GAVILAN COLLEGE
5055 Santa Teresa Blvd
Gilroy, CA 95023

Course Outline

COURSE: CD 17 DIVISION: 50 ALSO LISTED AS:

TERM EFFECTIVE: Summer 2024 CURRICULUM APPROVAL DATE: 04/09/2024

SHORT TITLE: SCIENCE WITH CHILD-FOUN/FRAM

LONG TITLE: Exploring Science with Children-Foundations and Frameworks

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

Out of Class Hrs:	36.00
Total Learning Hrs:	54.00

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.

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

05 - Hybrid

71 - Dist. Ed Internet Simultaneous

72 - Dist. Ed Internet Delayed

STUDENT LEARNING OUTCOMES:

By the end of this course, a student should:

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. 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.

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

COURSE OBJECTIVES:

By the end of this course, a student should:

1. 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.

2. Develop and use vocabulary and the general concepts of physical science in early childhood curriculum.

3. Collaborate with the community on earth, physical and life science inquiry.

4. Describe strategies to support English language learners in developing scientific concepts as they concurrently acquire English

COURSE CONTENT:

Curriculum Approval Date: 04/09/2024

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.

3 Hours

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

3 Hours

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

3 Hours

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

4 Hours

Content: Working with the community in the 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.

COURSE CONTENT (CONTINUED):

2 Hours

Final Exam. Sharing of science curriculum notebooks.

METHODS OF INSTRUCTION:

Lecture, discussion, demonstration, observations, and 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.

Required Outside Hours 4

Assignment Description

Working with the community in the development of the early childhood science curriculum. Discuss the ways teachers collaborate with parents and other caregivers to support children in their development of scientific concepts.

METHODS OF EVALUATION:

Writing assignments
Evaluation Percent 30
Evaluation Description
Percent range of total grade: 20% to 40%
Written Homework, Observation, Science Curriculum Notebook

Problem-solving assignments
Evaluation Percent 10
Evaluation Description
Percent range of total grade: 10% to 20%
Develop materials and/or activities for science learning.

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

Objective examinations
Evaluation Percent 30
Evaluation Description
Percent range of total grade: 20% to 40%
Multiple Choice, Essay

Other methods of evaluation
Evaluation Percent 20
Evaluation Description
Percent range of total grade: 10% to 30%
Requires student participation.

REPRESENTATIVE TEXTBOOKS:

Young Architects at Play: STEM Activities for Young Children , Ann Gadzikowski , Redleaf Press, 2020 or a comparable textbook/material.
ISBN: 978-1605547008
12th Grade Verified by: Claire Boss

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
Not Transferable
UC TRANSFER:
Not Transferable
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:
CSU Crosswalk Course Number:
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