geological, and geographical approaches to determining watershed health. In the field, participants will conduct geological surveys and measure hydrodynamic conditions in tidal waters, examine plant and animal communities, utilize various water and soil sampling strategies and examine land use conditions using a GPS and GIS technology. In the laboratory, participants will conduct water quality and soil analyses, learn mapping skills, and quantity various coastal land cover ecosystems. Emphasis will be placed on concepts and exercises that can be modified for application in a wide range of middle school and high school classroom settings. Each participant will synthesize these data to produce a research report, PowerPoint presentation, and classroom activities as final products for a NC Project INSTAR Resource Guide and CD-ROM, and the Project INSTAR website.

Project INSTAR in Coastal NC will be held in Wilmington, North Carolina, July 22-29, 2001. Project INSTAR is a science teacher institute focused on earth systems science education and technology training in coastal marine environments. The Institute, developed by a team of scientists and educators, began in 1998 at the University of Miami's Rosenstiel School of Marine & Atmospheric Science. Our mission is to enhance the geoscience knowledge of middle school and high school teachers throughout the southeast United States by offering an innovative approach to teacher professional development. The Institute, developed with the assistance of middle school and high school teachers, is expanding to coastal North Carolina in the summer of 2001 to provide an intensive training in coastal marine science themes. Teachers can directly use the activities, lessons, and materials back in their classrooms.

Registration Form: NC Project INSTAR 2001

Hydrology and Ecology of Coastal North Carolina

3 Graduate credits from the Department of Geography and Earth Science from UNC-Charlotte

Can be used toward science re-certification or technology credit

Name: ___________________________________________ Social Security #: ______________________________________

HOME ADDRESS:___________________________________________________________

City: _________________________ State: ______ ZIP: ________ Grade Level: ______

School: ___________________________ School Address:___________________________

City: _________________________ State: ______ ZIP: ________ E-mail: ___________________________

Home Phone: (____)__________ School Phone: (____)__________ Fax: (____)__________

Registration deadline: June 15, 2001

Mail or FAX (704) 687-3216 registration form to:

Center for Mathematics, Science, and Technology Education
University of North Carolina at Charlotte
9201 University City Boulevard
Charlotte, NC 28223-0001

Registration Fee: $1,800.00 per participant

Contact your district science supervisor for funding support
Upon receipt of your application, you will be invoiced for the $1,800 registration fee.

Please do not send your payment with this application.
Course Requirements

All participants are expected to attend all 7 days and evenings of the Institute between July 22-29, 2001. Participants will stay in the UNC-Wilmington dorms. Two follow-up days will also be required during the fall 2001 semester (exact dates and locations to be announced). Course requirements are listed below.

1. Research report
2. Homework assignments
3. Portfolio of lessons, activities, and student work
4. PowerPoint presentation
5. Presentation to colleagues
6. Complete web-based marine science course

Participants Receive:

- 3 graduate credits from UNC-Charlotte
- Theme Binders
- $500 toolkit equipment
- Room and board for 7 days
- Coastal field trips
- And much more……

**The course will be listed as a Fall 2001 University of North Carolina at Charlotte course. Participants will receive the three course credits in the fall 2001 semester upon successful completion of the summer Center for Mathematics, Science, and Technology Education
The University of North Carolina at Charlotte
9201 University City Boulevard
Charlotte, NC 28223-0001

For more information contact
Center for Mathematics, Science, and Technology Education at UNC Charlotte

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