

**MA100**  
**Chaminade University of Honolulu**  
**Spring 2022**  
**Syllabus**

**Course Description and Outcomes**

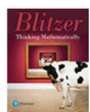
**MA100:** A study of various topics including an introduction to sets, logic, number systems, basic skills in algebra and geometry, consumer mathematics, probability and statistics, with an emphasis on problem solving, quantitative and logical thinking. Offered every semester.

**Course/Math General Education Outcomes**

- **Quantitative Skills:** Students will apply basic mathematical principles needed to function effectively and develop mathematical reasoning and problem-solving skills.
- **Information Literacy:** Students will define, identify, locate, evaluate, synthesize and present or demonstrate relevant information.

**e-Textbook and Online Homework System**

Original Materials:



**Thinking Mathematically 7th Edition**

Author(s): Blitzer, Robert

Textbook ISBN-13: 9780134683713

Series: MyLab Math

**Instructor Contact Info**

**Sheryl Dohm**

School of Natural Sciences and Mathematics

Chaminade University of Honolulu

3140 Waiālae Avenue, Honolulu, HI 96816

**Office Phone:** 808-739-8561 (pro-hint: Canvas Email is a much better way to reach me.)

**Email**

1. Canvas email: for quickest response use the email function in Canvas
2. Regular email: [sheryl.dohm@chaminade.edu](mailto:sheryl.dohm@chaminade.edu)

If you email me outside of office hours, please allow one-two business days for a response. (pro-hint: **please please please** do not wait until the last minute to seek help with course material)

3. Check for my response within a timely manner, in accordance to nature of email. Aloha

**Office Hours:** Friday, 1pm - 4pm. Call if you wish to make an appointment. Meetings will be virtual.

## Course Topic Timeline and Outcomes

### Week 1: 10 – 14 Jan

- Using MLM
- Determine the mean for a data set 12.2.1
- Determine Mean for a frequency distribution 12.2.1
- Determine the Median 12.2.2
- Determine the mode for a data set 12.2.3
- Determine the midrange 12.2.4
- Determine Range 12.3.1

### Week 2: 17 – 21 Jan

- Determine the standard deviation 12.3.2
- Find scores at a specific standard deviation from the mean 12.4.3
- Convert a data to a z-score 12.4.5
- Find a data item given a z-score. 12.4.5
- Percentiles and Quartiles 12.4.6
- Use and interpret margins of error 12.4.7

### Week 3: 24 – 28 Jan

- Make a scatter plot 12.6.1
- Interpret info given in a scatter plot 12.6.2
- Compute the correlation coefficient 12.6.3
- Write the equation of the regression line 12.6.4

### Week 4: 31 Jan – 4 Feb - back on ground

- Review

### Week 5: 7 – 11 Feb

- **Exam 1 on ground only**
- Conduct Pairwise Comparison to determine rank 13.1.5
- Use Ratio Proportions 6.2.3
- Use Dimensional Analysis 9.1.1

### Week 6: 14 – 18 Feb

- Counting Principle 11.1.1
- Permutation 11.1.2
- Combinations 11.1.3
- Fundamentals of Probability 11.4
- Probability with the Fundamental Counting Principle, Permutations, and Combinations (part A 11.5)

### Week 7: 21 – 25 Feb

- Probability with the Fundamental Counting Principle, Permutations, and Combinations (part B) 11.5
- Use the complement rules of probability 11.6
- Compute 'or' probabilities. 11.6
- Find the odds for or against an event. 11.6
- Use odds to find the probability of an event. 11.6

### Week 8: 28 Feb – 4 Mar

- Calculate 'and' probabilities with independent events. 11.7
- Calculate 'and' probabilities with dependent events. 11.7

- Calculate conditional probabilities 11.7
- **Exam 2 on ground only**

**Week 9: 7 – 11 Mar**

- Express a fraction as a percent.
- Express a decimal as a percent.
- Express a percent as a decimal.
- Utilize the percent formula  $A=PB$ .
- Solve applications involving sales tax and discounts.
- Determine percent increase or decrease.
- Determine if a percentage is being used properly.

**Week 10: 14 – 18 Mar**

- Calculate simple interest.
- Use the future value formula to calculate the value of an unknown.
- Solve applications involving simple interest.
- Use compound interest formula to calculate the value of an unknown.
- Calculate present value using compound interest.
- Find effective annual yield.
- Solve application problems involving compound interest.

**Spring Break: 21-25 March**

**Week 11: 28 Mar – 1 Apr**

- Write terms of an arithmetic sequence.
- Use the formula for the general term of an arithmetic sequence to find the indicated term
- Write terms of a geometric sequence.
- Use the formula for the general term of a geometric sequence to find the indicated term.
- Determine whether a sequence is arithmetic or geometric
- Determine whether a sequence is arithmetic or geometric, then find the sum of the...
- Solve applications involving arithmetic and geometric sequences
- **Exam 3**

**Week 12: 4 – 8 Apr**

- Concept of Sets 2.1
- Set Description 2.1.1
- Set Roster 2.1.1
- Set-Builder 2.1.1
- Empty Sets 2.1.2
- Use of notation "element" "not-an-element" 2.1.3
- Natural Numbers 2.1.4
- Cardinal Number 2.1.5
- Equivalent sets 2.1.6
- Equal sets 2.1.8
- Finite and infinite sets 2.1.7

**Week 13: 11 – 15 Apr**

- Subset (vs. element notation) 2.2.1
- Proper Subset (has cardinal # smaller than set) 2.2.2
- Number of Subsets 2.2.3

- Venn Diagrams and Set Operations 2.3.1,2
- Complement Sets 2.3.4
- Intersection of Sets 2.3.5
- Union of Sets 2.3.6
- Set Operations 2.3.7
- Operations with Three Sets 2.4.1
- Use Venns with Three Sets 2.4.2

**Week 14: 18 – 22 Apr**

- Statements 3.1.1
- Negating Statements 3.1.3
- Quantifies 3.1.3
- Expressing statements as symbols 3.1.2
- Compound Statements and Connectives 3.2
- Truth Tables 3.3 & 3.4

**Week 15: 25 – 29 Apr**

- Valid v. Sound Arguments  
Arguments and Truth Tables 3.7  
Arguments and Venns

**Week 16: 2 – 6 May Final Exam Week**

- **Exam 4**

**Grading**

Students are expected to keep track of their grades. Please note the canvas grade book function is not used. Final Letter determined by Percent of Final Grade

A = 90-100%

B = 80-89%

C = 70-79%

D = 60-69%

F <60

**Final Grade Calculation**

<b>Category</b>	<b>Percent of Final Grade</b>
Homeworks	10%
Attendance	10%
Participation	5%
Tests, on ground	75%
<b>Total</b>	<b>100%</b>

**Homework**

- Homework sets are in MLM

- Grade determined at the end of the semester. Final grade based on percent or all possible points.
- Each homework set has a 70% prerequisite of previous homework.

### **Tests**

- All tests are in person, in the classroom.
- Each test is noncumulative from the previous test.
- Each test grade is determined by percent of points earned
- Late exams are given only in extreme circumstances, in adherence to CUH policy. Please provide documented excuse.
- Final Exam – See the Canvas Syllabus Module for the official CUH Final Exam Schedule

### **Getting Help**

#### **With Canvas**

For help with Canvas,

- click on the encircled question mark found on left of Canvas page.
- Contact the Chaminade IT Helpdesk for technical issues: [helpdesk@chaminade.edu](mailto:helpdesk@chaminade.edu) or call (808) 735-4855

#### **With Pearson Account and MLM: Getting Help-Chat with Pearson**

- Below is a step-by-step guide/description to getting help with Pearson issues.
  - GoTo <https://support.pearson.com/getsupport/s/student>
  - Scroll to bottom and click on Contact Us
  - Select Fields
    - Country of Study – United States
    - Role – College Student
    - Issue Category – select most relevant to your issue
    - Product (this one is a little tricky) Type and select “MyLab Math”
    - Check I’m not a robot
    - Start a Chat

#### **With Math content (me)**

Use the "Ask your Instructor Function" in MLM.

You will see it a question window. Find "Get help" at the bottom.

#### **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 (<https://chaminade.edu/advising/kokua-ike/>) for the latest times, list of drop-in hours, and information on scheduling an appointment. Free online tutoring is also available via Smarthinking. Smarthinking can be accessed 24/7 from your Canvas account. Simply click Account – Notifications – Smarthinking. For more information, please contact Kōkua ‘Ike at [tutoring@chaminade.edu](mailto:tutoring@chaminade.edu) or 808-739-8305.

## **CUH, Class, and Communication Policies**

### **Attendance Policy**

The following attendance policy is from the CUH Academic Catalog. Faculty members should also check with their divisions for division-specific guidelines.

Students are expected to attend regularly all courses for which they are registered. 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.

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 may result in being withdrawn from the course by the instructor, although the instructor is not required to withdraw students in that scenario. Repeated absences put students at risk of failing grades.

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.

Attendance in online format is progressing and completing work in a timely manner. Please do not wait until the last minute and try to power through an entire module in one sitting.

### **Academic Conduct Policy**

From the CUH Undergraduate Academic Catalog:

Any community must have a set of rules and standards of conduct 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.

For further information, please refer to the Student Handbook: <https://chaminade.edu/wp-content/uploads/2019/08/NEW-STUDENT-HANDBOOK-19-20-Final-8.20.19.pdf>

### **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 37.5 hours of engagement. For example, in a one credit hour traditional face to face course, students spend 50 minutes in class per week for 15 weeks, resulting in a minimum of 12.5 instructional hours for the semester. Students are expected to engage in reading and other assignments outside of class for at least 2 additional hours per week, which equals an additional 25 hours. These two sums result in total student engagement time of 37.5 hours for the course, the total engagement time expected for each one credit course at Chaminade.

### **Guidelines/Policies for Communications**

#### Email:

- Use the Canvas email. Email from non-Chaminade accounts will not get a response.
- Always include a subject line.
- Remember without facial expressions some comments may be taken the wrong way. Be careful in wording your emails. Use of emoticons might be helpful in some cases.
- Use standard fonts.
- Check for my response within a timely manner, in accordance to nature of email.

#### Threaded Discussion Groups:

- Review the discussion threads thoroughly before entering the discussion.
- Try to maintain threads by using the "Reply" button rather starting a new topic.
- Do not make insulting or inflammatory statements to other members of the discussion group. Be respectful of other's ideas.
- Be patient and read the comments of others thoroughly before entering your remarks.
- Be cooperative with group leaders in completing assigned tasks.
- Be positive and constructive in group discussions.
- Respond in a thoughtful and timely manner.

### **Family Educational Rights Act (FERPA) and you**

Below is a link to U.S. Department of Education: FERPPA for Students (at age 18).

<https://www2.ed.gov/policy/gen/guid/fpco/ferpa/students.html>

### **ADA Accommodation**

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](mailto:ada@chaminade.edu)). 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 the Counseling Center as soon as possible.

For additional resources on ADA in college see the U.S. Department of Education website, *Students with Disabilities Preparing for Postsecondary Education: Know Your Rights and Responsibilities*

<https://www2.ed.gov/about/offices/list/ocr/transition.html>

### **Title IX Information**

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.

For a summary of recent changes see the U.S. Department of Education: Summary of Major Provisions of the Department of Education's Title IX Rule.

<https://www2.ed.gov/about/offices/list/ocr/docs/titleix-summary.pdf>

## **~Chaminade Mission and Values~**

### **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

MA100 focuses in Educate for Service, Justice and Peace. During the logic section of this class we will analyze real examples of valid and unsound arguments that perpetuate injustices.

For more information, see The Marianists, Province of the United States.

[https://www.marianist.com/wp-content/uploads/2017/10/CME\\_09012016.pdf](https://www.marianist.com/wp-content/uploads/2017/10/CME_09012016.pdf)

**Notice of Revisions:** As the semester plays out, some adjustments to the course may be needed.

~ALOHA~