# California Community Colleges Curriculum Alignment Project – CAP Transitional Kindergarten Course Outline

Title: CA Preschool Foundations & Frameworks: Science

## Short Title: CA FOUN/FRAM SCIENCE

### **Course Description**

Introduces the science domain of the California Preschool Learning Foundations and Frameworks including the strands of scientific inquiry, physical, life, and earth sciences and provides practical strategies for implementing the curriculum frameworks developed for this domain. Applicable to required or professional development units for Child Development Permit holders, pre-school, transitional kindergarten, and early-primary teachers.

#### **Student Learning Outcomes**

Upon successful completion of this class, students will be able to:

- 1. Explain the roles of the California Preschool Learning Foundations and Frameworks in the education of young children and their relationship to the Desired Results Developmental (DRDP), California Common Core State Standards for kindergarten and Content Standards for California Public Schools (kindergarten).
- 2. Plan environments and experiences, based on observation of children, to support children's development of scientific concepts.
- 3. Describe how teachers can collaborate with parents and other caregivers to support children's understanding of scientific concepts.

#### Objectives

In this class, students will:

- 1. Define the roles of the California Preschool Learning Foundations and Frameworks: Science in the education of young children and their relationship to the Desired Results Developmental (DRDP), California Common Core State Standards for kindergarten and Content Standards for California Public Schools (kindergarten).
- 2. Use knowledge of the science strands to select materials and plan meaningful experiences in the classroom to promote children's learning and use of scientific language and concepts.
- 3. Describe opportunities to include scientific inquiry in daily routines and across all areas of the curriculum.
- 4. Discuss the ways teachers collaborate with parents and other caregivers to support children in their development of scientific concepts.

#### Content

- I. Introduction to the California Preschool Learning Foundations: Science
  - A. Purpose and use
  - B. Relationship to the California Common Core State Standards for kindergarten and Content Standards for California Public Schools (kindergarten)

- C. Relationship to Desired Results Developmental Profile (DRDP)
- II. Science strands
  - A. Scientific inquiry
  - B. Physical science
  - C. Life science
  - D. Earth sciences
- III. Implementation of the Foundations and Frameworks
  - A. Planning based on observation of children's interests, skills and abilities
  - B. Daily experiences and routines as a vehicle to provide diverse opportunities for children to learn and use scientific concepts
  - C. Selection of books, materials, supplies to provide science rich environments
  - D. Integration of scientific inquiry into daily routines and across all areas of the curriculum
- IV. Supporting English language learners in developing English literacy skills while concurrently learning about science
- V. Partnering with parents and other caregivers to include meaningful experiences designed to scientific understanding

Assignments	Method of Evaluation
Writing Assignments	Students will be evaluated on their ability to plan meaningful science experiences through written curriculum proposals.
Problem Solving Demonstrations	Students will be evaluated on the ability to select and/or develop appropriate materials and activities for science learning based on their observations of individual children.
Skill Demonstrations	Students will be evaluated on their descriptions of how scientific inquiry can be integrated into daily routine and across all areas
Exams	Students will be evaluated on their knowledge of the science strands through multiple choice and/or essay exams as well as through their performance on course assignments.

#### METHODS OF EVALUATION