



MA 110-01-1: Pre-Calculus
School of Natural Sciences & Mathematics
[Chaminade University Honolulu](https://www.chaminade.edu/)
Spring 2023 / 3 Credits
Monday, Wednesday, Friday 11:30 am – 12:20 pm
Brogan Hall 101

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

Learning Materials:

- **MyMathLab Online Homework:** Directions on how to purchase can be found on Canvas
- **Desmos App:** A free, easy-to-use, graphing calculator app.
- **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 be comprised of provided guided notes, lectures, MyMathLab homework, and assessments.



Course Catalog Description

This course provides a foundation for further study in mathematics and prepares for Calculus I. Topics include functions and their graphs, polynomial and rational functions, exponential and logarithmic functions, trigonometric functions and their inverses, and some other selected topics.

Course Overview

This course is designed to produce better conceptual understanding of functions and mathematics in general that leads into understanding procedural understanding of formulas. A strong development of number relationships will also occur by the use of class discussions, sharing of ideas, and thought-provoking-take-home assessments.

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 'Olelo No'eau (Hawaiian proverbs) and Marianist core beliefs:

1. Educate for Formation in Faith (Mana) E ola au i ke akua ('Olelo No'eau 364) May I live by God
2. Provide an Integral, Quality Education (Na'auao) Lawe i ka ma'alea a kū'ono'ono ('Olelo No'eau 1957) Acquire skill and make it deep
3. Educate in Family Spirit ('Ohana) 'Ike aku, 'ike mai, kōkua aku kōkua mai; pela iho la ka nohana 'ohana ('Olelo No'eau 1200) Recognize others, be recognized, help others, be helped; such is a family relationship

Assessment

The assignments described below are each designed to contribute in a different and significant way to your knowledge and experience relative to diagnosis and remediation of mathematics. Always be prepared to effectively participate to class discussions, analyze the thinking of others in class, and clearly explain your thinking in most assignments. A scoring rubric is provided with every assessment to ensure you know what is required to receive the score desired. Feedback and grades on all assignments are provided within 7 days of submission.

1. MyMathLab (MML) Online Homework – 50% of Final Grade [CLO 1, 2, 3, 4, 5, 6, & 7]

Modules 1, 2, 3, 4, 6, 7, 8, 9 [5 points per section]

- Homework is assigned through the Pearson MyMathLab website. All homework assignments for each chapter are due at the end of each module. Extensions will not be granted and missed homework assignments cannot be reopened for completion. Collaboration with classmates is highly encouraged on all MyMathLab assignments.

2. Assessments – 50% of Final Grade (25% Each) [CLO 1, 2, 3, 4, 5, 6, & 7]

Module 5 - Chapters F, 1, 2, 3 Assessment [35 points]

Module 10 - Chapters 4, 5, 6 Assessment [35 points]

- Assessments focus on content demonstrated in the lectures, guided notes, activities/discussions that occur in class, strategies used in your MyMathLab homework, and open-ended style questions. A full week is provided to complete each assessment and Desmos is always permitted. Collaboration with classmates is strictly prohibited on assessments. Assessments focus on written and oral communication of mathematical ideas.

Grading Scale	
90 – 100 %	A
80 – 89 %	B
70 – 79 %	C
60 – 69 %	D
0 – 59 %	F

- A** - Outstanding scholarship and an unusual degree of intellectual initiative
- B** - Superior work done in a consistent and intellectual manner
- C** - Average grade indicating a competent grasp of subject matter
- D** - Inferior work of the lowest passing grade, not satisfactory for fulfillment of prerequisite course work
- F** - Failed to grasp the minimum subject matter; no credit given

Course Policies

Late Work Policy

This course has firm deadlines for completing all assignments. If assignments are likely going to be completed late, contact must be made with the instructor at least 24 hours before the deadline to discuss submission options.

Grades of "Incomplete"

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

Writing Policy

For any writing assignments, please use APA format. Please refer to <https://apastyle.apa.org> for any specific style and grammar guidelines questions.

Instructor and Student Communication

Questions for this course can be emailed to the instructor at travis.mukina@chaminade.edu. Online and/or in-person meetings can be arranged. Response time will take place up to 24 hours.

Additional Services

Disability Access

If you need individual accommodations to meet course outcomes because of a documented disability, please speak with me to discuss your needs as soon as possible so that we can ensure your full participation in class and fair assessment of your work. Students with special needs who meet criteria for the Americans with Disabilities Act (ADA) provisions must provide written documentation of the need for accommodations from Kōkua 'Ike: Center for Student Learning by the end of week three of the class, in order for instructors to plan accordingly. If a student would like to determine if they meet the criteria for accommodations, they should contact the Kōkua 'Ike Coordinator at (808) 739-8305 for further information (ada@chaminade.edu).

Technical Assistance for Canvas Users

- Search for help on specific topics or get tips in [Canvas Students](#)
- [Live chat with Canvas Support for students](#)
- Canvas Support Hotline for students: +1-833-209-6111
- Watch this [video to get you started](#)
- [Online tutorials](#): click on "Students" role to access tutorials
- Contact the Chaminade IT Helpdesk for technical issues: helpdesk@chaminade.edu or call (808) 735-4855

Tutoring and Writing 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 'Ike: 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 'Ike'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. TutorMe can be accessed 24/7 from your Canvas account. Simply click Account – Notifications – TutorMe. For more information, please contact Kōkua 'Ike at tutoring@chaminade.edu or 808-739-8305.

Chaminade University Policies

Student Conduct Policy

Campus life is a unique situation requiring the full cooperation of each individual. For many, Chaminade is not only a school, but a home and a place of work as well. That makes it a community environment in which the actions of one students may directly affect other students. Therefore, each person must exercise a high degree of responsibility. Any community must have standards of conduct and rules by which it operates. At Chaminade, these standards are outlined so as to reflect both the Catholic, Marianist values of the institution and to honor and respect students as responsible adults. All alleged violations of the community standards are handled through an established student conduct process, outlined in the Student Handbook, and operated within the guidelines set to honor both students' rights and campus values.

Students should conduct themselves in a manner that reflects the ideals of the University. This includes knowing and respecting the intent of rules, regulations, and/or policies presented in the Student Handbook, and realizing that students are subject to the University's jurisdiction from the time of their admission until their enrollment has been formally terminated. Please refer to the Student Handbook for more details. A copy of the Student Handbook is available on the Chaminade website under Student Life.

For further information, [please refer to the Chaminade Catalog](#).

Title IX Compliance

Chaminade University of Honolulu recognizes the inherent dignity of all individuals and promotes respect for all people. Sexual misconduct, physical and/or psychological abuse will NOT be tolerated at CUH. If you have been the victim of sexual misconduct, physical and/or psychological abuse, we encourage you to report this matter promptly. As a faculty member, I am interested in promoting a safe and healthy environment, and should I learn of any sexual misconduct, physical and/or psychological abuse, I must

report the matter to the Title IX Coordinator. If you or someone you know has been harassed or assaulted, you can find the appropriate resources by visiting Campus Ministry, the Dean of Students Office, the Counseling Center, or the Office for Compliance and Personnel Services.

Attendance Policy

Flex students are expected to asynchronously attend and submit course work in classes they are registered in. Student should notify their instructors when illness or other extenuating circumstances prevents them from attending class and make arrangements to complete missed assignments. Notification may be done by emailing the instructor's Chaminade email address, calling the instructor's campus extension, or by leaving a message with the instructor's division office. 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.

Students with disabilities who have obtained accommodations from the Chaminade University of Honolulu Tutor Coordinator may be considered for an exception when the accommodation does not materially alter the attainment of the learning outcomes.

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.

Credit Hour Policy

The unit of semester credit is defined as university-level credit that is awarded for the completion of coursework. One credit hour reflects the amount of work represented in the intended learning outcomes and verified by evidence of student achievement for those learning outcomes. Each credit hour earned at Chaminade University should result in 45 hours of engagement.

The minimum 45 hours of engagement per credit hour can be satisfied in fully online, internship, or other specialized courses through several means, including (a) regular online instruction or interaction with the faculty member and fellow students and (b) academic engagement through extensive reading, research, online discussion, online quizzes or exams; instruction, collaborative group work, internships, laboratory work, practica, studio work, and preparation of papers, presentations, or other forms of assessment. This policy is in accordance with federal regulations and regional accrediting agencies.

Course Schedule

Module # Dates	Module Content	Assignments Due by End of Module
Module 1 Jan 9 th – 15 th	Chapter F: A Prelude to Functions Section F.1: The Distance and Midpoint Formulas Section F.2: Graphs of Equations in Two Variables; Intercepts; Symmetry Section F.3: Lines Section F.4: Circles	<ul style="list-style-type: none"> ○ Introductory Post ○ GroupMe Registration ○ MyMathLab Registration ○ MML F.1, F.2, F.3, F.4
Module 2 Jan 16 th – 29 th	Chapter 1: Functions and Their Graphs Section 1.1: Functions Section 1.2: The Graph of a Function Section 1.3: Properties of Functions Section 1.4: Library of Functions; Piecewise-defined Functions Section 1.5: Graphing Techniques – Transformations	<ul style="list-style-type: none"> ○ MML 1.1, 1.2, 1.3, 1.4, 1.5
Module 3 Jan 30 th – Feb 12 th	Chapter 2: Linear and Quadratic Functions Section 2.1: Properties of Linear Functions and Linear Models Section 2.3: Quadratic Functions and Their Zeros Section 2.4: Properties of Quadratic Functions Section 2.7: Complex Zeros of a Quadratic Function	<ul style="list-style-type: none"> ○ MML 2.1, 2.3, 2.4, 2.7
Module 4 Feb 13 th – 26 th	Chapter 3: Polynomial and Rational Functions Section 3.1: Polynomial Functions and Models Section 3.2: The Real Zeros of a Polynomial Function Section 3.4: Properties of Rational Functions Section 3.5: The Graph of a Rational Function	<ul style="list-style-type: none"> ○ MML 3.1, 3.2, 3.4, 3.5
Module 5 Feb 27 th – Mar 5 th	Chapters F, 1, 2, 3 Assessment	
Module 6 Mar 6 th – 12 th	Chapter 4: Exponential Functions Section 4.1: Composite Functions Section 4.2: One-to-One Functions; Inverse Functions Section 4.3: Exponential Functions	<ul style="list-style-type: none"> ○ MML 4.1, 4.2, 4.3
Module 7 Mar 13 th – Apr 2 nd	Chapter 4: Logarithmic Functions Section 4.4: Logarithmic Functions Section 4.5: Properties of Logarithms Section 4.6: Logarithmic and Exponential Equations	<ul style="list-style-type: none"> ○ MML 4.4, 4.5, 4.6
Module 8 Apr 3 rd – 16 th	Chapter 5: Trigonometric Functions Section 5.1: Angles and Their Measure Section 5.2: Right Triangle Trigonometry Section 5.3: Computing the Values of Trigonometric Functions of Acute Angles Section 5.4: Trigonometric Functions of Any Angle Section 5.5: Unit Circle Approach; Properties of the Trigonometric Functions	<ul style="list-style-type: none"> ○ MML 5.1, 5.2, 5.3, 5.4, 5.5
Module 9 Apr 17 th – 23 rd	Chapter 6: Analytic Trigonometry Section 6.1: The Inverse Sine, Cosine, and Tangent Functions Section 6.3: Trigonometric Equations	<ul style="list-style-type: none"> ○ MML 6.1, 6.3
Module 10 Apr 24 th – 30 th	Chapters 4, 5, 6 Assessment	