



UNIVERSITY of HAWAII®
WINDWARD
COMMUNITY COLLEGE

Math 100 Survey of Mathematics

3 Credits (CRN 62114)

Monday - Friday 9:00AM-10:48AM

Math 78 College Math Companion

1 Credit (CRN 62113)

INSTRUCTOR: Kevin A. Takayama, Instructor

OFFICE: Hale Mana‘opono 105

OFFICE HOURS: by appointment

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EFFECTIVE DATE: Summer 2022

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 78: College Math Companion (1 credit)

This course provides students concurrently enrolled in MATH 100, MATH 101, MATH 111, or MATH 115 with Just-In-Time support with special emphasis on pattern recognition and problem solving. Course topics are tailored to the concurrent course and may include ratio and percent, unit conversion, graphs, data interpretation, basic algebra, solving linear equations, and working with formulas. (One Lecture Hour)

Pre-Requisite(s): Satisfactory Placement Score

Math 100: Survey of Mathematics (3 credits)

An introduction to quantitative and logical reasoning for the nonscience/nonmathematics major. The question, “What is mathematics?” is explored, while focusing on mathematical systems or models, cultivating an appreciation for mathematics as an aesthetic art, and developing skills in problem solving and analysis. (3 hours lecture)

Pre-Requisite(s): C or better in MATH 25, 26, 28, 29, 75X or higher or equivalent, co-requisite enrollment in Math 78, satisfactory math placement test score, or consent of instructor.

STUDENT LEARNING OUTCOMES

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

1. Utilize basic properties and/or operations related to the topics covered in the course
2. Employ symbolic/mathematical techniques to solve applied problems
3. Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form

FOUNDATION Quantitative Reasoning HALLMARKS

Math 100 fulfills 3 credits of the General Education requirements (Foundations: Quantitative Reasoning) for both an A.A. degree at WCC and a Bachelor's degree at UH Manoa. To satisfy the Quantitative Reasoning requirement, a course will

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 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.

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 completing and turning in all assignments as requested, by taking unit exams, and by taking a final exam over concepts and skill covered in the entire course. Unit exams and the final exam are to be taken without any references unless otherwise stipulated by the instructor.

Unless permission is granted by the instructor, 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, and tests as follows:

Homework. Homework sets will be graded on a 0 - 10 point scale. Assignments are to be completed on the designated date.

Weekly Quizzes. Weekly quizzes will be graded on a 0 - 5 point scale and will take place at the last meeting of every week. There is no make-up for a missed weekly quiz. Students must be present in class to participate.

Unit Exams. There are four unit exams. A unit exam will be approximately 75 minutes in length and will

be scored on a 100 point scale. There are no retests.

Exam Reviews. At least a day before each unit exam students will be assigned an exam review as preparation. This exam review must be fully completed on the day of the unit exam in order to take the exam.

Make-up. Make-up opportunity for exams will be possible only upon a timely presentation of a serious and justified explanation of the student's inability to take the exam on the designated date. The instructor has the right to request documentation of the student's inability to take the exam on the designated date is justified. **No more than one test or exam may be taken by a student on a make-up basis.**

Final Exam. The final exam will cover the concepts and skills in the entire course. The final exam is 2 hours in length and will be scored on a 200 point scale. There is no retest. There is no make-up.

Course grade. 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

Homework	30%
Quizzes	10%
Unit Exams	40%
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

- **Algebra: Graphs and Functions**
- **Personal Finance**
- **Logic**
- **Counting Methods**
- **Probability**
- **Statistics**

Skills or Competencies/Responsibilities of Students. Success in this course will be enhanced by:

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: Thinking Mathematically, 7th edition, by Pearson.

Required Material: Scientific calculator. Graphing calculators are not permitted.

TRiO: Hale Kāko‘o 116

Ka Piko Tutoring: <https://windward.hawaii.edu/services-for-students/tutoring/ka-piko/>

UH Manoa Online Learning Academy: manoa.hawaii.edu/ola/

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

ADDITIONAL INFORMATION

1. **Grading on Homework, Class Activities, 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. **Laulima.** The syllabus, course calendar, homework schedule, grades, etc. are all viewable through Laulima. Check Laulima regularly to stay up to date.

3. **Absences.** It is your responsibility to attend class. Even if you are absent, you are responsible for those topics and examples covered in the class that you missed. Furthermore, you are responsible for obtaining any important announcements and assignments given during the class that 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. Absence and tardiness to class can have a negative impact on your success in this course. You are allowed 1 absence without consequence. **If you are absent 2 times, your overall grade will drop by 10%, one letter grade.** You will be deducted 10% of your overall grade for every 2 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.**

4. **Communication.** It is your responsibility to stay in communication with the instructor. If you are unable to complete assignments for any reason, please inform your instructor so it may be determined if extensions are needed. 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.

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, 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:

UH Confidential Advocate
Phone: (808) 348-0663
Email: advocate@hawaii.edu

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

Karla K. Silva-Park, Title IX Coordinator
Phone: (808) 235-7468
Email: karlas@hawaii.edu
Office: Hale Kāko‘o 128

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/

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

Tuesday, May 31: 7.1 & 7.2

Wednesday, June 1: 7.6

Thursday, June 2: 8.5, 8.6

Friday June 3: 8.7, 8.8

Monday, June 6: Exam 1 Review

Tuesday, June 7: **Exam 1**

Wednesday, June 8: 3.1, 3.2

Thursday, June 9: 3.3, 3.4

Friday, June 10 – Kameahameha Day

Monday, June 13: 3.5, 3.6

Tuesday, June 14: 3.7, 3.8

Wednesday, June 15 – Study at TRiO

Thursday, June 16: Exam II Review

Friday, June 17: **Exam II**

Monday, June 20: 11.1, 11.2

Tuesday, June 21: 11.3, 11.4

Wednesday, June 22: 11.5, 11.6

Thursday, June 23: 11.7, 11.8

Friday, June 24 – Study at TRiO

Monday, June 27: Exam III Review

Tuesday, June 28: **Exam III**

Wednesday, June 29: 12.1, 12.2

Thursday, June 30: 12.3

Friday, July 1 – Study at TRiO

Monday, July 4 – 4th of July

Tuesday, July 5: 12.4

Wednesday, July 6: 12.5

Thursday, July 7: Exam IV Review

Friday, July 8: **Exam IV**

Monday, July 11: Final Exam Review

Tuesday, July 12: Final Exam Review

Wednesday, July 13: **Final Exam**

Thursday, July 14

Friday, July 15