

Course Outline

COURSE: CD 17 **DIVISION:** 50 **ALSO LISTED AS:**

TERM EFFECTIVE: Fall 2018 **CURRICULUM APPROVAL DATE:** 11/27/2017

SHORT TITLE: SCIENCE WITH CHILD-FOUN/FRAM

LONG TITLE: Exploring Science with Children-Foundations and Frameworks

Units	Number of Weeks		Contact Hours/Week		Total Contact Hours
1	18	Lecture:	1	Lecture:	18
		Lab:	0	Lab:	0
		Other:	0	Other:	0
		Total:	1	Total:	18

COURSE DESCRIPTION:

Learn to teach a coordinated science curriculum covering the strands of scientific inquiry, physical, life, and earth science concepts familiar and interesting to children age 2-8. 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. **ADVISORY:** Eligible for English 250 or 260.

PREREQUISITES:

COREQUISITES:

CREDIT STATUS: D - Credit - Degree Applicable

GRADING MODES

L - Standard Letter Grade

REPEATABILITY: N - Course may not be repeated

SCHEDULE TYPES:

02 - Lecture and/or discussion

72 - Dist. Ed Internet Delayed

STUDENT LEARNING OUTCOMES:

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).

Measure of assessment: homework: written assignment, exam

Year assessed, or planned year of assessment: 2018

Semester: Spring

2. Produce an integrated curriculum of earth, physical and life science explorations with children through the use of planned environments and experiences to support children's development of scientific concepts, based on the observation of children.

Measure of assessment: homework, demonstration, exam, curriculum notebook

Year assessed, or planned year of assessment: 2018

Semester: Spring

3. Describe how teachers can collaborate with parents and other caregivers to support children's understanding of scientific concepts.

Measure of assessment: discussion, homework, exam

CONTENT, STUDENT PERFORMANCE OBJECTIVES, OUT-OF-CLASS ASSIGNMENTS

Curriculum Approval Date: 11/27/2017

3 Hours

Content: Overview of science in early childhood and on planning, designing and writing science curriculum. CA Early Childhood Learning Foundations content for science in early childhood programs. Including its purpose and use, relationship to the California Core State Standards and Content Standards for California Public Schools, and the Relationship to Desired Results Developmental Profile (DRDP). Developing inquiry in the early childhood environment. Use knowledge of the science strands to select materials and plan meaningful experiences based on observation of children's interests, skills and abilities.

Student Performance Objectives: Develop curriculum using scientific inquiry, and the basic concepts of physical, earth and life science with young children in daily routines and across all areas of the curriculum. 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).

3 Hours

Content: Using the natural environment as earth science curriculum and explorations. Introduce documentation of children's work and progress.

Student Performance Objectives: Use basic vocabulary and the general concepts of nature in the earth science curriculum.

3 Hours

Content: Using physical science concepts as curriculum with young children.

Student Performance Objectives: Develop and use vocabulary and the general concepts of physical science in early childhood curriculum. Not limited to: gravity, ramps, weight, volume, etc.

3 Hours

Content: Using life science concepts as curriculum with young children.

Student Performance Objectives: Develop and use vocabulary and the general concepts of life science in early childhood curriculum.

4 Hours

Content: Working with the community in development of the early childhood science curriculum. Supporting Children's Learning of Science - Partnering with Parents and Other Caregivers. English Language Learners – Supporting Them as They Concurrently Learn about Science While Learning English. How science connects all aspects of a high quality early childhood program.

Student Performance Objectives: Collaborate with the community on earth, physical and life science inquiry. Discuss the ways teachers collaborate with parents and other caregivers to support children in their development of scientific concepts. Describe strategies to support English language learners in developing scientific concepts as they concurrently acquire English.

2 Hours

METHODS OF INSTRUCTION:

Lecture, discussion, demonstration, multi-media.

OUT OF CLASS ASSIGNMENTS:

Required Outside Hours: 6

Assignment Description: Out of Class Assignments: Read related textbook sections. Research on earth, physical and life science areas, and sample explorations. Observe children in an early childhood program exploring science concepts. Assigned readings on how young children interpret earth, physical and life science concepts.

Required Outside Hours: 6

Assignment Description: Out of Class Assignments: Read related textbook sections. Plan an exploration of the natural environment in which children explore every day. Bring in samples of how this exploration supports growth in the developmental areas of the CA Early Childhood Learning Foundations.

Required Outside Hours: 6

Assignment Description: Out of Class Assignments: Read related textbook sections. Develop an exploration of ramps, weight or volume using materials found in the early childhood environment. Document children's vocabulary and concept development.

Required Outside Hours: 6

Assignment Description: Out of Class Assignments: Read related textbook sections. Design a plan to support children's understanding of a plant's cycle from seed to table. Bring in literature to support the concepts chosen.

Required Outside Hours: 8

Assignment Description: Out of Class Assignments: Read related textbook sections. Develop a list of local areas of interest that would support scientific inquiry in young children. Develop a science curriculum notebook.

METHODS OF EVALUATION:

Writing assignments

Percent of total grade: 30.00 %

Percent range of total grade: 20% to 40% Written Homework, Observation, Science Curriculum Notebook Problem-solving assignments

Percent of total grade: 10.00 %

Percent range of total grade: 10% to 20% Develop materials and/or activities for science learning.

Skill demonstrations

Percent of total grade: 10.00 %

Percent range of total grade: 10% to 20% Demonstration of a hands-on science experience with inexpensive or low cost materials.

Objective examinations

Percent of total grade: 30.00 %

Percent range of total grade: 20% to 40% Multiple Choice, Essay

Other methods of evaluation

Percent of total grade: 20.00 %

Percent range of total grade: 10% to 30% Requires student participation.

REPRESENTATIVE TEXTBOOKS:

Required Representative Textbooks

Rosalind Charlesworth. Math and Science for Young Children, 8th Edition. Cengage Learning,2016.

ISBN: 978-1305088955

Reading Level of Text, Grade: 12th Verified by: Pat Henrickson

Required Other Texts and Materials

California Preschool Curriculum Framework, Volume 3 Publisher: California Department of Education, Child Development Division Sacramento, CA

ARTICULATION and CERTIFICATE INFORMATION

Associate Degree:

CSU GE:

IGETC:

CSU TRANSFER:

Transferable CSU, effective 200730

UC TRANSFER:

Not Transferable

SUPPLEMENTAL DATA:

Basic Skills: N

Classification: Y

Noncredit Category: Y

Cooperative Education:

Program Status: 1 Program Applicable

Special Class Status: N

CAN:

CAN Sequence:

CSU Crosswalk Course Department: CD

CSU Crosswalk Course Number: 17

Prior to College Level: Y

Non Credit Enhanced Funding: N

Funding Agency Code: Y

In-Service: N

Occupational Course: C

Maximum Hours:

Minimum Hours:

Course Control Number: CCC000118966

Sports/Physical Education Course: N

Taxonomy of Program: 130500