

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: (give full mailing addresses)

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.

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

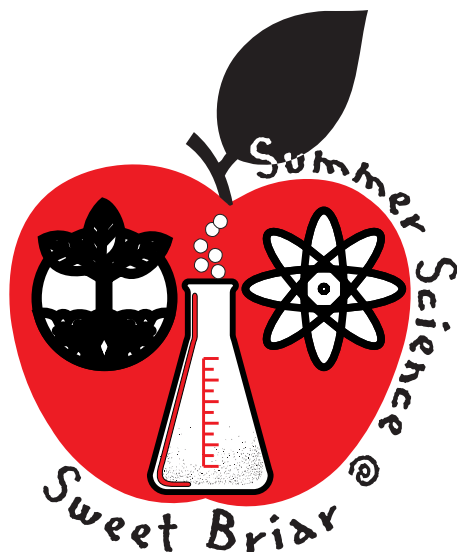
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Register me for these FALL courses during the 2004-2005 school year:

- q **September 18, 2004 “Teaching with Insects and Other Invertebrates”**
- q **October 16, 2004 – First Session of: “Praxis Tutoring in Math”**
- q **October 23, 2004 “Phases of the Moon”**
- q **November 13, 2004 – Second Session of: “Praxis Tutoring in Math”**
- q **November 20, 2004 “Understanding Water: Investigations with H₂O”**
- q **Please send me more information about the SPRING 2005 courses.**

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.



INVESTIGATE AND UNDERSTAND: MATH AND SCIENCE BY INQUIRY

Academic Year Program

2004-2005

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.

INVESTIGATE AND UNDERSTAND: MATH AND SCIENCE BY INQUIRY

ACADEMIC YEAR PROGRAM

This is the 6th 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 2004. 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 3-8. Key concepts will have their foundations in the traditional areas of biology, chemistry, physics, and mathematics – 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.

NOTE: The “Praxis Tutoring in Math” sessions will have a different format from our other workshops. These sessions will run from 9:00 – 12:00. Lunch will not be provided. You should plan on attending both sessions unless prior arrangements have been made. Both sessions will count as one workshop.

Summer 2004 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 2002 or 2003 academic year programs – you 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 at the College for workshop attendees. **There is no cost to Virginia certified 3-8 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

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WORKSHOP DESCRIPTIONS: FALL PROGRAM

INVESTIGATE & UNDERSTAND: MATH AND SCIENCE BY INQUIRY

SWEET BRIAR COLLEGE

September 18, 2004 “Teaching with Insects and Other Invertebrates”

Instructors: Linda Fink and Lincoln Brower

This workshop will provide ideas, practical advice, and links to resources for teachers keen on welcoming insects and other invertebrates into their curriculum. We will conduct observational exercises and experiments and learn techniques for capturing, marking, feeding, and housing a variety of animals. We will work with representative nectar-feeders, herbivores, predators, aquatics, and soil inhabitants. Appropriate for teachers of grades 3-8.

October 16, 2004 “Praxis Tutoring in Math” – Session 1 9:00 – 12:00

Instructor: Megan Murray

This is the first of two three hour sessions offered for teachers wanting help preparing for the Math Praxis. Specific topics will be addressed, especially fractions, decimals, and geometry, but participants are also welcome to bring in problems and/or ask for help in specific areas of mathematical need. Open to in-service and pre-service teachers. **(Session Two will be held November 13, 2004.)**

October 23, 2004 “Phases of the Moon”

Instructor: Hank Yochum

This session will focus on motions of Earth, Moon, and Sun, causes of Earth’s seasons, night and day, and phases of the Moon. Teachers will use simple and inexpensive objects to model the phases of the moon. Ideas for long term moon data collection will be discussed.

November 13, 2004 “Praxis Tutoring in Math” – Session 2 9:00 –12:00

Instructor: Megan Murray

This is the second of two three hour sessions offered for teachers wanting help preparing for the Math Praxis. Specific topics will be addressed, especially fractions, decimals, and geometry, but participants are also welcome to bring in problems and/or ask for help in specific areas of mathematical need. Open to in-service and pre-service teachers.

November 20, 2004 “Understanding Water: Investigations with H₂O”

Instructor: Jill Granger

This workshop will be devoted to a better appreciation and understanding of water – as an important natural resource and on a chemical/molecular level. Investigations will touch on a variety of water’s unique properties, including surface tension, heat capacity, phase transitions, role as the “universal solvent”, and use for mechanical purposes. We will be drawing curricular materials from the FOSS program, sponsored by the Lawrence Hall of Science, which include cross-curriculum materials to connect the science unit to reading, writing, math, social studies, and history. The workshop content is ideally suited for inclusion in the grade 3-5 curriculum, but could be adapted for other grades.

ACADEMIC YEAR IN-SERVICE PRESENTATIONS

Participants from the SCHEV-SBC Summer Institute “Investigate and Understand: Math and Science by Inquiry” (June 2004) 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 “Investigate and Understand: Math and Science by Inquiry” 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 18, 2004

October 23, 2004

November 20, 2004

Check here if you are planning to do your presentation in one of our Jan – May, 2005 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: _____

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