

SMEC WORKSHOPS

The UNCW Science and Mathematics Education Center is once again pleased to offer the following professional development in science and mathematics.

Why choose SMEC Professional Development?

SMEC programs:

- Are research based adhering to standards as listed by Linda Darling-Hammond in "Teacher Learning: What Matters" in Educational Leadership, February, 2009;
- Engage teachers in actively learning mathematics and science content;
- Help teachers understand how students learn specific content;
- Help teachers implement the NC SCOS;
- Are intensive and sustained; and
- Help teachers network professionally with their colleagues and establish connections with UNCW faculty.



SITE: 3-5 SCIENCE

This five day institute will focus on the major science theme of Energy, Forces and Motion aligned in the NC SCOS and the National Benchmarks for Science Literacy. Participants will actively learn content framed within the context of the 5-E model of instruction (engage, explore, explain, elaborate, evaluation). They will reflect and discuss how to best implement the content within the context of classrooms and schools.

Instructors: Dr. Dennis Kubasko, UNCW Watson School Education and Ms. Beth Brampton, New Hanover County

Dates: July 20—24, 2009

(with 2 optional Saturday follow ups)

Registration is \$400/teacher

Renewal Credit: 3.0 CEUs for summer



SITE: K-2 SCIENCE

This five-day workshop will focus on three K-2 curriculum modules (Earth Systems, Force & Matter, and Living Organisms) that cut across the NC SCOS for Science, Grades K-2. Participants will actively learn science content and apply "Curriculum Topic Study" strategies to link standards and research to instruction. Additionally, they will reflect and discuss how to best implement the content within the context of the classrooms and schools.

Instructors: Mr. Brian Brinkley, UNCW WSE and Ms. Ambie Hower, New Hanover County

Dates: August 3 – 7, 2009

(with 2 optional Saturday follow ups)

Registration is \$400/teacher

Renewal Credit: 3.0 CEUs for summer



SITE: CARSAM Content Area Reading in Science and Mathematics 6-12

This five-day, hands-on institute will focus on content area reading and writing strategies for increasing student learning in grades 6-12. Participants will 1) leave with classroom ready activities created using basic technology; 2) learn strategies which are especially helpful for EC and ESL learners who struggle with reading and give them an advantage to accessing the needed information in the math/science classroom; 3) work through the standard course of study in either science or math for their grade level and create activities aligned to it; and 4) explore additional appropriate reading materials that can be used to enhance instruction in each subject.

Instructors: Ms. Heather Ertzberger and Ms. Renee Griffin

Dates: July 20—24, 2009

Registration is \$400/teacher

Renewal Credit: 3.0 CEUs for summer

MARINE BIOTECHNOLOGY

This four-day, activity-based workshop will cover an introduction to Marine Biotechnology. This workshop will follow the path of advancement in marine biotechnology to investigate specific examples of how marine biotechnology affects our environment, energy, and health — from exploration, to cultivation and isolation, and commercialization through implementation of sound business practices. The workshop will come full circle and conclude with discussion and activities on marine conservation efforts to preserve ocean resources.

Instructors: Dr. Sonja Pyott & Dr. Tim Henkel, UNCW Dept. of Biology and Marine Biology, and Ms. Zoe Welsh, Wake County

Dates: June 29, 30, July 1, 2, 2009

Application required via the NCBC website

<http://www.ncbiotech.org/summerworkshops/>

Registration is \$50 paid to the North Carolina Biotechnology Center

Stipend: \$50/day - Breakfast and lunch provided, lodging for out of town teachers

Renewal Credit: 2.4 CEUs



K-5 ALGEBRAIC REASONING

This professional development workshop is designed to demystify algebraic reasoning for the elementary school teacher so that they may better prepare students for middle and high school algebra.

Algebraic reasoning is a study of patterns (sorting and classifying, extending and creating patterns), equations and inequalities (number sentences and number properties), and functions (relations and rate of change). The concept of variable is inherent in each of the three components of algebraic reasoning.

The workshop will be conducted in a problem solving manner that emphasizes multiple representations of algebra and the processes of reversibility, flexibility, and the ability to generalize.

Participants will be engaged in analyses of student thinking and assessment results in algebra. In addition to extending teachers' knowledge of algebraic reasoning, the workshop reinforces connections with the National Council of Teachers of Mathematics (NCTM) Principles and Standards and the North Carolina Standard Course of Study (NC SCOS).

Instructor: Dr. Shelby Morge, UNCW WSE

Date: June 29—July 2, 2009

Registration is \$320/teacher

Renewal Credit: 2.4 CEUs



For workshop registration information and applications, call our office or visit our Web site:

Phone: 910.962.3168

Toll Free: 800.258.2629

Fax: 910.962.4000

www.uncw.edu/smec



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UNCW is an EEO/AA Institution.

Accommodations for disabilities may be requested by contacting Tamsen Foote at 910-962-3168 at the time of registration to the event.



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Education Center**

Summer

2009

**Workshops
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