



## **Math 75X: Intro to Math Reasoning**

### **In-Person**

CRN: 61059

4 Credits

**INSTRUCTOR:** Tiffany Hayler  
**OFFICE:** Mana'opono 112  
**OFFICE HOURS:** TBA  
**TELEPHONE:** n/a.  
**EMAIL:** haylert@hawaii.edu  
**EFFECTIVE DATE:** Fall 2023

### **Windward Community College Mission Statement**

*Windward Community College offers innovative programs in the arts and sciences and opportunities to gain knowledge and understanding of Hawai'i and its unique heritage. With a special commitment to support the access and educational needs of Native Hawaiians, we provide O'ahu's Ko'olau region and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.*

### **CATALOG DESCRIPTION**

This course prepares students for MATH 100, MATH 101, MATH 111, and MATH 115. Course topics include ratio and percent, unit conversion, graphs, data interpretation, basic algebra, solving linear equations, and working with formulas with special emphasis on pattern recognition and problem solving. Additional topics may include set theory, inequalities, and quadratics.  
(4 hours lecture).

### **STUDENT LEARNING OUTCOMES**

As a result of taking this course, students can expect to attain the following outcomes:

1. Use algebraic techniques to analyze and solve applied problems
2. Graph linear and quadratic equations
3. Solve equations, inequalities, and systems
4. Utilize precise mathematical language and symbols to effectively communicate
5. mathematics in written and/or oral form

### **COURSE CONTENT AND TOPICS**

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| <ul style="list-style-type: none"><li>• <b>Quadratic Equations</b></li><li>• <b>Number Sense</b><ul style="list-style-type: none"><li>○ Introduction to Problem Solving</li><li>○ Comparisons and Proportional Reasoning</li></ul></li><li>• <b>Variable Sense</b><ul style="list-style-type: none"><li>○ Symbolic Rules and Expressions</li><li>○ Solving Equations</li><li>○ More Problem-Solving Using Algebra</li></ul></li></ul> | <ul style="list-style-type: none"><li>• <b>Function Sense and Linear Equations</b><ul style="list-style-type: none"><li>○ Function Sense</li><li>○ Introduction to Linear Functions</li><li>○ Linear Regressions, Systems, and Inequalities</li></ul></li><li>• <b>Introduction to Nonlinear Problem Solving</b><ul style="list-style-type: none"><li>○ Mathematical Modeling Involving Polynomials</li><li>○ Problems Solving with Quadratic Equations and Functions</li></ul></li></ul> |
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## REQUIRED MATERIALS

**Required MLM Pearson Access and eText:** Click the link on Laulima that says “MyLabMath” this will take you to a tab that allows you to purchase the etext and MLM course access for around \$60. The book title is “Mathematics in Action: An Introduction to Algebraic, Graphical, and Numerical Problem Solving.”

**Required Technology:** Scientific calculator and computer access for quizzes.

**Required Internet Connection:** Students need access to a strong internet connection.

**Required Classwork Items:**

- 2-inch binder
- 8 Tab Index/Subject Dividers

## COURSE TASKS

*Please notes, this class is using a “Flipped Classroom Design” which means students watch prerecorded lectures outside of class, and complete “homework-like” assignments in class with the assistance of the instructor.*

### Homework Lecture Videos

Students can view the lecture videos for each section by clicking on the links provided on the Laulima course overview page. Students need to complete provided lecture notes while watching the videos. Questions about the lecture video/notes will be answered the next following class day.

### Section Reading

Students need to read the sections in the etext or textbook for each week after viewing the lecture videos.

### In-Class/Group Work

After watching the lecture videos, and completing the provided lecture notes outside of class, we will complete in-class/group work assignments. These class assignments are due at the end of their respective week by Fridays. The building closes at 5:00pm, which is the latest the assignments can be put in my office door drop box.

### Weekly Quizzes

There will be weekly quizzes due via MLM Pearson each week on Fridays at 11:59pm. Students have only **one attempt per quiz. There are no makeup or retest opportunities.** Email the instructor at least 48 hours ahead of time if you are unable to complete a quiz.

### Optional Quiz Corrections

Full handwritten quiz corrections will be accepted for one week after the quiz due date. Corrections can only be done if a student completed the quiz on time. A complete solution can earn back up to 50% of points.

### Final Exam

The final exam will be given in class, it is 2 hours long. There are no make-up or retest opportunities for the final exam. Email the instructor at least 48 hours ahead of time if you are unable to attend the exam, another time to take the final may be provided. In the event of a valid emergency keeping the student from completing their final, students must provide documentation.

### Expected Weekly Study Time

It is expected that students spend, at the minimum, **12 hours per week** outside of class time studying, attending the Math Lab and/or TRiO for extra help, watching the lecture videos, completing the lecture notes and readings for this class.

## ADDITIONAL INFORMATION

- **MAKE-UP POLICY:** **There are no make-up opportunities for quizzes or exams.** Communicate with your instructor in a timely manner if a crisis occurs that keeps you from participating in the course. If you are unable to take an exam during the specified exam window, email the instructor at least 48 hours **before** the exam period begins to inform them of this. It may be possible for you to take the exam earlier than the specified day/time. Be sure to include the reason for not being able to take the exam. If you do not notify the instructor or if you do not have a justifiable reason, you will receive a score of 0 for that exam.
- **EMAIL:** Be sure to put “Math 75X” then the nature of the email in the subject line of your email. Please allow for 48 hrs to pass before sending a follow up email.
- **FINAL EXAM:** The final exam is cumulative. This means any problem or concept from any of the sections may be included in the final exam.
- **HELP:** The course instructor is your main human resource for help when you need help with the course material. There are also online help resources available and the Windward Community College Math Lab, online via Zoom. PLEASE seek help immediately if you are still lost or confused about the material after reading the sections and watching the lectures.

## LEARNING RESOURCES

**WCC Math Tutoring Zoom:** <https://windward.hawaii.edu/services-forstudents/tutoring/kahttps://windward.hawaii.edu/services-for-students/tutoring/ka-piko/mathlab/piko/math-lab/>

**UH Manoa Online Learning Academy:** <http://manoa.hawaii.edu/ola/> **Brainfuse:** <http://windward.hawaii.edu/Brainfuse/>

**Khan Academy:** <https://www.khanacademy.org/> Free online lessons and practice.

**TRiO:** <https://windward.hawaii.edu/services-for-students/tutoring/trio-sss/>

## RESPONSIBILITIES FOR STUDENTS IN THIS COURSE

Success in this course will be enhanced by:

1. A positive, inquiring attitude toward mathematics.
2. Setting aside adequate time for studying, working on problems, and careful cogitation of the material.
3. Reading the text carefully and making use of other learning materials whenever necessary.
4. Seeking assistance from the instructor, tutors and the Math Lab whenever necessary.
5. Regularly attending class and, notifying the instructor of an absence and responsibly obtaining and completing assignments by the designated date.

## STUDENT LEARNING OUTCOMES

As a result of taking this course, students can expect to attain the following outcome:

1. Solve applied mathematical problems, judge reasonableness of results, and communicate conclusions using appropriate terminology and symbols
2. Recognize and express mathematical patterns in various forms and contexts
3. Perform operations on real numbers
4. Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form

## ASSESSMENT AND GRADING

Grades for this course are based on the following course tasks:

Assignment	# of Points	Percentage of Grade
<b>In-Class Group Worksheets</b>	80 pts	16%
<b>Weekly MLM Quizzes</b>	240 pts	48%
<b>Lecture Notes (LN)</b>	80 pts	16%
<b>Final Exam</b>	100pts	20%
<b>Total:</b>	500 points	100%

Each letter grade for the course will be assigned according to the level of achievement as provided in the table following:

## LETTER GRADE/DEFINITION

A	90% - 100% of the cumulative points possible
B	80% - 89% of the cumulative points possible
C	70% - 79% of the cumulative points possible
D	60% - 69% of the cumulative points possible
F	Less than 60% of the cumulative points possible
W	Official Withdrawal
IN	Incomplete

Incomplete - given when a student has failed to complete a SMALL part of the course due to circumstances beyond his/her control.

Note: To receive a W grade a student must officially withdraw from the course before the posted deadline on the UH academic calendar for the current semester.

## ACADEMIC HONESTY

You may not consult with any classmates or outside resources while taking quizzes or exams. You are **not** allowed to tell a classmate the kind of questions on a quiz or exam or help a classmate in any way (e.g. by explaining how to solve the problem). Evidence of cheating will result in a score of 0 for all parties involved.

An “F” will be assigned to students involved in **cheating** and will be reported to the Dean. Please keep in mind that you are being assessed for your own knowledge and understanding of the concepts and strategies.

Any evidence of plagiarism will result in a score of 0 for all parties involved. If plagiarism persists, then an “F” will be assigned to the students involved in **plagiarism** and will be reported to the Dean.

All students are required to follow the Student Conduct Code described at

<http://www.hawaii.edu/policy/?action=viewPolicy&&policySection=ep&policyChapter=7&policyNumber=208>

## DISABILITIES ACCOMMODATIONS

If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to fully participate in this class, you are encouraged to contact the Accessibility Counselor to discuss reasonable accommodations that will help you succeed in this class. Roy Inouye can be reached at (808) 235-7448, [royinouye@hawaii.edu](mailto:royinouye@hawaii.edu), or you may stop by Hale Kāko‘o 106 for more information.

## SEX DISCRIMINATION AND GENDER BASED VOILENCE RESOURCESS (Title IX)

Windward Community College is committed to providing a learning, working, and living environment that promotes personal integrity, civility, 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.

If you or someone you know is experiencing any of these, WCC has staff and resources to support and assist you. To report an incident of sex discrimination or gender-based violence, as well as receive information and support, please contact one of the following:

Jojo Miller, Confidential Advocate

Phone: (808) 348-0663

Email: [advocate@hawaii.edu](mailto:advocate@hawaii.edu)

Office: Hale Kāko‘o 110

Desrae Kahale, Mental Health Counselor & Confidential Resource

Phone: (808) 235-7393

Email: [dkahale3@hawaii.edu](mailto:dkahale3@hawaii.edu)

Office: Hale Kāko‘o 101

Karla K. Silva-Park, Title IX Coordinator

Phone: (808) 235-7468

Email: [karlas@hawaii.edu](mailto:karlas@hawaii.edu)

Office: Hale ‘Ākoakoa 220

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. Although the Title IX Coordinator and I cannot guarantee confidentiality, you will still have options about how your case will be handled. My goal is to make sure you are aware of the range of options available to you and have access to the resources and support you need.

For more information regarding sex discrimination and gender-based violence, the University's Title IX resources and the University's Policy, Interim EP 1.204, go to [manoa.hawaii.edu/titleix/](https://manoa.hawaii.edu/titleix/)

#### ALTERNATE CONTACT INFORMATION

If you are unable to contact the instructor, have questions that your instructor cannot answer, or for any other issues, please contact the Academic Affairs Office:

- Location: Alaka'i 121
- Phone: (808) 235-7422