

Registration

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:

Work _____

Home _____

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

Phone and e-mail information:

Work _____

Home _____

E-Mail address _____

Do you check email? Daily, Weekly, or Hardly ever
Circle one.

Register me for these FALL courses during the 2002-2003 school year:

- q September 27, 2003 "Monarch Butterfly Migration Workshop"
- q September 27, 2003 "Coins and Clocks"
- q October 11, 2003 "Archaeology of an Antebellum Plantation"
- q October 25, 2003 "The Reasons for the Seasons"
- q November 1, 2003 "Investigations with Bubbles"
- q November 1, 2003 "Herbology"

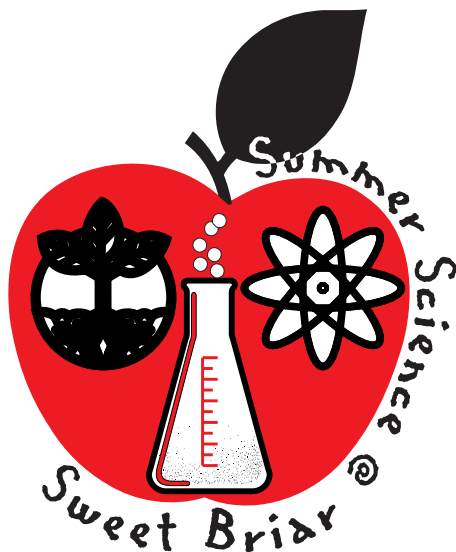
- q Please send me more information about the SPRING 2004 courses

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

.....

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.



ESSENTIAL CONCEPTS FOR QUALITY INSTRUCTION:

Hands-On Investigations

Academic Year Program

2003-2004

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.

ESSENTIAL CONCEPTS FOR QUALITY INSTRUCTION: HANDS-ON INVESTIGATIONS ACADEMIC YEAR PROGRAM

This is the 5th 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 June 2003. 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 laboratory experiments that cover a broad range of SOLs in grades K-6. Key concepts will have their foundations in the traditional areas of biology, chemistry, physics, and mathematics as well as new courses in archeology and the history of science – as described in this brochure. All experiments are based around a “real-world” application of science and delivered through an inquiry-based pedagogy. Participants will learn to interpret and present their data.

One lab session will be held each day. Participants will be conducting experiments and learning more about the science 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 participants will get **priority registration** for ALL of the Academic Year program sessions.

If you are a previous summer workshop attendee or if you have participated in any of 2001 or 2002 academic year programs – you may still be eligible and may be interested in participating in this year's Academic Year program. You should 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 each day in the cafeteria. **There is no cost to Virginia certified K-6 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@sb.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@sb.edu.

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

September 27, 2003 “Monarch Butterfly Migration”

Instructors: Linda Fink, Lincoln Brower and Elizabeth Howard.

This workshop will introduce the biology and conservation of the monarch butterfly, emphasizing its annual migration and overwintering ecology in Mexico. We are fortunate to have as the course instructors one of the world's experts on monarch butterflies, Lincoln Brower, the founder of *Journey North*, Elizabeth Howard, and Sweet Briar ecologist, Linda Fink. We will have a hands-on session on rearing caterpillars; catching, measuring, tagging, and releasing adult butterflies; and examples of classroom and research projects. Nature willing, monarch eggs, caterpillars and/or chrysalids will be available for teachers to take back to their classrooms. We will be outside in a butterfly research garden for part of the session. The workshop will introduce teachers to an internet-based student research program on animal migrations (*Journey North*). Limit = 32 teachers, grades K-6

September 27, 2003 “Coins and Clocks”

Instructor: Bessie Kirkwood

Hands-on activities for developing understanding of time (quantifying time and reading analog and digital clocks) and money (recognizing coins, assigning value to coins, and problem-solving with coins) using AIMS materials. Limit = 16 teachers, grades K-2

October 11, 2003 “Archaeology of an Antebellum Plantation”

Instructor: Lynn Rainville

After a lecture on archaeological techniques we will spend the afternoon walking the antebellum landscape and attempting to recreate the everyday life of Euro-American farmers, enslaved African Americans, and the indigenous Monacan People. We will tour the plantation mansion, a standing slave cabin, and then we will visit landmarks scattered throughout the antebellum farm (including an the remains of a blacksmith's shop, a mill site, and slave cemetery). During these walks we will discuss how archaeological and historical methods can help us understand life on an antebellum plantation. Limit = 16 teachers, grades K-6.

October 25, 2003 “The Reasons for the Seasons”

Instructor: Hank Yochum

Participants will do hands-on experiments that will lead to an understanding of why there are seasonal changes on the Earth.

November 1, 2003 “Investigations with Bubbles”

Instructor: Jill Granger

Let your inner child free! We will use bubbles as the vehicle for a variety of investigations and good, clean fun. The physical characteristics of the bubble will be fully explored as we learn about the process of the investigation and how to interpret our results from group data. Bubble stations will be set up for less structured learning about aerodynamics, surface tension, light and color, etc. Activities will be based upon the Lawrence Hall of Science GEMS programs on Bubble•ology and the Bubble Festival. Limit = 16 teachers, grades K-6.

November 1, 2003 “Herbology”

Instructor: Robin Davies

Participants will do hands-on experiments leading to an understanding of the function and structures of a variety of types of plants.

ACADEMIC YEAR IN-SERVICE PRESENTATIONS

Participants from the SCHEV-SBC Summer Institute “Essential Concepts for Quality Instruction: Hands-On Investigations” (June 2003) 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 the 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 “Essential Concepts for Quality Instruction: Hands-On Investigations” 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 these workshops:
(Give 1st, and 2nd choices please)

Fall Program:

____ September 27, 2003

____ October 11, 2003

____ October 25, 2003

____ November 1, 2003

____ Check here if you are planning to do your presentation in one of our Jan – May, 2004 workshops, dates to be announced later.

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.