ED 322-01-1: Elementary Math Methods I
School of Education & Behavioral Sciences
Chaminade University Honolulu
Fall 2025 / 3 Credits
Tuesday & Thursday 11:30 am – 12:50 pm
Brogan Hall 101

Instructor:	Dr. Travis Mukina	**Office Location:**	Brogan 132
Email:	travis.mukina@chaminade.edu	**Cell Phone:**	(814) 450-8134

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.
- **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.

Marianist Values
This class represents one component of your education at Chaminade University of Honolulu. An education in the Marianist Tradition is marked by five principles and you should take every opportunity possible to reflect upon the role of these characteristics in your education and development:

1. Education for formation in faith
2. Provide an integral, quality education
3. Educate in family spirit
4. Educate for service, justice and peace
5. Educate for adaptation and change

Native Hawaiian Values
Education is an integral value in both Marianist and Native Hawaiian culture. Both recognize the transformative effect of a well-rounded, value-centered education on society, particularly in seeking justice for the marginalized, the forgotten, and the oppressed, always with an eye toward God (Ke Akua). This is reflected in the ʻOlelo Noʼeau (Hawaiian proverbs) and Marianist core beliefs:

1. Educate for Formation in Faith (Mana) E ola au i ke akua (ʻŌlelo Noʻeau 364) May I live by God
2. Provide an Integral, Quality Education (Naʼauao) Lawe i ka maʻalea a kūʻonoʻono (ʻŌlelo Noʻeau 1957) Acquire skill and make it deep
3. Educate in Family Spirit (ʻOhana) ʻIke aku, ʻike mai, kōkua aku kōkua mai; pela iho la ka nohana ʻohana (ʻŌlelo Noʻeau 1200) Recognize others, be recognized, help others, be helped; such is a family relationship
4. Educate for Service, Justice and Peace (Aloha) Ka lama kū o ka noʻeau (ʻŌlelo Noʻeau 1430) Education is the standing torch of wisdom
5. Educate for Adaptation and Change (Aina) ʻAʻohe pau ka ʻike i ka hālau hoʻokahi (ʻŌlelo Noʻeau 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 Learning Outcomes

	CLO 1	CLO 2	CLO 3
Marianist Values	Provide an integral and quality education Educate for adaptation and change	Provide an integral and quality education Educate for adaptation and change	Provide an integral and quality education Educate for adaptation and change
WASC Core Competencies	Written Communication Oral Communication Quantitative Reasoning Critical Thinking	Written Communication Oral Communication Quantitative Reasoning Critical Thinking	Written Communication Oral Communication Quantitative Reasoning Critical Thinking
Program Outcomes	1, 2	1, 2	1, 2

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	C	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 Reflections

2. **3️⃣Three-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. The following situations will result in *not* earning Mastery for CLO 2:
     - Missing more than 4 days of 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. **

Kōkua ʻIke: Tutoring & Learning Services
Chaminade is proud to offer free, one-on-one tutoring and writing assistance to all students. Tutoring and writing help is available on campus at Kōkua ʻIke: Center for Student Learning in a variety of subjects (including, but are not limited to biology, chemistry, math, nursing, English, etc.) from trained Peer and Professional Tutors. Please check Kōkua ʻIke's website for the latest times, list of drop-in hours, and information on scheduling an appointment. Free online tutoring is also available via TutorMe. Tutor Me can be accessed 24/7 from your Canvas account. Simply click on Account > TutorMe. For more information, please contact Kōkua ʻIke at tutoring@chaminade.edu or 808-739-8305.

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.

Federal regulations require continued attendance for continuing payment of financial aid. When illness or personal reasons necessitate continued absence, the student should communicate first with the instructor to review the options. Anyone who stops attending a course without official withdrawal may receive a failing grade or be withdrawn by the instructor at the instructor's discretion.

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, and plagiarism, in addition to more obvious dishonesty.
Questions of academic dishonesty in a particular class are first reviewed by the instructor, who must make a report with recommendations to the Dean of the Academic Division. Punishment for academic dishonesty will be determined by the instructor and the Dean of Academic Division and may include an "F" grade for the work in question, an "F" grade for the course, suspension, or dismissal from the University.
For the most up to date information, please refer to the Academic Honesty Policy on the Chaminade University Catalog website.

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.

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.

CUH Alert Emergency Notification
To get the latest emergency communication from Chaminade University, students' cell numbers will be connected to Chaminade's emergency notification text system. When you log in to the Chaminade portal, you will be asked to provide some emergency contact information. If you provide a cell phone number, you will receive a text from our emergency notification system asking you to confirm your number. You must respond to that message to complete your registration and get emergency notifications on your phone.

Assessment for Student Work
With the goal of continuing to improve the quality of educational services offered to students, Chaminade University conducts assessments of student achievement of course, program, and institutional learning outcomes. Student work is used anonymously as the basis of these assessments, and the work you do in this course may be used in these assessment efforts.

Student with Disabilities Statement
Chaminade University of Honolulu offers accommodations for all actively enrolled students with disabilities in compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA) of 1990, and the ADA Amendments Act (2008).
Students are responsible for contacting Kokua Ike: Center for Student Learning to schedule an appointment. Verification of their disability will be requested through appropriate documentation and once received it will take up to approximately 2–3 weeks to review them. Appropriate paperwork will be completed by the student before notification will be sent out to their instructors. Accommodation paperwork will not be automatically sent out to instructors each semester, as the student is responsible to notify Kokua Ike via email at ada@chaminade.edu each semester if changes or notifications are needed.

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*

COURSE SCHEDULE

Module # Dates	**Content**	**Assessments**
Module 1 Aug 25 - Sept 7	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 – 3) 🗣️ NTR (Module 1)
Module 2 Sept 8 - 14	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?	3️⃣ Three-Act Task Information & Understanding 📚 VDWR (Chap. 4, 5, & 6) 🗣️ NTR (Module 2)
Module 3 Sept 15 - 21	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?	3️⃣ Three-Act Task (1st Submission) 📚 VDWR (Chap. 7) 🗣️ NTR (Module 3)
Module 4 Sept 22 - Oct 5	Van De Walle Textbook • Chapter 8: Developing Meanings for the Operations	📍 CCSS Operations Poster 🚌 Pālolo Reflections #1 & #2 📓 PSS (Chap. 8) 📚 VDWR (Chap. 8) 🗣️ NTR (Module 4)
Module 5 Sept 6 - Oct 12	Work on Three-Act Task [No Class]	3️⃣ Three-Act Task (2nd Submission)
Module 6 Oct 13 - 26	Van De Walle Textbook • Chapter 9: Developing Basic Fact Fluency	🚌 Pālolo Reflections #3 & #4 📓 PSS (Chap. 9) 📚 VDWR (Chap. 9) 🗣️ NTR (Module 6)
Module 7 Oct 27 - Nov 2	Van De Walle Textbook • Chapter 10: Developing Whole-Number Place-Value Concepts	🚌 Pālolo Reflection #5 📓 PSS (Chap. 10) 📚 VDWR (Chap. 10)
Module 8 Nov 3 - Nov 16	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?	🚌 Pālolo Reflections #6 & #7 📓 PSS (Chap. 11) 📚 VDWR (Chap. 11) 🗣️ NTR (Module 8)
Module 9 Nov 17 - 30	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?	🚌 Pālolo Reflections #8 📓 PSS (Chap. 12) 📚 VDWR (Chap. 12) 🗣️ NTR (Module 9)
Module 10 Dec 1 - 7	Present Three-Act Tasks	3️⃣ Three-Act Task (Final Submission)