Child Development 118

Science and Math for Young Children

3 units; 3 hours lecture

Prerequisite: Child Development 103 with a minimum grade of C or equivalent or Concurrent Enrollment Recommended Preparation: English 1 or eligibility for English 1A or qualification by appropriate assessment Degree applicable Transfer CSU

This course focuses on the principles and methods of planning, presenting, and evaluating science and math experiences for young children ages two to six. Students will develop activities that foster children's natural curiosity about scientific and mathematical concepts. These activities will be designed to encourage exploration, experimentation, problem solving, and discovery. Methods for adapting science and math experiences for young children with special needs will also be discussed. This course is designed for teachers in training and teachers in service needing to developer refine skills in understanding, planning, and implementing developmentally appropriate science and math curriculum. Students will be required to participate in one structured activity related to children and/or professional development outside of class hours.

Course Objectives:

- 1. Identify developmentally appropriate science and math activities for children ages two through six in diverse early childhood educational programs.
 - Term or other papers
- 2. Design science and math experiences to foster cognitive, psychosocial, and physical development of young children.
 - Presentation
- 3. Formulate objectives and concepts for science and math experiences for young children.
 - Term or other papers
- 4. Create and evaluate teaching materials and activities appropriate for science and math experiences for young children.
 - Presentation
- 5. Plan, present, and evaluate science and math experiences to meet the needs of children from diverse cultures.
 - Presentation
- 6. Adapt math and science activities for children with special needs.
 - Term or other papers
- 7. Develop and employ strategies to communicate the value of math and science experiences to parents of young children.
 - Term or other papers
- 8. Evaluate state standards and the National Association for the Education of Young Children's (NAEYC) Developmentally Appropriate Practices to curriculum planning.
 - Term or other papers
- 9. Develop and express a deeper knowledge and understanding of the foundations of mathematics and science to enhance personal teaching skills and strategies.
 - Term or other papers

Student Learning Outcomes (SLO):

1. Math and Science Skills

Recognize and implement math and science concepts for early childhood education curriculum.

2. Activity Plans

Design and implement curriculum integrating developmentally appropriate science, technology, engineering and mathematics.

3. Role of the Environment

Demonstrate an understanding of the many aspects of the environment's role in early childhood programs related to science, technology, engineering, and mathematics.

ADA Statement:

El Camino College is committed to providing educational accommodations for students with disabilities upon the timely request by the student to the instructor. A student with a disability, who would like to request an academic accommodation, is responsible for identifying herself/himself to the instructor and to the Special Resource Center. To make arrangements for academic accommodations, contact the Special Resource Center.

Student Code of Conduct

https://www.elcamino.edu/administration/board/2019-policies/AP%205500%20Student%20Conduct%20.pdf

Student Rights and Grievances Procedure 5530

 $\frac{https://www.elcamino.edu/administration/board/boarddocs/AP\%205530\%20STUDENT\%20\%20RIGHTS\%20AND\%20GRIEVANCES.pdf$