



### **Course Description/Statement of Purpose**

*Mother Goose Cares About Math, Science and Social Studies* is an integrated curriculum of basic science process skills, social studies standards based on the National Council for Social Studies (NCSS) recommendations and the National Council of Teachers of Mathematics (NCTM) standards-based mathematics concepts appropriate for preschool children. This combined course is appropriate for Kindergarten and preschool educators and uses 23 works of exemplary children's literature, chosen for their rich language as well as for the basic mathematics, science and social studies concepts as its core materials.

### **Course Objectives and Outcomes**

The goals of this course are to:

- Increase the preschool science, social studies and mathematics literacy, confidence and competence of early educators
- Increase early educators' ability to understand and incorporate mathematics skills, concepts, standards and investigations into their daily interactions with children and into their communications with families
- Increase early educators' ability to understand and incorporate science process skills, concepts, standards and investigations into their daily interactions with children and into their communication with families
- Increase early educators' ability to understand and incorporate social studies concepts, standards and investigations into their daily interactions with children and into their communication with families
- Foster early educators' ongoing pursuit of higher education in relevant disciplines.

### **Syllabus**

*Mother Goose Cares About Math, Science and Social Studies* will be offered in four sessions at the Capital Plaza in Montpelier, Vermont on June 27 – 30, 2011. Lunch is included in the course registration fee of \$675 per person. The instructor will be Catherine White.

Topics covered are the instruction of mathematics, science, social studies to early educators, as follows:



Reading + Talking + Exploring = Learning Experiences  
from the Vermont Center for the Book

[www.mothergooseprograms.org](http://www.mothergooseprograms.org)

### *Science*

Sorting, patterns and relationships, same and different, physical science, earth science, growing, change over time, sounds, patterns

### *Social Studies*

Mapping, routines, sequences, families, growing and changing, feelings, needs and wants, friends, observing, collecting data, family, community, friends, the big world, inventions

### *Mathematics*

Sequences, measurement, numbers and operations, geometry and spatial sense  
Educators will receive two *Educator Resource Guides* that contain preschool skills, standards and outcomes for mathematics, science and social studies, as well as pedagogical guidance in the instruction of these topics. The guides also contain extensive bibliographies of picture books for children and approximately 75 investigations and explorations that guide educators in a step-by-step approach through instruction.

Educators/students will also receive instructional materials, including math cards, counting chips, a simple balance, measuring tools and eight hand lenses.

The children's books used in this course are:

*Where are you going Manyoni?* by Catherine Stock

*10 Minutes till Bedtime* by Peggy Rathmann

*Just a Little Bit* by Ann Tompert

*Seven Blind Mice* by Ed Young

*The Shape of Things* by Dayle Ann Dodds

*Max Found Two Sticks* by Brian Pinkney

*Bunny Cakes* by Rosemary Wells

*Hannah's Collections* by Marthe Jocelyn

*Bein' with You This Way* by W. Nikola-Lisa

*Cleversticks* by Bernard Ashley

*Now I'm Big* by Margaret Miller

*Sometimes I'm Bombaloo* by Rachel Vail

*Jamaica and Brianna* by Juanita Havill

*Officer Buckle and Gloria* by Peggy Rathmann

*Bear Shadow* by Frank Asch

*Down the Road* by Alice Schertle

*Jody's Beans* by Malachy Doyle

*Mama Zooms* by Jane Cowen-Fletcher

*Albert's Alphabet* by Leslie Tryon

*The Big Trip* by Valerie Gorbachev

*To Be a Kid* by Maya Ajmera

*The Doorbell Rang* by Pat Hutchins

*My Map Book* by Sara Fanelli

All educators are expected to attend each session. Course credits are available through Vermont College of the Union Institute and Course Requirements for Undergraduate and Graduate Students are available upon request. For graduate credit, the activity write-up will comprise 5-10 pages of work beyond what the undergraduates are doing. Graduate students will be expected to make a report of their work.

**Equipment and Facilities**

Provided by Mother Goose Programs, learning opportunities from the Vermont Center for the Book.

[www.mothergooseprograms.org](http://www.mothergooseprograms.org)

10/09