



UNIVERSITY of HAWAII*
WINDWARD
COMMUNITY COLLEGE

Math 100 Survey of Mathematics

4 Credits (CRN 64479)

TTh 1:00 PM – 2:15 PM

INSTRUCTOR: Kevin A. Takayama, Instructor
OFFICE: Hale Mana'opono 105
OFFICE HOURS: M-Th 11:15 AM – 12:15 PM or by appointment
TELEPHONE: 236-9283 **EMAIL:** ktakayam@hawaii.edu
EFFECTIVE DATE: Fall 2018

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

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 problemsolving 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.

Activities Required at Scheduled Times Other Than Class Times

MyMathLab is an online learning resource. Every night you will be assigned textbook homework and online assignments through MyMathLab. 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.

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. Utilize basic properties and/or operations related to the topics covered in the course
3. Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form

FOUNDATION 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 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.

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

Homework Exercises. Homework Exercise sets will be graded on a 0 - 10 point scale. Assignments are to be turned in at the beginning of class on the designated date. *Late homework will not be accepted.*

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 three unit exams and one unit quiz given in class. A unit exam will be approximately 75 minutes in length and will be scored on a 100 point scale, and the unit quiz will be scored on a 50 point scale. There is no retest.

Practice Tests. At least a day before each unit exam you will be assigned a practice test as preparation. This practice test must be fully completed on the day of the unit exam in order to take the exam. All practice tests can be found in Lualima.

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. Each 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	Note: Students must apply for the Cr/NC grading option at the Admissions Office. Consult the WCC Catalog for deadlines.
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	Note: W grade is given only when the student officially withdraws from the course at the Admissions Office. Consult the WCC Catalog for deadlines
F	< 60% of the total possible points	

LEARNING RESOURCES

Required Text: Thinking Mathematically, 6th edition, by Pearson.

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

Required MyMathLab Access: Included with the required text is an access code for MyMathLab. If you purchase the textbook secondhand, or through a retail outlet other than the WCC bookstore, you may also need to purchase an access code for MyMathLab. Our course ID for this semester: **takayama50699**

TRiO: Hale Kāko‘o 116

The Math Lab: La‘akea 220

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

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

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. Frequent or long periods of absence require a professional note justifying the absence.

4. **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.

5. **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 Disability Specialist Counselor to discuss reasonable accommodations that will help you succeed in this class. Ann Lemke can be reached at 235-7448, lemke@hawaii.edu, or you may stop by Hale 'Ākoakoa 213 for more information.

TITLE IX

Title IX prohibits discrimination on the basis of sex in education programs and activities that receive federal financial assistance. Specifically, Title IX prohibits sex discrimination; sexual harassment and gender-based harassment, including harassment based on actual or perceived sex, gender, sexual orientation, gender identity, or gender expression; sexual assault; sexual exploitation; domestic violence; dating violence; and stalking. For more information regarding your rights under Title IX, please visit: https://windward.hawaii.edu/Title_IX/.

Windward Community College is committed to the pursuit of equal education. If you or someone you know has experienced sex discrimination or gender-based violence, Windward CC has resources to support you. To speak with someone confidentially, contact Karla Silva-Park, Mental Health Counselor, at 808-235- 7468 or karlas@hawaii.edu or Kaahu Alo, Designated Confidential Advocate for Students, at 808-235- 7354 or kaahualo@hawaii.edu. To make a formal report, contact the Title IX Coordinator at 808-235-7393 or wcctix@hawaii.edu.

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: Alakai 121

Phone: 808-235-7422

Email: wcaa@hawaii.edu

Windward Community College is an equal opportunity, affirmative action institution.

Tentative Calendar
Fall 2018

	Monday	Tuesday	Wednesday	Thursday	Friday
Aug	20	21 Introduction, 7.1, 7.2	22	23 7.6	24
	27	28 8.5, 8.6	29	30 8.7, 8.8	31
Sept	3 Labor Day	4 Review for Exam 1	5	6 Exam 1	7
	10	11 3.1, 3.2	12	13 3.3	14
	17	18 3.4	19	20 3.5, 3.6	21
	24	25 3.7	26 3.8	27	28
Oct	1	2 Review for Exam II	3	4 Exam II	5
	8	9 11.1, 11.2	10	11 11.3, 11.4	12
	15	16 11.5	17	18 11.6	19
	22	23 11.7	24	25 11.8	26
Nov	29	30 Review for Exam III	31	1 Exam III	2
	5	6 General Election Day	7	8 12.1	9
	12 Veteran's Day	13 12.2	14	15 12.3	16
	19	20 12.4	21	22 Thanksgiving	23 Thanksgiving
	26	27	28	29	30

		12.5		Review for Mini Exam IV	
Dec	3	4	5	6	7
		Mini Exam IV		Review for Final Exam	
	10	11	12	13	14
		Final Exam			