

Center for the Advancement of Earth and Space Science Education

Stony Brook University

Workshops for Earth Science Teachers

The Center for the Advancement of Earth and Space Science Education is offering three workshops this winter to introduce and demonstrate laboratory programs which are offered to Regents Level middle and high school students by the Center for Science and Mathematics Education (CESAME) at Stony Brook University (<http://www.stonybrook.edu/cesame/students/ScienceTeachingCenter/geosciencecenter.shtml>).

All lessons are aligned with the New York State science education standards.

The following workshops for teachers are on Saturdays from 9 AM to 12 Noon and provide 3 hours towards in-service credit. The workshops meet in room 137 of the ESS Building at Stony Brook.

Saturday February 12, 2011

STREAM TABLE ACTIVITIES A professional grade river simulator with a variety of laboratory exercises can be used to demonstrate basic principles of river behavior and subtle channel morphology and sediment transport processes. Students can model real world geologic processes while earning about 240 Regents laboratory minutes.

POROSITY AND PERMEABILITY LAB: Our water cycle is governed by properties of Porosity and Permeability below the surface of the land. Where does our drinking water come from? Where does it go? In this program, students will perform experiments which will teach them about the movement of water within the water cycle. Qualifies for approximately 120 N.Y. State Regents laboratory minutes. **This lab can be performed at your school or it can be combined with the Stream Table Laboratory on our campus.**

Saturday March 12, 2011

MICROCLIMATES LAB: Microclimates are all around us! They are created between the buildings we build and exist in the spaces that are left green. How can we design our world to create spaces which are optimal for both nature and us? Student will use heat sensors and weather meters to gather data and study this problem. This lab qualifies for about 120-180 Regents laboratory minutes. **This Laboratory can be performed at your school or at Stony Brook.**

Saturday March 26, 2011

TOPOGRAPHY LAB Geology is everywhere and we will bring it to your school! We will bring geologic survey equipment and teach your students how to use them. Students will work in teams of four to construct topographic maps of your school's surroundings. Qualifies for approximately 120-180 Regents laboratory minutes. **This lab can be performed at your school or at Stony Brook.**

If you wish to participate in one or more of these workshops, please fill out and send this form by e-mail to Gil Hanson ([mailto:gilbert.hanson@stonybrook.edu?subject=Earth Science Winter Workshops](mailto:gilbert.hanson@stonybrook.edu?subject=Earth%20Science%20Winter%20Workshops))

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| Name | School |
| E-mail | |

Please check the box(es) next to the workshop(s) you wish to attend.

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|--------------------------|---|
| <input type="checkbox"/> | Saturday February 12, 2010 STREAM TABLE ACTIVITIES and POROSITY AND PERMEABILITY LAB |
| <input type="checkbox"/> | Saturday March 12, 2011 MICROCLIMATES LAB |
| <input type="checkbox"/> | Saturday March 26, 2011 TOPOGRAPHY LAB |