



UNIVERSITY of HAWAII®
WINDWARD
COMMUNITY COLLEGE

MATH 103 - College Algebra, 4 credits

MATH 88 - College Algebra Companion, 2 credits

CRN: 63121 and 63120

Meets in person M, T, W, R 8:30 am - 11:15 am

Classroom: Mana'opono 113

INSTRUCTOR: Bethany Hopkins
OFFICE: Hale Mana'opono Room 112A
OFFICE HOURS: By appointment
TELEPHONE: (808) 236-9282
EMAIL: hopkinsb@hawaii.edu (Preferred method of communication. Will respond within 24 hours, excluding weekends and holidays)
EFFECTIVE DATE: Summer 2024 (May 13 - June 28, 2024)

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

Math 103 investigates linear equations, inequalities, systems of equations, polynomials, functions, fractional expressions and equations, exponents, powers, roots, quadratic equations and functions; rational, exponential and logarithmic functions.

Pre-Requisite(s): "C" or better in MATH 25, 26, 29, 82 or equivalent, satisfactory math placement test score, or consent of instructor.

Co-Requisite: Enrollment in MATH 88.

STUDENT LEARNING OUTCOMES

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

1. Graph or interpret algebraic relations that are relevant to the topics in this course
2. Employ algebraic techniques to find the solutions to equations or inequalities, or systems of equations or inequalities appropriate to the level of this course
3. Use algebraic techniques to analyze and solve applied problems

4. Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form

Note: All SLO assessments are embedded in class activities, homework, or exams.

FOUNDATIONS QUANTITATIVE (FQ) REASONING HALLMARKS

Math 103 fulfills 4 credits of the General Education requirements (Foundations Quantitative Reasoning) for both an A.A. degree at WCC and a Bachelor's degree at 4 year UH institutions. Consequently, it meets the following hallmarks of the Quantitative Reasoning requirement:

1. Provide students with theoretical justifications for, and limitations of, mathematical or statistical methods, and the formulas, tools, or approaches used in the course.
2. Include the application of abstract or theoretical ideas and information to the solution of practical quantitative reasoning problems arising in pure and applied research in specific disciplines, professional settings, and/or daily and civic life.
3. Provide opportunities for practice and feedback that are designed to help students evaluate and improve quantitative reasoning skills by including a course component at least once per week with a maximum 30:1 student-to-teacher ratio.
4. Be designed so that students will be able to
 - a. Identify and convert relevant quantitative information into various forms such as equations, graphs, diagrams, tables, and/or words;
 - b. Select appropriate techniques or formulas, and articulate and evaluate assumptions of the selected approaches.
 - c. Apply mathematical tools and perform calculations (including correct manipulation of formulas);
 - d. Make judgments, create logical arguments, and/or draw appropriate conclusions based on the quantitative analysis of data, the assumptions made, the limitations of the analysis, and/or the reasonableness of results; and
 - e. Effectively communicate those results in a variety of appropriate formats.

STUDENT RESPONSIBILITIES

- Complete assignments on time
- Attend class regularly
- Check Lualima regularly
- Check school emails regularly
- Be self-motivated
- Set aside adequate study time (~20 hours per week)

COURSE TASKS AND GRADING

Final Exam: There will be one cumulative paper and pencil final exam. The exam is timed (3 hours) and is worth 20% of your overall grade. You may use a provided scientific calculator on the final exam.

Tests: There will be 4 in-class tests as noted on the course calendar. You are permitted to use a scientific calculator on tests.

Homework: Homework will be assigned weekly. A homework grade will be determined based on the completion of your work, showing all necessary steps. You may still earn credit for incorrect answers and we will review mistakes during class.

In-class Activities: During each class, you will be working (individually and/or in groups) on several examples that I will provide. You will earn a classwork grade for completing each activity.

All grades can be accessed through Laulima. To view your overall grade in the course, log in to our Laulima course and click on Gradebook in the left-side menu. The grade breakdown will be as follows:

Assignment	Percentage
Final Exam	20%
4 Tests	40%
Homework	30%
In-class activities	10%
Total	100%

A letter grade for Math 103 will be assigned according to the level of achievement as provided below:

A = 90%-100%

B = 80%-89%

C = 70%-79%

D = 60%-69%

F = 0%-59%

CR 70% or above of the cumulative points possible

NC Less than 70% of the cumulative points possible

W Official Withdrawal

I Incomplete

Note: CR/NC grades require written instructor consent. Students must apply for CR/NC grading option at the WCC Admissions Office by the posted deadline.

Note: The W grade is given only when the student officially withdraws from the course by the posted deadline.

Note: The I grade is a temporary grade given at the instructor's discretion when a student has failed to complete a small part of a course because of circumstances beyond his or her control. A student may qualify for the I grade if (a) they are unable to take the final exam and (b) taking the final exam could possibly raise their course grade.

Grading for the Co-Requisite Course Math 88:

Students will get CR in Math 88 if they pass Math 103 with a grade of C or better. They will receive NC in Math 88 if they receive a grade of D or lower in Math 103.

COURSE CONTENT

- A review of Basic Algebra including rational exponents, radicals, rational expressions, and factoring (*FS & FQ*)
- Equations and Inequalities including solving quadratic equations, complex numbers, linear and compound inequalities, absolute value equations and inequalities, and applications (*FS & FQ*)
- The Rectangular Coordinate System and Graphs of Equations including circles, linear functions, and algebra of functions (*FS & FQ*)
- Polynomial and rational functions (*FS & FQ*) Exponential and Logarithmic Functions (*FS & FQ*)
- Linear Systems (*FS & FQ*)

LEARNING RESOURCES, MATERIALS, & ACADEMIC SUPPORT

REQUIRED MATERIALS:

- **Textbook:** *Algebra for College Students*, 9th Edition, by Lial, Hornsby, & McGinnis.
- Scientific calculator (no graphing calculators may be used on tests). A calculator will be provided for in-class use.

ADDITIONAL LEARNING RESOURCES:

- Symbolab: <https://www.symbolab.com>
- Wolfram Alpha: <http://www.wolframalpha.com>
- Desmos Graphing Calculator: <https://www.desmos.com>
- Khan Academy Videos: <http://www.khanacademy.org>
- Tutor.com: <https://windward.hawaii.edu/tutor.com/>
- The Math Lab: La‘akea 220 <https://windward.hawaii.edu/services-for-students/tutoring/ka-piko/>
- TRIO: <https://windward.hawaii.edu/services-for-students/tutoring/trio-sss/>

ADDITIONAL INFORMATION

Attendance and Class Preparation: This is an in-person class and students are expected to take notes in a notebook, binder, or electronic device. Students are expected to interact with the instructor and other members of this class with professionalism.

ACADEMIC INTEGRITY

Work submitted by a student must be the student’s own work. You are free to work with each other on class activities and homework, however, work on exams must be of your own merit. All cases of academic dishonesty are referred to the Vice Chancellor for Student Affairs. WCC Policies: <https://windward.hawaii.edu/Policies/>

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. Jodi Asato, Disabilities Counselor, can be reached at Hale Kako‘o 105, 808-235-7472, jodiaka@hawaii.edu.

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:

Desrae Kahale, Mental Health Counselor; Confidential Resource
 Phone: (808) 235-7393
 Email: dkahale3@hawaii.edu
 Office: Hale Kāko‘o 101

Leslie Cabingabang, UH System Confidential Advocate
 Phone/Text: (808) 348-0432 or (808) 341-0952
 Email: advocate@hawaii.edu
 Office: Hale Kāko‘o 107 (Wednesdays)

Mykie Ozoa-Aglugub
 Title IX Coordinator
 Hale Kāko‘o 109
mozoa@hawaii.edu
 808-235-7468

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 <https://manoa.hawaii.edu/titleix/>



I strongly uphold the University of Hawai‘i’s non-discrimination policy in my class. Any discriminatory acts or language on the basis of race, religion, sex, gender, gender identity, age, national origin, ancestry, disability, or sexual orientation will NOT be tolerated. We will maintain our classroom as a safe environment for all. [LGBTQ+ Equality | University of Hawaii System](#)

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

This syllabus is subject to change at any time at the discretion of the instructor. Students are responsible for keeping current with changes made to this syllabus. Be sure to check your school email for class announcements.

COURSE CALENDAR

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
WEEK 1	May 13 (Class Begins) R.2, R.4, 1.1	May 14 1.5, 1.6, 1.7	May 15 2.1, 2.2, 2.3	May 16 Class Canceled due to rain storm	May 17 No Class
WEEK 2	May 20 2.4, 2.5, 2.6	May 21 3.1, 3.2, 3.3	May 22 Review for Test 1	May 23 Test 1	May 24 Make up Class 4.1, 4.2, 4.3
WEEK 3	May 27 Memorial Day, No Class	May 28 4.4, 4.5, 4.6	May 29 5.1, 5.2, 5.3, 5.5	May 30 6.1, 6.2, 6.3	May 31 Class meets to make up for the holiday 6.4, 6.5, 6.6
WEEK 4	June 3 Review for Test 2	June 4 Test 2	June 5 7.1, 7.2, 7.3	June 6 7.4, 7.5, 7.6	June 7 No Class
WEEK 5	June 10 7.7, 8.1, 8.2	June 11 King Kamehameha Day, No Class	June 12 8.3, 8.4, 8.5	June 13 Review for Test 3	June 14 Class meets to make up for the holiday Test 3
WEEK 6	June 17 10.3, 10.4, 10.5	June 18 10.6, 11.4, 12.1	June 19 12.3, 12.4	June 20 Review for Test 4	June 21 No Class
WEEK 7	June 24 Test 4	June 25 Final Exam Review	June 26 Final Exam Review	June 27 (Class ends) Final Exam	June 28 No Class