

ED 212-3 Natural Science

Course Description: This course will provide students with a working knowledge of natural science and with a knowledge of a process, open-ended approach to teaching natural science to preschoolers.

Course Philosophy:

Most teaching in the preschool is spontaneous and process oriented. An open-ended, discovery through experience approach is used with the children. This is particularly so in the natural science area of the curriculum. This course is designed to provide the student with the maximum opportunity to integrate this teaching strategy into his teaching practice, balancing process and content.

Course Goals

1. To help individuals become self-directed learners (student-teachers, preschoolers)
2. To help the student acquire a working knowledge of natural science.
3. To provide the students with experience in presenting natural science learning opportunities to colleagues and preschoolers, using a process-oriented, open-ended approach.
4. To have the students diagnose needs for, design, implement, and evaluate a natural science program for preschoolers.

Terminal Objectives

The student will demonstrate ability through course development, project construction and implementation:

1. to diagnose needs and interest of the preschool child relating to natural science.
2. to understand the natural science materials and information which will be used in the program (general background knowledge)
3. to identify, locate, and utilize available resources for a natural science program.
4. to organize chosen natural science materials into relevant learning experiences for preschool children.
5. to provide an effective natural science learning environment for nursery school children.

6. to select appropriate methods of presentation of natural science experiences using process-oriented, open-ended teaching methods.
7. to apply knowledge, understanding and skill in designing a sequence of natural science learning experiences.
8. to evaluate one's teaching, the learning of the children, and the natural science program.
9. to communicate and interact effectively with colleagues by micro-teaching the natural science program designed.
10. to deal with the dynamics of inter-personal relations with colleagues in class and in the nursery school.
11. to integrate theory and practice relating to group development and group process.

Texts

1. Science Experiences for the Early Childhood Years, J.D. Harlan, Merrill, 1976.
2. Science With Young Children, B.G. Holt, N.A.E.Y.C., 1977.

Reference: Teaching Science Through Discovery  
3rd Edition, A.A. Carin and R.B. Sund.