

**Virginia Western Community College**  
**CHD 146**  
**Methods and Materials for Developing Science,**  
**Mathematical, and Social Studies Concepts in**  
**Children**

**Prerequisites**

None

**Course Description**

Provides experiences in developing the content, methods, and materials for the development of math, science, and social studies skills in young children. Emphasis will be on developing strategies for using various resources to facilitate children's construction of knowledge. Addresses strategies for intervention and support for exceptional children and English Language Learners.

**Semester Credits: 3****Lecture Hours: 2****Lab/Recitation Hours: 2****Required Materials**

1. Textbook
2. Internet access
3. Canvas

**Textbook:**

*Creative Activities and Curriculum for Young Children*- 978-1-285-42817-8/Mayesky 11<sup>th</sup> ed. Cengage

**Other Required Materials:**

None

## Course Outcomes

**At the completion of this course, the student should be able to:**

1. Developmental characteristics as they relate to the areas of math, science, and social studies for children.
2. Materials, procedures, and methodologies for constructing knowledge in the areas of math, science, and social studies for children.
3. Appropriate math, science, and social studies lessons and materials for children based on assessment data.
4. Differentiation of instruction for children whose development is atypical or exceptional in the areas of math, science, and social studies.
5. The role of culture in learning math, science, and social studies.
6. Assessment strategies in math, science, and social studies.
7. Preparing learning environments that foster exploration as related to math, science, and social studies.
8. Learning standards as they relate to math, science, and social studies; the Virginia Foundation Blocks, the Child Development Milestones, the Virginia Standards of Learning and Core Competencies for Early Childhood Professionals

## Topical Description

1	Concept Development for Young Children
2	Introduction to Math for Young Children
3	Framework and Processes in Math
4	Math Content Areas:
	a. Numbers and Operations
	b. Patterns, Functions and Algebra
	c. Geometry and Spatial Sense
	d. Measurement
	e. Data Analysis
	f. Probability
5	Introduction to Science
6	Science Content Areas:
	a. Life and Physical Science
	b. Earth and Space

	c. Environmental Education
	d. Human Body
	e. Healthy Bodies
7	Technology in the Classroom
8	Introduction to Social Studies
9	Using Literature in Social Studies
10	Prop Boxes
11	Overview of Social Studies content areas:
	a. Geography
	b. History
	c. Civics and Government
	d. Economics
	e. Anthropology
	f. Archaeology

### **Notes to Instructors (portfolio requirements)**

1. Students must complete a developmentally appropriate lesson plan which focuses on math, science, or social studies.
2. Students will also complete a media review; focusing on a math, science, or social studies website.