



## Basic Course Information

Semester:	<b>SPING 2025</b>	Instructor Name:	<b>CECILE RICHMOND</b>
Course Title & #:	<b>SCIENCE AND MATH FOR YOUNG CHILDREN CDEV 122</b>	Email:	<b>cecile.richmond@imperial.edu</b>
CRN #:	<b>21158</b>	Webpage (optional):	<b>CHILD DEVELOPMENT</b>
Classroom:	<b>207</b>	Office #:	<b>760-235-5441</b>
Class Dates:	<b>2/10/25 TO 6/6/25</b>	Office Hours:	<b>TBD</b>
Class Days:	<b>THURSDAY</b>	Office Phone #:	<b>760-235-5441</b>
Class Times:	<b>6:00PM TO 8:10PM</b>	Emergency Contact:	<b>760-355-6232</b>
Units:		Class Format/Modality:	<b>FACE TO FACE</b>

## 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

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

1. Investigate and critique developmentally appropriate science and math curriculum and the use of California standards. (ILO1, ILO2, ILO4)
2. Describe strategies to involve parents and caregivers to support children's understanding of science concepts. (ILO2, ILO4)
3. Plan math and science activities and environments based on the observation of children, to support children's development in math and science concepts. (ILO2, ILO4)



## Course Objectives

Upon satisfactory completion of the course, students will be able to:

1. Create and demonstrate math and science activities that are based on California standards.
2. 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 interest and abilities of children.
3. Select and evaluate various materials to support mathematic and scientific learning.
4. Develop strategies to involve parents and caregivers in supporting children's learning of math and science.

## Textbooks & Other Resources or Links

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

## Course Requirements and Instructional Methods

Grades will be based upon class participation, attendance and the completion of assignments, quizzes and tests throughout the semester.

All material presented in the text, study guide, videos and handouts will be part of the evaluation process.

All students must participate in instructor-initiated contact whether it be via zoom or through email a response is required.

The following resources shall be used to maintain contact with students:

- a. Orientation material.
- b. Weekly announcements in Canvas
- c. Threaded discussion boards
- d. Email contact within or outside Canvas  
(response to student emails recommended within 24-48 hours); and
- e. Timely feedback for student work.
- f. Participation in online group collaboration projects
- g. Face-to-face informal meetings via zoom (e.g. review sessions)
- h. Face-to-face formal meetings (e.g. regular, scheduled class sessions)

All assignments must be submitted online to Canvas. If you are having difficulty you can email assignment to instructor. Although all assignments will have due dates, all assignments can and must be submitted by the end of the semester.

All assignments have a rubric by which the student can view what is required to receive the highest grade on that assignment.



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## Course Grading Based on Course Objectives

- MATH, SCIENCE or BLOCK AREA PLAN POWERPOINT = 100 POINTS (FINAL)
- PLANTING ACTIVITY = 50 POINTS
- LIMA BEAN GROWING EXPERIMENT = 75 POINTS
- SENSORY ACTIVITY PRESENTATION= 100 POINTS
- MATH OR SCIENCE ACTIVITY PLAN = 100 POINTS
- PARTICIPATION IN CLASS ACTIVITIES = 25 POINTS

90 -100% = A

80 - 89% = B

70 - 79% = C

60 - 69% = D

59% and below

"When grades are given for any course of instruction taught in a community college district, the grade given to each student shall be the grade determined by the faculty member of the course, and the determination of the student's grade by the instructor, in the absence of mistake, fraud, bad faith or incompetency, shall be final. " California Education Code, Section 76224

(a) Everyone in each class can earn an "A" grade. There is no set number or percentage that limits how many A's can be earned in each class. All assignments have a rubric by which the student can view what is required to receive the highest grade on that assignment.

## Academic Honesty (Artificial Intelligence -AI)

IVC values critical thinking and communication skills and considers academic integrity essential to learning. Using AI tools as a replacement for your own thinking, writing, or quantitative reasoning goes against both our mission and academic honesty policy and will be considered academic dishonesty, or plagiarism unless you have been instructed to do so by your instructor. In case of any uncertainty regarding the ethical use of AI tools, students are encouraged to reach out to their instructors for clarification.

## Accessibility Statement

Imperial Valley College is committed to providing an accessible learning experience for all students, regardless of course modality. Every effort has been made to ensure that this course complies with all state and federal accessibility regulations, including Section 508 of the Rehabilitation Act, the Americans with Disabilities Act (ADA), and Title 5 of the California Code of Regulations. However, if you encounter any content that is not accessible, please contact your instructor or the area dean for assistance. If you have specific accommodations through **DSPS**, contact them for additional assistance.

We are here to support you and ensure that you have equal access to all course materials.

## Course Policies

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See [General Catalog](#) for details.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absence exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences. Attendance is critical to student success and for IVC to use federal aid funds. Acceptable indications of attendance are:
  - Student submission of an academic assignment
  - Student submission of an exam
  - Student participation in an instructor-led Zoom conference
  - Documented student interaction with class postings, such as an interactive tutorial or computer-assisted instruction via modules
  - A posting by the student showing the student's participation in an assignment created by the instructor
  - A posting by the student in a discussion forum showing the student's participation in an online discussion about academic matters
  - An email from the student or other documentation showing that the student has initiated contact with a faculty member to ask a question about an academic subject studied in the course. Logging onto Canvas alone is NOT adequate to demonstrate academic

## Other Course Information

- Attendance is critical to student success and for IVC to use federal aid funds. Acceptable indications of attendance are:
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  - Student submission of an exam
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  - Documented student interaction with class postings, such as an interactive tutorial or computer-assisted instruction via modules
  - A posting by the student showing the student's participation in an assignment created by the instructor
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- An email from the student or other documentation showing that the student has initiated contact with a faculty member to ask a question about an academic subject studied in the course.
- Logging onto Canvas alone is NOT adequate to demonstrate academic attendance by the student.
- **Electronic Devices:** Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor.
- **Food and Drink** are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as 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](#).
- **Children in the classroom:** Due to college rules and state laws, only students enrolled in the class may attend; children are not allowed.

## Financial Aid

Your Grades Matter! In order to continue to receive financial aid, you must meet the Satisfactory Academic Progress (SAP) requirement. Making SAP means that you are maintaining a 2.0 GPA, you have successfully completed 67% of your coursework, and you will graduate on time. If you do not maintain SAP, you may lose your financial aid. If you have questions, please contact financial aid at [finaid@imperial.edu](mailto:finaid@imperial.edu).

## 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

<u>Date or Week</u>	<u>Activity, Assignment, and/or Topic</u>	<u>Pages/ Due Dates/Tests</u>
<u>Week# 1</u> 2/13	<ul style="list-style-type: none"> <li>Syllabus and Introduction</li> <li>Review Module 0</li> <li>Introduction of California Frameworks and Foundations</li> </ul>	<b>Discussion question Due</b>
<u>Week# 2</u> 2/20	<ul style="list-style-type: none"> <li>Developmentally Appropriate Practice</li> <li>Activity planning</li> <li>Practice Activity plan</li> </ul>	
<u>Week# 3</u> 2/27	<ul style="list-style-type: none"> <li>Intro to Science</li> <li>Area Environment</li> <li>Nature</li> <li>Earth/Planting and Seeds</li> <li>Lifecycles and Insects</li> <li>In class Activity Planting Lima beans</li> </ul>	<b>READ:136 TO 152 IN Frameworks Volume 3</b> <b>In Class Activity: Planting a Lima bean</b>
<u>Week #4</u> 3/6	<ul style="list-style-type: none"> <li>Planting presentations</li> </ul>	<b>In Class Activity: Planting</b>
<u>Week# 5</u> 3/13	<ul style="list-style-type: none"> <li>Sensory play</li> <li>Sensory Bins, Sensory trays, Sensory Bottles</li> </ul>	<b>Read: 153 to 174 in Frameworks Volume 3</b>
<u>Week# 6</u> 3/20	<ul style="list-style-type: none"> <li>Discuss Sensory presentations</li> <li>Slime, Goop and Playdough</li> <li>Cooking with children</li> </ul>	<b>In Class Activity: Making Slime</b>
<u>Week # 7</u> 3/27	<ul style="list-style-type: none"> <li>Sensory Presentations</li> </ul>	<b>Activity: Sensory bin or Sensory bottle activity</b> <b>Read 176 to 195 in Frameworks Volume 3</b>



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<u>Week #8</u> <u>4/3</u>	<ul style="list-style-type: none"> <li>• Benefits of Sand play</li> <li>• Tools for Sand Play</li> <li>• Kinesthetic Sand</li> </ul>	<u>In Class Activity</u> <u>Kinesthetic Sand</u> <u>Read: 197 to 214</u> <u>In Frameworks</u> <u>Volume 3</u>
<u>Week#9</u> <u>4/10</u>	<ul style="list-style-type: none"> <li>• The benefits of Waterplay</li> <li>• Water play Activities</li> <li>• Tools for Waterplay</li> </ul> <p>Discuss Piaget conservation experiment</p>	<u>Read 215 to 230</u> <u>In Frameworks</u> <u>Volume 3</u>
<u>Week#10</u> <u>4/17</u>	<ul style="list-style-type: none"> <li>• Introduction to Math and Engineering</li> <li>• Area Environment</li> <li>• Block Play</li> <li>• Construction, Planning, Building, Measuring, Estimating, Predicting</li> <li>• Tubes and Ramps</li> <li>• Discuss Power Point Presentations</li> </ul>	<u>Read 231 to 240 in</u> <u>Frameworks Volume 1</u> <u>Activity:</u> <u>Building with</u> <u>cardboard, tubes and</u> <u>variety of materials</u>
<u>Week#11</u> <u>4/24</u>	SPRING BREAK	<u>SPRINK BREAK</u>
<u>Week# 12</u> <u>5/1</u>	<ul style="list-style-type: none"> <li>• Manipulatives/ Counting, Matching, one to one correspondence</li> <li>• In Class Activity</li> </ul>	<u>Munipulatives</u>
<u>Week # 13</u> <u>5/8</u>	<ul style="list-style-type: none"> <li>• Math Science or Block Area PowerPoint Presentations</li> </ul>	<u>Read 241 to 258 in</u> <u>Frameworks Volume 1</u>
<u>Week#14</u> <u>5/15</u>	<ul style="list-style-type: none"> <li>• How Cooking and Science are connected</li> <li>• Making Bag Ice Cream.</li> </ul>	<u>Read 259 to 296 in</u> <u>Frameworks</u> <u>Volume 1</u> <u>Math and or</u> <u>Science Activity</u> <u>Plan due</u>
<u>Week#15</u> <u>5/22</u>	<ul style="list-style-type: none"> <li>• Recyclables</li> <li>• 3 D MATERIALS ACTIVITY</li> </ul>	<u>In Class</u> <u>3D Art Activity</u>



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<b><u>Week#16</u></b> <b><u>5/29</u></b>	<ul style="list-style-type: none"><li>• <b>Work on final project</b> <b>Concept Paper</b></li></ul>	
<b><u>Week #17</u></b> <b><u>6/5</u></b>	<ul style="list-style-type: none"><li>• <b>Final Project Due</b></li><li>• <b>Review Class</b></li></ul>	<b>Final Due</b>

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

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