



**Note to Instructor: Replace the placeholder text beneath the headings with the appropriate information for your course. Please note that all sections, with the exception of "Other Course Information," are required elements.**

### Basic Course Information

Semester:	<b>Summer 2023</b>	Instructor Name:	<b>Rebecca Green</b>
Course # and Title:	<b>CDEV122 Science and Math</b>	Email:	<b>Becky.green@imperial.edu</b>
CRN #:	<b>30164</b>	Webpage (optional):	
Classroom:	<b>212</b>	Office #:	<b>Preschool 2200</b>
Class Dates:	<b>June 20-July 27 2023</b>	Office Hours:	
Class Days:	<b>MW</b>	Office Phone #:	<b>760-355-6231</b>
Class Times:	6:00-9:05	Emergency Contact:	
Units:	2	Class Format:	In Person

### Course Description

*Introduction to the mathematics and science domains of the California Preschool Learning Foundations and Frameworks including the mathematic strands of number sense, algebra and functions, measurement, geometry, and mathematical reasoning and the science strands of scientific inquiry, physical, life, and earth sciences. The course will provide practical strategies for implementing the curriculum frameworks science and math domains through planning of appropriate curriculum and environments. Applicable to required or professional development units for Child Development Permit holders, pre-school, transitional kindergarten, and early primary teachers.*

### Course Prerequisite(s) and/or Corequisite(s)

None

### Student Learning Outcomes

- 1. Investigate and critique developmentally appropriate science and math curriculum and the use of California standards.*
- 2. Describe strategies to involve parents and caregivers to support children's understanding of science concepts.*
- 3. Plan math and science activities and environments based on the observation of children, to support children's development in math and science concepts.*

### Textbooks & Other Resources or Links

*No Textbook required*

California State Preschool Learning Foundations, Available at:  
<http://www.cde.ca.gov/sp/cd/re/documents/preschoollf.pdf>

### Course Requirements and Instructional Methods

*Please see Canvas*

*All Students must have required immunizations as per SB792: TB (clear results), Influenza, Pertussis, and Measles. The Student Health Nurse can provide the immunizations and proof of clearance forms.*



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*We will be doing a lot of hands on activities come prepared.*

### **Course Grading Based on Course Objectives**

*Create and demonstrate math and science activities that are based on California standards.*

*Plan and create math and science rich environments in which math and science can be implemented into daily routines, classroom experiences that meet the various interests and abilities of children.*

*Select and evaluate various materials to support mathematic and scientific learning.*

*Develop strategies to involve parents and caregivers in supporting children's learning of math and science.*

*SEE CANVAS Rubrics*

### **Course Policies**

*Attendance is essential for this course. Group work and in class work will be your primary work.*

*•Electronic Devices: Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor.*

*•Disruptive Students: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the General Catalog.*

*•The Imperial Valley College Developmental Preschool and Infant Toddler labs follow and adhere to the National Association for the Education of Young Children (NAEYC) Code of Ethical Conduct. These ethics can be found on line at <http://www.naeyc.org/files/naeyc/file/positions/PSETH05.pdf>*

*Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the important of acknowledging and safeguarding intellectual property.*

*There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.*

*•Plagiarism is taking and presenting as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to "cite a source" correctly, you must ask for help.*

*•Cheating is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question.*

*Anyone caught cheating or plagiarizing will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the*



General Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment; (e) using a commercial term paper service.

### Other Course Information

Please be on time. We will have lots to do in this class.

### IVC Student Resources

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit <http://www.imperial.edu/studentresources> or click the heart icon in Canvas.

### Anticipated Class Schedule/Calendar

[Provide a tentative overview of the readings, assignments, tests, and/or other activities for the duration of the course. A table format as in the example below may be used for this purpose.]

Date or Week	Activity, Assignment, and/or Topic	Pages/ Due Dates/Tests
Week 1 June 21	Introduction to Course <b>Homework: READING:</b> Preschool Learning Foundations: Volume 3: Science. Pages: 48-72 <a href="http://www.cde.ca.gov/sp/cd/re/documents/preschoolfoundationsvol3.pdf">http://www.cde.ca.gov/sp/cd/re/documents/preschoolfoundationsvol3.pdf</a> <b>WRITTEN ASSIGNMENT (DISCUSSION Board Canvas):</b> Reflect on the paper-copter activity we did in class and write about how it connects with the California Preschool Science Foundations. Write one paragraph on the connection to the Science Inquiry strand and one paragraph on the connection to Physical Science strand.	SEE CANVAS for DUE DATES
June 26	Water Play Physical Science Exemplar: Sink/Float Math Focus: Sets and Sorting <b>READING:</b> California Preschool Math Foundations: Volume 1: Mathematics. Pages 143-159. <a href="http://www.cde.ca.gov/sp/cd/re/documents/preschoollf.pdf">http://www.cde.ca.gov/sp/cd/re/documents/preschoollf.pdf</a> Reader Section 2: Making the Most of Water Play (article) A Constructivist Curriculum Model for Science <b>WRITTEN ASSIGNMENTS Canvas:</b> Provide at least one example how water play can help develop young children’s skills and understanding in each of the math strands (Number Sense, Algebra and Functions, Measurement, Geometry, Mathematical Reasoning) described in the Foundations in Mathematics (pp. 145-147). Think of the benefits of water play and how children will be investigating water in the classroom. 1-2 paragraph response. <b>WRITTEN ASSIGNMENTS Canvas:</b>	



Date or Week	Activity, Assignment, and/or Topic	Pages/ Due Dates/Tests
	Explain how sorting is math.	
June 28	Exploring Rocks <b>READING:</b> Reader Section 4: Investigating Rocks and Sand: Addressing Multiple Learning Styles Through an Inquiry-Based Approach (article) <b>Assignment</b> <b>Exemplar Activity Guide: Exploring Rocks</b>	
July 3	Measurement	
July 5	Cooking Bubbles	
July 10	Number Sense Chemistry	
July 12	Counting One to one correspondence	
July 17	Number Operations Investigating life science Gardening	
July 19	Ramps and Pathways Life Science Worms	
July 24	Spatial Relations Shapes and Patterning Student Activities	
July 25	Student Activities	

\*\*\*Subject to change without prior notice\*\*\*