



UNIVERSITY of HAWAII®  
**WINDWARD**  
COMMUNITY COLLEGE

## **Math 75X Introduction to Mathematical Reasoning**

4 Credits (CRN 61094)

MWF 10:00AM – 11:15AM

**INSTRUCTOR:** Kevin A. Takayama, Instructor  
**OFFICE:** Hale Mana‘opono 105  
**OFFICE HOURS:** Wednesday 11:15 AM – 12:15 PM; or by appointment  
**TELEPHONE:** (808)236-9283      **EMAIL:** ktakayam@hawaii.edu  
**EFFECTIVE DATE:** Spring 2021

### **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 the Ko‘olau region of O‘ahu 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)

*Pre-Requisite(s): None*

*Co-Requisite(s): None*

### **Activities Required at Scheduled Times Other than Class Times**

MyLab Math is an online learning resource. Every day you will be assigned online assignments through MyLab Math. Most exercises include learning aids, such as guided solutions, sample problems, and extra help as you're working through them, and they offer helpful feedback when you enter incorrect answers. A variety of multimedia resources are also available in the homework exercises. You can link to the ebook, video clips, and animations to improve your understanding of key concepts. Videos are captioned in English, and several courses are also captioned in Spanish.

This course will be participating in the Bookstore’s Interactive Digital Access Program (IDAP). Through this program, you will access your course material digitally, and it will be available to you by the first day of class.

A charge for the digital course material through IDAP will be added to your MyUH account. You have the option to opt-out of receiving your course material through IDAP. By opting-out, you will lose access to the course material and the charge will be refunded on your MyUH

account. If you do not opt-out, the charge will stay on your MyUH account. Any unpaid charges on your MyUH account will turn into a hold. Holds on your account will prevent you from accessing various services within the University.

You may opt-out by visiting your unique Inclusive Access Student Portal, which can be found in your IDAP welcome email (Subject Line: “IMPORTANT: You have enrolled in an IDAP Course”).

For more information regarding IDAP, please contact your campus bookstore.

## STUDENT LEARNING OUTCOMES

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

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

## COURSE TASKS

The mode of instruction is primarily discussion-problem solving where the initial portion of each class period may be utilized to discuss and clarify any questions from the preceding class meeting and/or assignment, and the remaining portion is used to discuss new material. Lectures, directed student explorations, group work, appropriate technologies, and projects will also be used as appropriate. After the completion of each unit, a review and an exam will be conducted.

## ASSESSMENT TASKS AND GRADING

The student will demonstrate competency in the objectives by participating in and completing all class activities, by completing and turning in all assignments as requested, by taking unit tests, and by taking a final exam over concepts and skill covered in the entire course. Class activities, weekly quizzes, unit tests, and the final exam are to be taken in the classroom and without any references unless otherwise stipulated by the instructor.

It is the student’s responsibility to obtain and complete all assignments that are given in any class meeting for which the student is unable to attend. Unless permission is granted by the instructor beforehand, assignments and tests must be completed and submitted to the instructor at the specified date and time.

Points will be assigned to each graded assignment, class activity, weekly quiz, and tests as follows:

**MyLab Math.** Homework Exercise sets will be graded on a 0 - 10 point scale. Assignments are to be completed by the designated due date.

**Weekly Quizzes.** Weekly quizzes will be graded on a 0 - 10 point scale and will be due on the Sunday of the following week through MyLab Math. The weekly quizzes will be timed and will consist of a few questions from the week’s lessons.

**Chapter Tests.** The four chapter tests are given in class at the end of each chapter. A chapter test will be 75 minutes in length and will be scored on a 100-point scale. **The student must achieve a minimum of 70% of the possible points for each chapter test.** Without this minimum requirement, a passing grade for the course is not possible.

**Chapter Reviews.** Prior to each chapter test students will be assigned a chapter review as preparation. This chapter review must be fully completed on the day of the chapter test in order to take the test.

**Retests.** After each chapter test, a chapter retest deadline will be given. One retest is allowed without penalty for each unit exam if it is done by the specified unit retest deadline. The better of the two exam scores will count towards your grade. No retests will be given after the unit retest deadline. Retests are arranged by appointments with your instructor.

To take a retest, all of the following must be met:

- a) All problems assigned from the instructor must be completed and shown to the instructor.
- b) The student must meet with the instructor to review mistakes made on the first form of the test taken.
- c) Additional math activities as designated by the instructor must be completed.
- d) The retest must be taken by the designated chapter retest deadline.

**Final Exam.** The final exam will cover the concepts and skills in the entire course. The final exam is two hours in length and will be scored on a 200-point scale. **The student must achieve a minimum of 60% of the possible points for the final exam.** Without this minimum requirement, a passing grade for the course is not possible.

Retesting for the final exam is available if the 60% minimum is not met and the 70% minimum per chapter test was met. In that event, a retest of the final exam is possible, however, the maximum score of the retest is 60% of the possible points for the final exam.

**Make-up.** Make-up opportunity for tests and exams will be possible only upon a timely presentation of a serious and justified explanation of the student's absence from the class exam. The instructor has the right to request documentation of the student's absence from the class in order to determine if the absence from the class exam is justified. A make-up test or exam must be taken within one week of the in-class test or exam unless otherwise specified by the instructor. **No more than one test or exam may be taken by a student on a make-up basis.**

**Course grade.** If the student has achieved a minimum of 70% of the possible points for each unit exam and a minimum of 60% of the possible points for the final exam, then a letter grade for the course will be assigned according to the level of achievement as provided in the table below:

GRADE	DEFINITION
A	90% - 100% of the total possible points
B	80% - <90% of the total possible points
C	70% - <80% of the total possible points
Cr	70% - 100% of the total possible points
NC	<70% of the total possible points
D	60% - <70% of the total possible points
F	< 60% of the total possible points

### Percentage Breakdown

MyLab Math	40%
Quizzes	10%
Chapter Tests	30%
Final Exam	20%
Total:	100%

Note: Students must apply for the Cr/NC grading option at the Admissions Office. Consult the WCC Catalog for deadlines.

Note: W grade is given only when the student officially withdraws from the course at the Admissions Office. Consult the WCC Catalog for deadlines.

## COURSE CONTENT

### *Concepts or Topics*

- **Critical Thinking and Problem Solving Strategies**
- **Number Sense**
- **Operations on Real Numbers**
- **Proportional Reasoning**
- **Linear Equations in One and Two Variables**
- **Evaluating and Manipulating Formulas**
- **Graphical Representations**
- **Dimensional Analysis**
- **Geometry and Measurement**

### *Skills or Competencies*

1. a positive, inquiring attitude towards mathematics;
2. setting aside adequate time for studying and working of problems;
3. reading the text carefully and making use of other learning materials whenever necessary;
4. seeking assistance from the instructor and the Math Lab personnel whenever necessary;
5. completing assignments by the designated date;
6. regular class attendance, participation and maintaining accurate class notes.

## LEARNING RESOURCES

**Required Text:** Mathematics in Action, 5th edition, by Pearson.

TRiO: Hale Kāko‘o 116

The Math Lab: La‘akea 220 <https://sites.google.com/view/kapikowcc/math-lab?authuser=0>

UH Manoa Online Learning Academy: [manoa.hawaii.edu/ola/](http://manoa.hawaii.edu/ola/)

Math Tutorial Videos: <https://windward.hawaii.edu/jitmath/index.php>

Tutor.com: 24/7 online tutoring that connects students one-to-one with a subject expert tutor

## ADDITIONAL INFORMATION

1. **Grading on Homework, Weekly Quizzes, or Tests/Exams.** To receive full marks for problems done on any graded activity, you must show your work neatly and completely as well as provide clear written explanations when it is asked. Partial credit may be awarded.

2. **Absences.** It is your responsibility to attend every class meeting. Even if you are absent, you are responsible for those topics and examples covered in class that you missed. Furthermore, you are responsible for obtaining any important announcements and assignments given during the class you missed. If you are absent frequently or for an extended period of time, contact the

instructor as soon as possible to discuss your situation. Absences and tardiness to class will have a negative impact on your success and overall grade in this course. You are allowed 3 absences without consequence. **If you are absent 4 times, your overall grade will drop by 10%, one letter grade.** You will be deducted 10% of your overall grade for every 4 absences thereafter. You are considered tardy if you come to class between 5-20 minutes after class has started. **Two tardy attendances are worth 1 absence.**

3. **Homework.** For each chapter, as you read through each section, it is recommended that you write down the words, phrase or math symbols and their meanings, formulas, and properties/rules that are important for each section. It is important for you to know these.

After reading through each section carefully, try the suggested odd numbered problems in each section. The answers to the odd numbered problems are available at the back of the textbook. Do as many as you feel is necessary to help you learn and understand the material and become comfortable with the concepts and/or properties. If you have difficulty solving problems in the section, review the material in the text and your class notes. Many examples are solved. Review the solutions to these problems. If, after checking these sources and trying to find your mistakes, you are still unable to solve a problem correctly, make a note of the exercise number so that you can ask someone for help with that problem.

Mathematics is not a spectator sport. To succeed in mathematics, you must do problems. It is often necessary to practice a skill more than the instructor requires. For example, a textbook may provide 50 practice problems in a section and the instructor may assign only 25 of them. However, some students may need to do 30, 40, or all problems. If you are an accomplished athlete, musician, or dancer, you know that long hours of practice are necessary to acquire a skill. Do not cheat yourself of the practice you need to develop skills taught in this course.

4. **Laulima.** The syllabus, course calendar, homework schedule, grades, etc. are all viewable through Laulima. Check Laulima regularly to stay up to date.

5. **Calculators.** Calculator use is allowed on certain quizzes, tests, and exams. Graphing calculators are not allowed.

6. **Communication.** It is your responsibility to stay in communication with the instructor. If you will be unable to make it to class for any reason, please inform your instructor so it may be determined if the absence is excused. The instructor may need to contact you throughout the semester and will do so via email. It is your responsibility to check your student email on a regular basis.

7. **MySuccess.** At Windward community college we want every student to be successful. MySuccess is a system wide effort that seeks to support students early in the semester when they first begin experiencing difficulty in class. If I feel that you're having difficulty in my class within the first few weeks of the semester (e.g. missing class, missing assignments, or low test scores) and working together to address your challenges shows that you would really benefit from being connected to resources outside of the classroom, I may refer you to your assigned counselor. Once referred, MySuccess will:

- Call you and send an email to your Hawaii.edu account to let you know about my referral; and

- have the MySuccess team follow up with you by phone or email to find out what kinds of help you might need and connect you with the necessary resources to help you devise a strategy for success.

I will not refer you without telling you. However, if I do refer you, know that I am doing so in an effort to connect you with all of the help you may need to do well this semester as your success is important to me.

## 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, [royinouy@hawaii.edu](mailto:royinouy@hawaii.edu), or you may stop by Hale Kāko‘o 106 for more information.

## SEX DISCRIMINATION AND GENDER-BASED VIOLENCE RESOURCES (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:

Kaahu Alo, Student Life Counselor & Designated Confidential\* Advocate for Students  
 Phone: (808) 235-7354  
 Email: [kaahualo@hawaii.edu](mailto:kaahualo@hawaii.edu)  
 Office: Hale ‘Ākoakoa 232  
*\*confidentiality is limited*

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/](http://manoa.hawaii.edu/titleix/)

## ACADEMIC INTEGRITY

Work submitted by a student must be the student's own work.

In this class, students who commit academic dishonesty, cheating or plagiarism will have the following consequence(s):

Students will receive a failing grade for plagiarized assignments.

All cases of academic dishonesty are referred to the Vice Chancellor for Student Affairs.

## 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

### Tentative Calendar Spring 2021

	Monday	Tues	Wednesday	Thurs	Friday
<b>Jan</b>	11 Introduction, 1.2	12	13 <b>No Class</b>	14	15 1.3
	18 <b>Dr. MLK Jr Day</b>	19	20 1.3	21	22 1.4
	25 1.5	26	27 1.6	28	29 1.7, 1.8
<b>Feb</b>	1 1.9, 1.10	2	3 1.11	4	5 1.12
	8 1.13	9	10 1.14	11	12 Chapter 1 Review
	15 <b>Presidents' Day</b>	16	17 <b>Chapter 1 Test</b>	18	19 2.1
	22 2.2	23	24 2.3, 2.4	25	26 2.5, 2.6
<b>Mar</b>	1 2.7	2	3 2.8	4	5 <b>No Class</b>

	8 2.9	9	10 2.10, 2.11	11	12 Chapter 2 Review
<b>March 15-19 Spring Break</b>					
	22 3.1	23	24 3.2	25	26 <b>Prince Kūhiō Day</b>
<b>Apr</b>	29 3.3, 3.4	30	31 3.5, 3.6	1	2 <b>Good Friday</b>
	5 3.7	6	7 3.8	8	9 3.11
	12 3.11	13	14 3.12	15	16 3.14
	19 Chapter 3 Review	20	21 4.1	22	23 4.2
	26 4.4	27	28 4.7	29	30 Chapter 4 Review
<b>May</b>	3 Final Exam Review	4	5 Final Exam Review	6	7 No Class
	10 <b>Final Exam 10AM-12PM</b>	11	12	13	14