IMPERIAL VALLEY COLLEGE

Basic Course Information

Semester:	Fall 2024	Instructor Name:	Allyn Leon
Course Title & #:	Math 114, Children's Mathematical Thinking	Email:	allyn.leon@imperial.edu
CRN #:	10049	Webpages (optional):	Canvas Login
Classroom:	N/A	Office #:	2761
Class Dates:	08/12/2024 - 10/04/2024	Student Hours (2761):	Wed/Thurs: 10:00 am to 11:00 am
Class Days:	N/A	Student Hours (Zoom):	Mon/Tues: 9:00 am to 10:00 am
Class Times:	N/A	Office Phone #:	760-355-6523
Units:	1	Emergency Contact:	Email me or call/text office phone

Course Description

Explore children's mathematical thinking with in-depth analysis of their understanding of operations, place value, algorithms, and multiple representations of problems. Examine interviews of children to assess understanding of mathematics topics, then plan tutoring sessions on the basis of interviews. (CSU)

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 demonstrate problem solving strategies by identifying an appropriate method to solve a given problem, correctly set up the problem, perform the appropriate analysis and computation, and share their interpretation of the conclusion or the outcome, using correct grammar or in an oral presentation. This outcome will be assessed through selected exercises on exams throughout the semester.

Textbooks & Other Resources or Links

Textbook/Resources: IMAP Select CD of Children's Reasoning (all required videos are available online in Canvas)

Course Objectives

Upon satisfactory completion of the course, students will be able to:
1. Demonstrate skill in recognizing representations of mathematical problems and their connections to children's understanding at 70% accuracy.
2. Demonstrate an understanding of problem types and solution strategies for addition and subtraction at 70% accuracy.
3. Demonstrate an understanding of problem types and solution strategies for multiplication and division at 70% accuracy.
4. Demonstrate alternative algorithms and a connection to complex elements of counting at 70% accuracy.
5. Demonstrate an understanding of place value concepts at 70% accuracy.

Course Requirements and Instructional Methods

General: There will be readings or videos assigned for watching every week, along with 6 Discussion Forums for participation during most weeks. Discussion forums will be 25 points if all requirements are met, totalling 150 points for the semester. Most of the homework will be based on content from the videos you watch. .

Homework: There will be 2 written homework assignments worth 25 points each. The first assignment is based on the Syllabus and is a quiz style assignment. The second assignment is based on working with fractions and doing operations with pattern blocks.

Interviews: There will be two interviews of elementary age school children that are fully explained separately within Canvas. Each interview is worth 100 points.

Exams: There will be a final exam worth 100 points. This exam will be taken online through Canvas.

Out of Class Assignments: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

Course Grading Based on Course Objectives

Your grade will be calculated based on the following items:

Syllabus Quiz and Pattern Blocks Assignment @ 25 Points Each	50 points	~10%
6 Discussion Forums @ 25 points each forum	150 points	~30%
1st Interview @ 100 points	100 points	~20%
2nd Interview @ 100 points	100 points	~20%
Final Exam @ 100 points	100 points	~20%
Total	*500 points*	*100%*

Your final grade will be based on the following points and percentages:

90% to 100%	450-500 points	A
80% to 89%	400-449 points	B
70% to 79%	350-399 points	C
60% to 69%	300-349 points	D
Below 60%	Below 300 points	F

The **Canvas Gradebook** is where you want to go to check your grades and progress. You can do this at any time to get an idea of how you are doing in the class.

Other Course Information

Last day to add the class: Thursday 08/15/2024
Last day to withdraw from the class with a "W": Friday 09/20/2024

Updated 6/2023

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.

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.

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 absences 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 in an online class is more than just logging in*
    - o You will need to make sure that you log in and check announcements regularly
    - o There are weekly readings and assignments that need to be done in a timely manner
    - o **The Syllabus Quiz, based on the syllabus, counts as an attendance check for the first week**
    - o **The Syllabus Quiz is due by 11:59 pm on Thursday, 08/15/2024**
    - o **If you do not complete the Syllabus Quiz on time, you will be dropped from the class**

Anticipated Class Schedule/Calendar

Date or Week	Activity, Assignment, and/or Topic	Assignment Dates
Week 1: Aug 12 - Aug 18	Introduction, Orientation Videos	SYLLABUS QUIZ DUE 08/15 Discussion 1
Week 2: Aug 19 - Aug 25	Watch Videos: 21, 20, 22, 1, 2, 3	Discussion 2
Week 3: Aug 26 - Sept 1	Watch Videos: 24, 4, 5, 6, 7, 8	Discussion 3
Week 4: Sept 2 - Sept 8	Watch Videos: 9, 10, 11, 12, 13	Interview 1 Due Discussion 4
Week 5: Sept 9 - Sept 15	Watch Videos: 14, 15, 16, 17, 18	Discussion 5
Week 6: Sept 16 - Sept 22	Pattern blocks	Pattern Blocks Due
Week 7: Sept 23 - Sept 29	Watch Videos: 19, 23, 25	Discussion 6 Interview 2 Due
Week 8: Sept 30 - Oct 4	Final Exam	Final Exam

THE SYLLABUS QUIZ IS DUE BY 11:59 PM ON THURSDAY 08/15/2024.

Updated 6/2023