NEW JERSEY CENTER
FOR TEACHING & LEARNING

MATH6412: Foundations of Teaching Mathematics II

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Office Hours: The date/time of your instructor's weekly office are posted at the top of the course page. If your schedule does not allow you to meet at that time, please contact your instructor to make alternate arrangements.

Course Credit: 3.0 NJCTL credits

Dates & Times:
This is a 3-credit, self-paced course, covering 7 modules of content. The exact number of hours that you can expect to spend on each module will vary based upon the module coursework, as well as your study style and preferences. You should plan to spend approximately 15 hours per credit working online, and up to 30 hours per credit working offline.

LMS Link: https://moodle.njctl.org/course/view.php?id=338

COURSE DESCRIPTION:
This course is the second in a two-course series on foundational mathematics for early childhood educators. In this course candidates will learn to meet young learners where they are; including the use of assessment to identify gaps and remediation strategies that work. Candidates will also learn the tenets of cognitively guided mathematics instruction.

Prerequisite: MATH6410

STUDENT LEARNING OUTCOMES:

Upon completion of the course, the student will be able to:

1. Candidates will be able to apply the principles of Cognitively Guided Mathematics Instruction (CGMI) in an early childhood classroom.

2. Students will understand the role of assessment in determining which students need additional support in attaining grade level standards.

3. Students will be able to provide appropriate remediation and intervention strategies to support students' growth in mathematics.

4. Students will understand the roles of formative, functional, and standardized assessments in early childhood mathematics classrooms.

TEXTS, READINGS, INSTRUCTIONAL RESOURCES:

Required Text(s):
When viewing each module's PowerPoint slideshow, you should review all external links in white boxes *unless* they are denoted as optional. Other links within the slideshow and inserted into the "notes" section are for reference or further information only.

GRADE DISTRIBUTION AND SCALE:
In order to receive a Passing grade, the participant must complete the following course requirements: all short answer assignments, critical thinking assignments, and the final reflection outlined in the *Assignments* section of the Class Schedule (below).

Grade Distribution:

Proctored Assessments	70%
Critical Thinking Assignments	7%
Short Answer Assignments	13%
Proctored Final Assignment	10%

Grade Scale:

A	93 – 100
A-	90 – 92
B+	86 – 89
B	83 – 86
B-	80 – 82
C+	77 – 79
C	73 – 76
C-	70 – 72
D	60.0 – 69.9
F	59.9 or below

GRADING RUBRICS:
The following rubric is used to score:
- Short Answer Assignment – 13% of grade
- Critical Thinking Assignments – 7% of grade

The minimum possible score for this rubric is 4 points, and the score will be converted to the minimum grade available in this module (which is zero unless the scale is used). The maximum score of 25 points will be converted to the maximum grade.

Intermediate scores will be converted respectively and rounded to the nearest available grade. If a scale is used instead of a grade, the score will be converted to the scale elements as if they were consecutive integers.

Critical Thinking Rubric:

	Meets Expectations	Approaches Expectations	Below Expectations	Limited Evidence
	13-15 Points	**10-12 Points**	**7-9 Points**	**4-6 Points**
Requirements	Includes all of the required components, as specified in the assignment.	Includes most of the required components, as specified in the assignment.	Includes some of the required components, as specified in the assignment.	Includes few of the required components, as specified in the assignment.
	13-15 Points	**10-12 Points**	**7-9 Points**	**4-6 Points**
Content	Demonstrates strong or adequate knowledge of the materials; correctly represents knowledge from the readings and sources.	Some significant but not major errors or omissions in demonstration of knowledge.	Major errors or omissions in demonstration of knowledge.	Fails to demonstrate knowledge of the materials.
	17-20 Points	**13-16 Points**	**9-12 Points**	**5-8 Points**
Critical Thinking and Analysis	Demonstrates strong or adequate critical thinking and analysis of concepts and applications.	Some significant but not major errors or omissions in critical thinking and analysis.	Major errors or omissions in critical thinking and analysis.	Fails to demonstrate critical thinking and analysis.
Mechanics and Writing				
	9-10 Points	**7-8 Points**	**5-6 Points**	**3-4 Points**

Demonstrates college-level proficiency in organization, grammar, and style	Project is clearly organized, well written, and in proper format (including APA as applicable) as outlined in the assignment. Strong sentence and paragraph structure; few errors in grammar and spelling. Proper APA formatting when applicable.	Project is fairly well organized and written, and is in proper format (including APA as applicable) as outlined in the assignment. Reasonably good sentence and paragraph structure; significant number of errors in grammar and spelling.	Project is poorly organized; does not follow proper paper format (including APA as applicable). Inconsistent to inadequate sentence and paragraph development; numerous errors in grammar and spelling.	Project is not organized or well written, and is not in proper paper format (including APA as applicable). Poor quality work; unacceptable in terms of grammar and spelling.

Short Answer Rubric:

	Meets Expectations	**Approaches Expectations**	**Below Expectations**	**Limited Evidence**
	7 Points	**5 Points**	**3 Points**	**1 Point**
Content	Demonstrates excellent knowledge of concepts, skills, and theories relevant to topic.	Demonstrates fair knowledge of concepts, skills, and theories.	Demonstrates incomplete or insubstantial knowledge of concepts, skills, and theories.	Demonstrates little or no knowledge of concepts, skills, and theories.
Depth of Reflection	Content is well supported and addresses all required components of the assignment.	Content is partially supported; addresses most of the required components of the assignment.	Content contains major deficiencies; addresses some of the required components of the assignment.	Content is not supported and/or includes few of the required components of the assignment.
Evidence and Practice	Response shows strong evidence of synthesis of ideas presented and insights gained throughout the entire course. The implications of these insights for the respondent's overall teaching practice are thoroughly detailed, as applicable.	Response shows some evidence of synthesis of ideas presented and insights gained throughout the entire course. The implications of these insights for the respondent's overall teaching practice are detailed, but the response is brief.	Response is missing some components and/or does not fully meet the requirements indicated in the instructions. Some questions or parts of the assignment are not addressed. Some attachments and additional documents, if required, are missing or unsuitable for the purpose of the assignment.	Response excludes essential components and/or does not address the requirements indicated in the instructions. Many parts of the assignment are addressed minimally, inadequately, and/or not at all.
	4 Points	***3 Points***	***2 Points***	***1 Point***
Writing Quality	Writing is well-organized, clear, concise, and focused; no errors.	Some minor errors or omissions in writing organization, focus, and clarity.	Some significant errors or omissions in writing organization, focus, and clarity.	Numerous errors in writing organization, focus, and/or clarity.

ACADEMIC STANDING:
NJCTL has established standards for academic good standing within a student's academic program. Students enrolled in any NJCTL online course must receive an 80 or higher to successfully complete a course and receive credit for that course. An 80 is equivalent to a GPA of 2.7 or B-. Additionally, students in an endorsement program must receive a cumulative GPA of 3.0 for all courses combined in order to successfully complete the program.

ACADEMIC INTEGRITY:
Students must assume responsibility for maintaining honesty in all work submitted for credit and in any other work designated by the instructor of the course. Academic dishonesty includes cheating, fabrication, facilitating academic dishonesty, plagiarism, reusing /repurposing your own work, unauthorized possession of academic materials, and unauthorized collaboration.

Please refer to the school's Policy on the Use of Generative AI posted in the Graduate Student Handbook for allowable uses of AI.

CITING SOURCES WITH APA STYLE:
All students are expected to follow proper writing and APA requirements when citing in APA (based on the APA Style Manual, 6th edition) for all assignments. Resources for doing so can be found here.

DISABILITY SERVICES STATEMENT:
We are committed to providing reasonable accommodations for all persons with disabilities. Any student with a documented disability requesting academic accommodations should contact the Dean of Students, Melissa Axelsson, for additional information to coordinate reasonable accommodations for students with documented disabilities (melissa@njctl.org).

NETIQUETTE:
Respect the diversity of opinions among the instructor and classmates and engage with them in a courteous, respectful, and professional manner. All posts and classroom communication must be conducted in accordance with the student code of conduct. Think before you push the Send button. Did you say just what you meant? How will the person on the other end read the words?

Maintain an environment free of harassment, stalking, threats, abuse, insults or humiliation toward the instructor and classmates. This includes, but is not limited to, demeaning written or oral comments of an ethnic, religious, age, disability, sexist (or sexual orientation), or racist nature; and the unwanted sexual advances or intimidations by email, or on discussion boards and other postings within or connected to the online classroom.

If you have concerns about something that has been said, please let your instructor know.

READING SCHEDULE:
Required readings are available within each module by clicking the links within each presentation

Module	**Graded Assignments**
1 - Foundations & Background of CGMI	● Short Answer Assignment ● Proctored Assessment, includes Multiple Choice and Written Response
2 - CGMI by Domain	● Short Answer Assignment ● Proctored Assessment, includes Multiple Choice and Written Response
3 - Play-Based CGMI	● Short Answer Assignment ● Proctored Assessment, includes Multiple Choice and Written Response
4 - Understanding Student Thinking in Early Mathematics	● Short Answer Assignment ● Proctored Assessment, only Written Response
5 - Formative & Functional Assessment in P-3 Mathematics	● Short Answer Assignment ● Proctored Assessment, includes Multiple Choice and Written Response
6 - Standardized Assessment in Early Childhood Mathematics	● Short Answer Assignment ● Critical Thinking Assignment ● Proctored Assessment, only Written Response
7 - Integrating Math Across the Curriculum	● Short Answer Assignment ● Proctored Assessment, only Written Response
8 - Final Reflection	● Zoom meeting with course instructor as needed to prepare for final assignment ● Final Proctored Critical Thinking Assignment