



ED 322-01-1: Elementary Math Methods I
College of Education & Human Development
Fall 2026 / 3 Credits
Monday, Wednesday, Friday 2:30 – 3:20 pm
Brogan Hall 101

Instructor: Dr. Travis Mukina
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Office Location: Brogan Hall 132
✓Direct Message: GroupMe App

Learning Materials

- **Textbook (Required):** J.A. Van DeWalle, K. Kary, J.M. Bay-Williams (2022). *Elementary and middle school mathematics: Teaching developmentally*. 11th ed. Pearson. ISBN: 9780136818038
- **Textbook (Required):** Parrish, Sherry (2014). *Number talks: Whole number computation, grades K-5*. Math Solutions. ISBN-10: 1935099655
- **GroupMe App:** A way to stay up-to-date with all class announcements, assignments, and questions between you, your professor, and your classmates.
- **Canvas Student App:** Used to submit all assessments and check progress on mastery of course learning outcomes.
- **Google Drive/3-Ring Binder:** This should comprise self-created notes, problem-solving sets, reflections, and all other assignments.



Course Catalog Description

This course provides an overview and applications of best practice mathematics instructional approaches, strategies, techniques, and assessment methods. Math concepts for students in kindergarten through grade 3 are explored using hands-on and problem-solving approaches.

Service Learning Hours

Designated time every Monday from 2:15 - 3:15pm at Pālolo Elementary will be spent tutoring elementary students in all content areas, but specifically mathematics.

Course Snapshot

This course is designed to produce a strong development of pedagogical mathematical techniques that occurs from class discussions, sharing of ideas through collaboration, and thought-provoking assessments.

Marianist Values

An education in the Marianist Tradition is marked by five principles. Reflect on how this course relates to them:

- Education for formation in faith
- Provide an integral, quality education
- Educate in family spirit
- Educate for service, justice and peace
- Educate for adaptation and change

Native Hawaiian Values

Education is central to both Marianist and Native Hawaiian culture — both seek transformative, value-centered learning that serves the marginalized. This is reflected in the 'Ōlelo No'eau (Hawaiian proverbs) below:

- **Educate for Formation in Faith (Mana):** E ola au i ke akua ('Ōlelo No'eau 364) — May I live by God.
- **Provide an Integral, Quality Education (Na'auao):** Lawe i ka ma'alea a kū'ono'ono ('Ōlelo No'eau 1957) — Acquire skill and make it deep.
- **Educate in Family Spirit ('Ohana):** 'Ike aku, 'ike mai, kōkua aku kōkua mai ('Ōlelo No'eau 1200) — Recognize others, be recognized, help others, be helped.
- **Educate for Service, Justice and Peace (Aloha):** Ka lama kū o ka no'eau ('Ōlelo No'eau 1430) — Education is the standing torch of wisdom.
- **Educate for Adaptation and Change (Aina):** 'A'ohe pau ka 'ike i ka hālau ho'okahi ('Ōlelo No'eau 203) — All knowledge is not taught in the same school.

Program Learning Outcomes (PLOs)

PLO 1	Apply knowledge of learner development, learner differences, diverse students and the learning environment to optimize learning for Elementary students.
PLO 2	Describe central concepts, tools of inquiry and structures of the subject matter disciplines for Elementary students.
PLO 3	Utilize formative and summative assessments, to determine, select, and implement effective instructional strategies for Elementary students.
PLO 4	Analyze the history, values, commitments, and ethics of the teaching profession within the school community.
PLO 5	Explain the Marianist tradition of providing an integral, quality education within diverse learning communities.

Course Learning Outcomes (CLOs)

CLO 1	Students will design real-world mathematics lessons that reflect appropriate consideration of student needs, objectives to be achieved, content to be taught while allowing exploration, conjectures, and logical reasoning.
CLO 2	Students will use problem-solving skills to investigate mathematical situations and communicate ideas verbally, numerically, symbolically, graphically, and/or geometrically.
CLO 3	Students will demonstrate deep conceptual understanding of foundational mathematics content relevant to the elementary curriculum, and be able to explain these concepts clearly and accurately.
CLO 4	Students will reflect on their own mathematical beliefs, identities, and experiences to develop equitable, culturally responsive practices that support all learners in building positive mathematical mindsets.
CLO 5	Students will analyze and implement various approaches, strategies, and materials for teaching lower elementary mathematics.

Alignment of Course Learning Outcomes

	CLO 1	CLO 2	CLO 3	CLO 4	CLO 5
Marianist Values	2, 5	2, 5	2, 5	2, 5	2, 5
PLOs	1, 2	1, 2	1, 2	1, 2	1, 2
Native Hawaiian Values	2, 5	2, 5	2, 5	2, 5	2, 5

What is the Point of Math Class?

Collaboration

Communicate Thoughts & Ideas

Creativity

Critical Thinking

Assessment

This course is designed to contribute in a different and significant way to your knowledge and experience relative to diagnosis and teaching of mathematics. Always be prepared to effectively participate in class discussions, analyze the thinking of others in class, and clearly explain your thinking. A Mastery rubric is provided with every assessment with Mastery being defined as your most recent assessment level. Feedback on all assessments are provided within 7 days of submission. All assessments must be completed and be completed in order, or a passing grade cannot be earned in the course.

How Many CLOs Demonstrate Mastery?					
5	4	3	2	1	0
A	B	F	F	F	F

1. Participation Assignments

Assessed: Entire Semester

- There are multiple assignments that do not affect your overall grade, but are all required to complete in order to receive a grade in the course:
 -  GroupMe Registration
 -  CCSS Domain Poster & CCSS Operations Poster
 -  Pālolo Tutoring Attendance (10 Hours) & Reflections

2. Three-Act Task

[CLO 1]

Assessed: Modules 2, 3, 5, 10

- You will create your own real-world math lesson called a Three-Act Task, which must focus on one of the content areas covered in this course. You will submit parts of the task during specific modules for feedback before you submit the full, completed task in the final module.

3. Building a Thinking Classroom

[CLO 2]

Assessed: Every In-Person Class

- During our in-person class, you are expected to contribute to our building thinking classroom activities by communicating effectively with your classmates to solve various mathematical situations. To earn Mastery for CLO 2, the following must be met:
 - Absent/Tardy 6 or less days of in-person class, for any reason, during the entire semester

4. Problem-Solving Sets (PSS)

[CLO 3]

Assessed: Modules 4, 6, 7, 8, 9

- During certain modules, you will complete five questions from that chapter's content. These questions will require detailed explanation of thought processes and mathematical drawings to show solutions.

5. Van De Walle Reflections (VDWR)

[CLO 4]

Assessed: Modules 1, 2, 3, 4, 6, 7, 8, 9

- After reading chapters of the Van De Walle textbook, you will submit reflections about what you read by responding to provided questions.

6. Number Talks Reflections (NTR), & Teaching

[CLO 5]

Assessed: Modules 1, 2, 3, 4, 6, 8, 9

- After reading specific pages in the Parrish & Dominick textbook and watching the corresponding classroom videos, you will submit reflections about what you saw by responding to provided questions.

** The Model Code of Ethics for Educators is intertwined throughout various activities within this course, as well as the other courses you will take within the program. The responsibility to profession, of professional competence, to our students, to the school, and with the use of technology are integral to all aspects of this course. **

Course Policies

Attendance Policy

Students are expected to attend regularly all courses for which they are registered. Students should notify their instructors when illness or other extenuating circumstances prevents them from attending class and make arrangements to complete missed assessments. Notification may be done by contacting the instructor via a direct message on GroupMe. It is the instructor's prerogative to modify deadlines of course requirements accordingly.

- Any student who stops attending a course without officially withdrawing may receive a failing grade.
- Unexcused absences equivalent to more than a week of classes may lead to a grade reduction for the course.
- Any unexcused absence of two consecutive weeks or more for any reason will result in being withdrawn from the course by the instructor.
- Repeated, non-consecutive absences for any reason put students at risk of a failing grade.

Late Work Policy

Always accepted, but feedback may be delayed.

Grades of Incomplete

This policy on incomplete grades aligns with the same University policies.

Instructor and Student Communication

Questions for this course can be sent through a direct message on the GroupMe app. Online and/or in-person meetings can be arranged. Response time will take place up to 24 hours.

Important Information

Academic Honesty

Academic honesty is an essential aspect of all learning, scholarship, and research. It is one of the values regarded most highly by academic communities throughout the world. Violations of the principle of academic honesty are extremely serious and will not be tolerated. Students are responsible for promoting academic honesty at Chaminade by not participating in any act of dishonesty and by reporting any incidence of academic dishonesty to an instructor or to a University official. Academic dishonesty may include theft of records or examinations, alteration of grades, plagiarism, *and unauthorized and/or undisclosed AI usage*, in addition to more obvious dishonesty. See catalog section *Student Use of Artificial Intelligence in Academic Work* for further information.

Questions of academic dishonesty in a particular class are first reviewed by the instructor, who must make a report with recommendations to the Director of the Academic College. Punishment for academic dishonesty will be determined by the instructor, Director, and the Dean of Academic College and may include an "F" grade for the work in question, an "F" grade for the course, academic notice, or dismissal from the University.

AI (Artificial Intelligence) Statement

Chaminade University recognizes the increasing role of artificial intelligence (AI) technologies in academic and professional environments. AI encompasses, but is not limited to, generative AI platforms, automated writing or content generation software, coding assistants, and similar tools. Students must ensure all submitted work genuinely reflects their knowledge and effort. Using AI to produce or significantly complete graded assignments, exams or other academic tasks – defined as use that substitutes for or substantially replaces a student's own analysis, reasoning or written expression – without explicit instructor approval is considered academic misconduct and will be dealt with according to the University's Academic Honesty Policy.

If an instructor has reasonable grounds to question whether submitted work genuinely reflects a student's own knowledge, authorship, or mastery of course material — or whether it meets the course's expectations for AI use — the instructor may require the student to provide additional or alternative evidence of authorship and content mastery. Such evidence may include drafts, notes, revision history, source materials, process explanations, oral discussion, in class work, or completion of an alternative assessment. A student's refusal or inability to provide such evidence may be considered, along with other available information, in evaluating whether the work meets course requirements and stated learning outcomes. Instructors will not rely solely on AI detection software or other automated tools in making grading or academic integrity determinations. Such determinations will be based on the totality of the available information and handled in accordance with applicable University policies and procedures. See the catalog section *Student Use of Artificial Intelligence in Academic Work* for further information.

Title IX and Nondiscrimination Statement

Chaminade University of Honolulu is committed to providing a learning, working and living environment that promotes the dignity of all people, inclusivity and mutual respect and is free of all forms of sex discrimination and gender-based violence, including sexual assault, sexual harassment, gender-based harassment, domestic violence, dating violence, and stalking. As a member of the University faculty, I am required to immediately report any incident of sex discrimination or

gender-based violence to the campus Title IX Coordinator. For pregnant and parenting students, I am also obligated to provide you with similar resources for support and protections available to you. My goal is to make sure that you are aware of the range of options available to you and have access to the resources and support you need.

Contact information and reporting options: chaminade.edu/titleix/nondiscrimination/. File a report via the [Campus Incident Report Form](#).

Nondiscrimination Policy & Notice of Nondiscrimination

Chaminade University of Honolulu does not discriminate on the basis of sex and prohibits sex discrimination in any education program or activity that it operates, as required by Title IX and its regulations, including in admission and employment. Inquiries about Title IX may be referred to the University's Title IX Coordinator, the U.S. Department of Education's Office for Civil Rights, or both and contact information may be found at the [Chaminade University Title IX Office Contact Information and Confidential Resources website](#). On-campus Confidential Resources may also be found here at [CAMPUS CONFIDENTIAL RESOURCES](#).

The University's Nondiscrimination Policy and Grievance Procedures can be located on the University webpage at: <https://chaminade.edu/compliance/title-ix-nondiscrimination-policies-procedures/>.

To report information about conduct that may constitute sex discrimination or make a complaint of sex discrimination under Title IX, please refer to the [Campus Incident Report form](#). Chaminade University of Honolulu prohibits sex discrimination in any education program or activity that it operates. The NOTICE of NONDISCRIMINATION can be found here: [Notice of Nondiscrimination](#).

Student with Disabilities Statement

Accessibility Services recognizes disability as a valued aspect of diversity and ensures equal access to the educational environment in accordance with Section 504 of the Rehabilitation Act; the Americans with Disabilities Act, as amended; and the principles and professional standards of the Association on Higher Education and Disability. Access is supported through reasonable accommodations and referrals to campus and community resources. Appointments with the Accessibility Services Coordinator are available through Stellic at

<https://chaminade.stellic.com> and may be held virtually or in person. Drop-in appointments are also welcome.

Students seeking support must meet with the Accessibility Services Coordinator as early as possible, even if they are unsure whether they have appropriate documentation of their disability or its impacts. The Accessibility Services Coordinator prioritizes listening to students's experiences and will discuss any documentation needs during the initial intake meeting. Students may seek support at any time.

Learn more at <https://chaminade.edu/ada-accommodations>

Assessment of Student Work

Chaminade University may use student work anonymously to assess achievement of course, program, and institutional learning outcomes as part of ongoing quality improvement efforts.

Credit Hour Policy

This is a three-credit hour course requiring 135 clock hours of student engagement, per the official CUH Credit Hour Policy.

Clock Hour Category	Total Time (hours)
In Class - Seat Time	37.5
Key Assessments - Three-Act Task - Problem-Solving Sets - VDWRs - NTRs	55
Remaining Hours - Pālolo Elementary Tutoring - Reading - Researching	42.5
Remaining Hours / 15 Weeks	~ 2.8 hours / week

Campus Resources & Support Services

The following resources are available to all Chaminade students. Reach out early — these services exist to support your success.

Resource	Description	Contact / Website
Accessibility Services (Kōkua 'Ike)	Accommodations under Section 504 and ADA. Contact early — appointments via Stellic, virtual or in person.	ada@chaminade.edu chaminade.edu/ada-accommodations
Tutoring & Academic Coaching (Kōkua 'Ike)	Tutoring and Academic Coaching Services support students' progression toward their academic, personal, and professional goals with clarity and intention. Services include individualized support in English, math, nursing, sciences, and social sciences, as well as guidance in developing goals and study strategies.	chaminade.edu/tutoring-academic-coaching-services
Career Services	Career Services supports students throughout their career journeys. Services include individualized job search strategy coaching, resume reviews, job interview coaching, and access to career-related resources and opportunities.	chaminade.edu/career-services
Basic Needs Resources	Support for food insecurity, housing instability, and other basic needs.	chaminade.edu/basic-needs/
Title IX / Nondiscrimination	Reporting and support for sex discrimination and gender-based violence. Campus Incident Report Form available online.	chaminade.edu/titleix/resources-and-support/
Hazing Prevention	Confidential support, crisis intervention, and reporting for any type of abuse including hazing.	hazingpreventionnetwork.org/athlete-helpline/
Campus Safety / SafeSwords	Security escort service for anyone who feels unsafe walking alone on campus at any time of day. Call security and a professional will escort you to your destination.	chaminade.edu/student-life/security/campus-safeswords-program/
CUH Alert Emergency Notification	Emergency text system. Register your cell number via the Chaminade portal and confirm the text to complete enrollment.	chaminade.edu

COURSE SCHEDULE

Module # Dates	Content	Assessments
Module 1 August 17 - 30	Van De Walle Textbook - Chapter 1: Developing Confident and Competent Mathematics Learners - Chapter 2: Exploring What It Means to Know and Do Mathematics - Chapter 3: Teaching Problem-Based Mathematics Number Talks Textbook - Chapter 1: What is a Classroom Number Talk?	 GroupMe Registration  CCSS Domain Poster  VDWR (Chap. 1, 2, & 3)  NTR (Module 1)
Module 2 Aug 31 - Sept 6	Van De Walle Textbook - Chapter 4: Planning in the Problem-Based Classroom - Chapter 5: Creating Assessments for Learning - Chapter 6: Teaching Mathematics Equitably to All Students Number Talks Textbook - Chapter 2: How Do I Prepare for Number Talks?	 Three-Act Task Information & Understanding  VDWR (Chap. 4, 5, & 6)  NTR (Module 2)
Module 3 September 7 -13	Van De Walle Textbook - Chapter 7: Developing Early Number Concepts and Number Sense Number Talks Textbook - Chapter 3: How Do I Develop Specific Strategies in the K – 2 Classroom?	 Three-Act Task (1st Submission)  VDWR (Chap. 7)  NTR (Module 3)
Module 4 September 14 - 27	Van De Walle Textbook Chapter 8: Developing Meanings for the Operations	 CCSS Operations Poster  Pälolo Reflections #1 & #2  PSS (Chap. 8)  VDWR (Chap. 8)  NTR (Module 4)
Module 5 Sept 28 - Oct 4	Work on Three-Act Task [No Class]	 Pälolo Reflection #3  Three-Act Task (2nd Submission)
Module 6 October 5 - 11	Van De Walle Textbook Chapter 9: Developing Basic Fact Fluency	 Pälolo Reflection #4
Wellness Week October 12 - 18		
Module 6 October 19 - 25	Van De Walle Textbook Chapter 9: Developing Basic Fact Fluency	 Pälolo Reflection #5  PSS (Chap. 9)  VDWR (Chap. 9)  NTR (Module 6)
Module 7 Oct 26 - Nov 1	Van De Walle Textbook Chapter 10: Developing Whole-Number Place-Value Concepts	 Pälolo Reflection #6  PSS (Chap. 10)  VDWR (Chap. 10)
Module 8 Nov 2 - Nov 15	Van De Walle Textbook - Chapter 11: Developing Strategies for Addition and Subtraction Computation Number Talks Textbook - Chapter 5: How Do I Develop Specific Addition and Subtraction Strategies in the 3 – 5 Classroom?	 Pälolo Reflections #7 & #8  PSS (Chap. 11)  VDWR (Chap. 11)  NTR (Module 8)
Module 9 Nov 16 - 29	Van De Walle Textbook - Chapter 12: Developing Strategies for Multiplication and Division Computation Number Talks Textbook - Chapter 7: How Do I Develop Specific Multiplication and Division Strategies in the 3 – 5 Classroom?	 Pälolo Reflections #8 & #9  PSS (Chap. 12)  VDWR (Chap. 12)  NTR (Module 9)
Module 10 Nov 30 - Dec 6	Present Three-Act Tasks	 Pälolo Reflection #10  Three-Act Task (Final Submission)