

REGISTRATION / INFORMATION

Register me for the following Fall Academic Year Workshops:

- | | |
|--|---|
| <input type="checkbox"/> Simple Machines,
August 23 | <input type="checkbox"/> Plant-Animal
Interactions, September 27 |
| <input type="checkbox"/> Exploring Plants,
September 13 | <input type="checkbox"/> We're All Downstream,
October 4 |
| <input type="checkbox"/> Fractions, Decimals
and Percents, September 20 | <input type="checkbox"/> What Causes the
the Seasons? November 8 |

Name: _____

School: _____

Grade(s) you are teaching in 08-09: _____

- I teach all subjects
 I specialize in teaching math
 I specialize in teaching science

School Address: _____

School Phone: _____

Home Address: _____

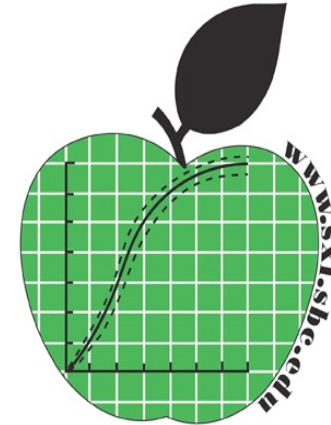
Home Phone: _____

E-mail: _____

Do you check your e-mail daily, weekly, or rarely? (Circle one)

The program will be filled on a first come first served basis, with the approval of the teacher's school administration. Applications will be accepted from teachers currently serving Central Virginia public school divisions and private schools. Enrollments are limited.

Questions about the program may be addressed to: Jill Granger, Co-Project Director at 434-381-6166, granger@sbc.edu; Hank Yochum, Co-Project Director at 434 381-6357, hyochum@sbc.edu; Arlene Vinion-Dubiel, Instructional Support Specialist at 434 381-6118, dubiel@sbc.edu; Pam Simpson, Project Associate at 434 381-6443, psimpson@sbc.edu; or Jessica Griffith, Project Assistant at 434 941-5531, jgriffith@sbc.edu.



INQUIRY APPROACHES TO MATH AND SCIENCE

A PROFESSIONAL DEVELOPMENT PROGRAM FOR
CENTRAL VIRGINIA TEACHERS OF GRADES 3-8

ACADEMIC YEAR PROGRAM

FALL 2008

WWW.SXI.SBC.EDU

SPONSORED BY THE STATE COUNCIL OF HIGHER EDUCATION FOR
VIRGINIA (SCHEV) THROUGH THE FEDERAL NO CHILD LEFT BEHIND,
TITLE IIA, IMPROVING TEACHER QUALITY INITIATIVE



PROJECT GOALS

Our goals include: (1) conveying to participating teachers 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 students by using course modules that apply 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, giving students the benefit of on-going exposure to inquiry-based, hands-on science. We believe achievement of these goals will significantly improve science and math SOL test scores.

GRADES 3-8 TEACHER DEVELOPMENT WORKSHOPS ACADEMIC YEAR PROGRAM

For ten consecutive years, Sweet Briar College has been sponsored by the State Council of Higher Education for Virginia as a provider of professional development opportunities in math and science for Central Virginia teachers. The academic year program is designed to introduce 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 key scientific concepts and a broad range of SOLs in grades 3-8. Workshops will be offered in biology, physics, and mathematics, as described in this brochure. All activities are based around “real-world” applications 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 conduct experiments, do activities to learn more about the science or math content area, and analyze data. Workshops will typically begin at 9:00 and end around 3:00 each day with a lunch break around noon.

Mail the completed registration form to:

Jessica Griffith, SCHEV-NCLB Project Assistant
PO Box AD, Sweet Briar College
Sweet Briar, VA 24595

OR

Email your registration information to:

Jessica Griffith
jgriffith@sbc.edu

Put “SCHEV REGISTRATION” in the subject line

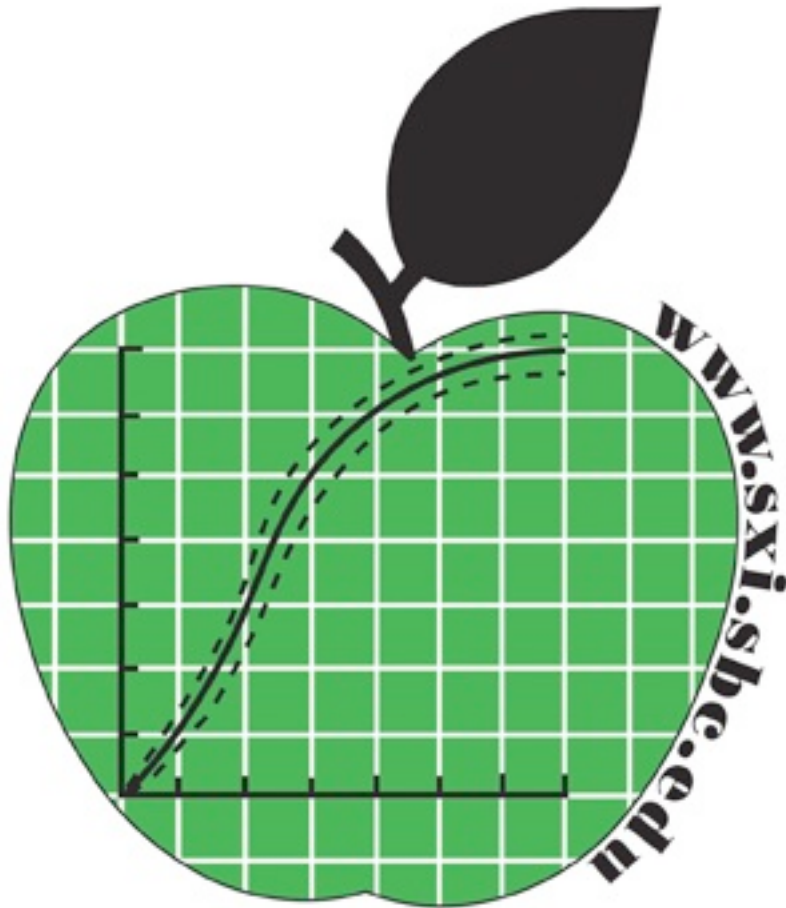
Please note:

E-mail registrations must be complete!
A confirmation e-mail will be returned to you

QUESTIONS?

WWW.SXI.SBC.EDU

**FALL WORKSHOP DESCRIPTIONS:
INQUIRY APPROACHES TO MATH AND
SCIENCE
GRADES 3-8
SWEET BRIAR COLLEGE**



August 23, 2008

“Simple Machines”

Instructor: Dorsa Sanadgol

Starting with a variety of different simple machines, we will explore how they work and why they’re useful. Next, we will build machines using LEGOS and study their effectiveness through data analysis and observation. Your challenge will be to design and build your own simple machine. This is a great way to practice problem solving with math and science through direct application.

SOL Science: 3.1, 3.2, 4.1, 4.2, 5.1, 6.1, 6.2, PS.1, PS.10

September 13, 2008

“Exploring Plants in Your Science Curriculum”

Instructor: Janet Steven

In this workshop, we will explore the use of plants as models for scientific techniques and biological principles. We’ll talk about how to design experiments and what to do with the data, and we’ll use plants as subjects for various types of measurement. We’ll also discuss plant development, and plants appropriate for year-round study in the classroom.

SOL Science: 3.1, 4.1, 4.4, 5.1, 6.1, LS.1, LS.3b, LS4.a,c

September 20, 2008

“Fractions, Decimals and Percents”

Instructor: Beth Williams

In this one day workshop, participants will explore fractions, decimals, and percent connections using multiple representations. Participants solve problems involving rational numbers using reasoning alone, and then connect and explain the reasoning that underlies those procedures.

SOL Math: 3.5, 3.6, 3.7, 4.2, 4.3, 4.4, 4.9, 5.1, 5.2, 5.4, 6.1, 6.4, 6.6, 7.1, 8.1

September 27, 2008

“Plant-Animal Interactions”

Instructor: Linda Fink

In all seasons, central Virginia is a wonderful place to observe interesting interactions between plants and animals. Pollination, herbivory, fruit production and seed dispersal are worthy of exploration in their own right. They also offer opportunities to teach many concepts in ecology, evolution, plant biology and animal behavior; to collect and analyze all sorts of measurements; and to design and conduct experiments. We will spend most of the workshop indoors but, weather permitting, we will also make field observations close to the science building. Please wear long pants, socks and comfortable walking shoes. SOL Science: 3.1, 3.5, 3.8, 3.10, 4.1, 4.4, 4.5, LS.1, LS.7, LS.9, LS.12

October 4, 2008

“We're All Downstream”

Instructor: Judy Strang

Hands-on, field-tested, SOL-correlated lessons will help make "watershed" a more concrete and comprehensible concept. Using indoor and outdoor settings, this workshop will showcase activities that help students become more accurate observers of watershed phenomena, better understand visible signs and probable consequences of human impact on watersheds, and recognize the importance of natural resource conservation.

SOL Science: 3.1, 3.10, 4.1, 4.8, 5.1, 5.7, 6.1, 6.5, 6.7, 6.9.

November 8, 2008

“Earth Patterns, Cycles and Changes: What Causes 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. SOL Science: 3.1, 3.8, 4.1, 4.7, 6.1, 6.8, plus the .1's.

PRIORITY REGISTRATION

Teachers enrolled in EDU 656 or EDUC 657 will get **priority registration** for ALL of the academic year program workshops.

If you have participated in any of our previous academic year or summer programs, you may still 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; plus, there is a \$60 / day stipend.** All 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 24595; (434) 381-6166; granger@sbc.edu.

To register: Complete the registration form from this brochure and mail it directly to Jessica Griffith or e-mail the same information to jgriffith@sbc.edu. If you register by email, please include **all** information from the registration form.