Registration Form

YES! I want to participate in the SCHEV-SBC NCLB program at Sweet Briar

Name _____

School _____

Grade(s) You Teach Currently/Near Future

_____

Mailing information: (give full mailing addresses)

Work_____

_____

Home _____

_____

Where do you prefer we mail to you? HOME or WORK.
Circle one.

Work phone _____

Home phone _____

E-Mail address _____

Do you check email daily, weekly, or rarely? Circle one.

Register me for these FALL courses during the 2005-2006 school year:

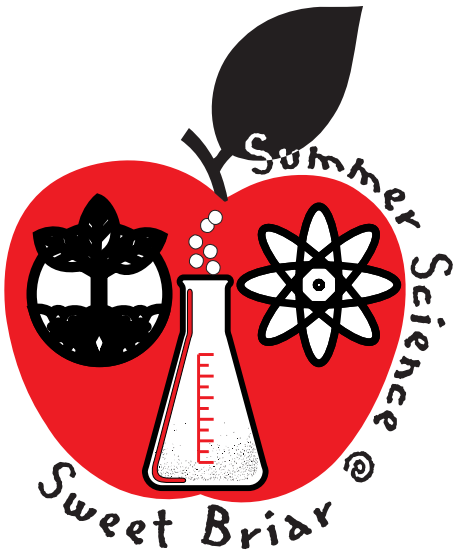
- ☐ **September 10, 2005 – Variables in Scientific Investigations**
- ☐ **October 8, 2005 – Probability Without a Doubt**
- ☐ **October 22, 2005 – Rocks Rock!**
- ☐ **November 5, 2005 - Exploring My Watershed**
- ☐ **Please send me more information about the SPRING 2006 courses.**

Please mail directly to Jill Granger, 206 Guion, Sweet Briar VA, 24595 **OR e-mail** the same information to *granger@sbc.edu*

-- -- -- -- -- -- -- -- -- -- **cut here and mail in registration form**-- -- -- -- -- -- -- -- -- --

Project Goals

Our goals include: (1) conveying to participants the "excitement of discovery" through well-planned, hands-on laboratory modules designed to stimulate the inquisitiveness and imagination of their students; (2) helping make science relevant for their students by using course modules that involve applications of science to everyday life and to current societal issues, yet are keyed to basic concepts included in the VA SOLs; and (3) spanning a range of grade levels and course subjects, so that students have the opportunity to benefit from an on-going exposure to inquiry-based, hands-on science. We believe achievement of these goals will have a very positive impact on science SOL test scores.



Inquiry Approaches to Math and Science: Grades 3-8

Academic Year Program

2005-2006

FALL PROGRAM BROCHURE

Sweet Briar College

Sweet Briar, VA

Funding for this Program has been provided by a grant from the State Council for Higher Education of Virginia under the federal No Child Left Behind initiative (SCHEV NCLB) and by Sweet Briar College.

Inquiry Approaches to Math and Science:

Grades 3-8

Teacher Development Workshops

Academic Year Program

This is the 7th Professional Workshop for Central Virginia Teachers in Science and Mathematics to be held at Sweet Briar College and sponsored by the State Council of Higher Education for Virginia. The summer program was held in July 2005. The academic year program is an additional follow-on activity to extend the learning of the summer participants and also to introduce other teachers to new hands-on ways of doing science and math in the elementary classroom.

This Year's program

Participants will conduct hands-on experiments that cover a broad range of SOLs in grades 3-8. Key concepts will have their foundations in the traditional areas of biology, chemistry, physics, and mathematics – as described in this brochure. All activities are based around a "real-world" application of science and math and are delivered through an inquiry-based pedagogy. Participants will learn to interpret and present their data.

One content session will be held each day. Participants will be conducting experiments doing activities to learn more about the science or math content area and data analysis. Workshops will typically begin at 9:00 and end around 3:00 each day with a lunch break around noon.

Summer 2005 workshop participants will get **priority registration** for ALL of the Academic Year program workshops.

If you are a previous summer workshop attendee or if you have participated in any of our previous academic year programs you may be interested in participating in this year's Academic Year program. Contact the project director, Jill Granger, to determine the extent of overlap from any previously attended program. All of our previous participants are warmly welcomed back!

What's Provided

All necessary supplies and materials for the program will be provided. Lunch will be provided at the College for workshop attendees. **There is no cost to Virginia certified 3-8 grade teachers to attend;** your registration is paid for by the SCHEV-SBC grant. Certificates of participation will be provided upon request and may be used toward recertification as arranged between you and your school system.

For More Information OR To Register

Questions regarding the Academic Year Program should be addressed to: Jill Granger, Project Director, SCHEV-SBC Professional Development Project, 206 Guion Science Center, Sweet Briar, VA 24505; (434) 381-6166; *granger@sbc.edu*. To register: Complete the registration form from this brochure and mail it directly to Dr. Granger or e-mail the same information to *granger@sbc.edu*. If you register by email, please include all information from the registration form.

Mail Your Registration Form to

Jill Granger, Project Director

SCHEV-SBC Professional Development Workshop

206 Guion Science Center

Sweet Briar College, VA 24595

Funding for this Program has been provided by a grant from the State Council for Higher Education of Virginia under the federal No Child Left Behind initiative (SCHEV NCLB) and by Sweet Briar College.

Workshop Descriptions: Fall Program

Inquiry Approaches to Math and Science:

Grades 3-8

Sweet Briar College

September 10, 2005 "Variables in Scientific Investigation"
Instructor: Jill Granger
Through our workshop we will analyze the variable components of experimentation as presented in several different types of simple, fun investigations. Investigations will touch on multiple science content topics, including simple machines, and floating/sinking/density. We will be drawing curricular materials from the FOSS program, sponsored by the Lawrence Hall of Science, which includes cross-curriculum materials to connect the science unit to other subjects. In-process and summative assessments appropriate for the evaluation of student inquiry will also be presented. The workshop content is ideally suited for inclusion in the grade 5-8 grade curricula, but could be adapted for other grades. SOLs addressed include investigation skills-related standards and can be applied toward an inquiry approach to teaching/learning of all other content topics. Multiple math SOLs will also be addressed through data collection and analysis.

October 8, 2005 "Probability Without a Doubt"
Instructor: Bessie Kirkwood
This workshop will introduce teachers to activities, games and investigations for exploring probability, grades 3-8, including basic counting principles for finding theoretical probabilities. Math S.O.Ls addressed: 3.23, 4.18, 5.16, 6.20, 7.15, 7.16, 7.17, 7.18, 8.12

October 22, 2005 "Rocks Rock!"
Instructor: Rebecca Ambers
How do we excite students about rocks and minerals? It may be easier than you think! This workshop will cover the basics of rock and mineral identification, the rock cycle, and the rock-soil relationship. We'll also explore the tools and techniques geologists use during a brief field trip on Sweet Briar property to sample local bedrock. We'll discuss current issues regarding nonrenewable natural resources with emphasis on fuels and metals. You'll leave with much more enthusiasm for teaching and providing hands-on experiences for studying rocks, minerals, soil, energy resources, and natural resources. Science SOLs addressed: 3.7, 3.11, 4.8, 5.7, 6.2, 6.9, ES.5, ES.6, ES.7, ES.10.

November 5, 2005: "Exploring My Watershed: investigations to bring the watershed concept home"
Instructor: Judy Strang
Using schoolyard and classroom activities that focus on water quality (watersheds, forest buffers, wetlands, aquatic life, erosion, water chemistry), build an understanding of ecosystem relationships within and human impact on watersheds. Engage students through active, practical, real "field study." Includes technology and language arts applications. SOLs addressed: SCIENCE 3.1, 3.4, 3.5, 3.6, 3.10; 4.1, 4.5, 4.8; 5.1, 5.7; 6.1, 6.7, 6.9; MATH 3.14, 3.17, 3.22; 4.11, 4.12, 4.20; 5.11, 5.18; 6.10, 6.18, 6.19.

Funding for this Program has been provided by a grant from the State Council for Higher Education of Virginia under the federal No Child Left Behind initiative (SCHEV NCLB) and by Sweet Briar College.

Academic Year In-Service Presentations

Participants from the SCHEV-SBC Summer Institute "Investigate and Understand: Math and Science by Inquiry" (July 2005) are required to conduct one in-service presentation to the participants in one academic year workshop based on the implementation of summer workshop materials in their classrooms.

Presentations should be 10 - 15 minutes in length. The presenter should describe the activity, where and how it was presented to students, and should provide an evaluation of the impact on student learning. (Follow the general guidelines as given during the summer institute.) The presenter should be prepared to answer questions from the audience.

To schedule your presentation during the Academic Year Workshops – please notify Jill Granger by submitting the form below:

SIGN-UP

YES! I want to give a presentation during the SCHEV-SBC Academic Year "Inquiry Approaches to Math and Science: Grades 3-8" program at Sweet Briar:

Name
_____

School
_____

The Best Way to Contact You during the day:

_____

_____

_____

I would like to sign-up to present at one of the following workshops:
(Give 1st and 2nd choices please)

Fall Program:

_____September 10, 2005

_____October 8, 2005

_____October 22, 2005

_____November 5, 2005

_____ Check here if you are planning to do your presentation in one of our Jan – May, 2006 workshops, dates to be announced later.

_____ Check here if you are planning NOT to do your presentation (waiving your stipend) this year.

Please mail directly to Jill Granger, 206 Guion, Sweet Briar VA, 24595 **OR e-mail** the same information to *granger@sbc.edu*

Date received: _____

Funding for this Program has been provided by a grant from the State Council for Higher Education of Virginia under the federal No Child Left Behind initiative (SCHEV NCLB) and by Sweet Briar College.