

MATH 100 Survey of Mathematics

INSTRUCTOR: Robert Garry

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OFFICE: Mana'opono 110a

OFFICE HOURS: Monday and Wednesday 10:00 – 11:00, 1:00 – 2:00 or by Appointment

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EFFECTIVE DATE: Fall 2018

CRN 64314 Days MW 11:30 – 12:45 Room Manao 114

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.

Course 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 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.

Foundation Hallmarks

1. Students will be exposed to the beauty, power, clarity and precision of formal systems.
2. Instructors will help students understand the concept of proof as a chain of inferences.
3. Instructors will teach students how to apply formal rules or algorithms.
4. Students will be required to use appropriate symbolic techniques in the context of problem solving, and in the presentation and critical evaluation of evidence.
5. The course will include computational and/or quantitative skills.
6. Instructors will build a bridge from theory

Student Learning Outcomes

On completion of the course, the student will be able to:

- Utilize basic properties and/or operations related to the topics covered in the course
- Employ symbolic/mathematical techniques to solve applied problems
- Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form
- **Note: All SLOs assessments are embedded in class activities, homework, quizzes, or Exams.**

Required Materials

Textbook: Blitzer. 2015. Thinking Mathematically, 6th ed., Pearson.

- Option 1: Buy the printed textbook from the bookstore with an Access Code included.
- Option 2: Buy access to MyMathLab directly online and get the e-book included.

Basic 5-function calculator (including square root key) or a scientific (non-graphing) calculator

Course Content

Concepts or Topics (What students should know or understand)

- Algebra: Graphs, Functions, and Linear Systems
- Personal Finance
- Logic
- Counting Methods and Probability Theory
- Statistics

Assessment

- Homework 40%
- Midterms 40%
- Final Exam 20% Thursday, December 12, 11:30 -1:30

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

CR/NC CR requires 70% or better of the cumulative points

W grade Official Withdrawl

I See: College Policies.

N grade: not given

Learning Resources:

- Math Lab: La'akea (Library Learning Commons) Room 220
http://windward.hawaii.edu/About_WCC/Math_Lab/index.php
- Testing Center: La'akea (Library Learning Commons) Room 228
Phone: 235-7498
http://windward.hawaii.edu/Testing_Center/index.php
- Brainfuse Online Tutors: <http://windward.hawaii.edu/Brainfuse/>

- OLA (UH online tutoring program): <http://manoa.hawaii.edu/ola/>
- TRiO: <http://windward.hawaii.edu/TRIO/index.php>
- WolframAlpha: <http://www.wolframalpha.com>
- Kahn Academy Videos: <http://www.khanacademy.org>

DISABILITIES ACCOMMODATION STATEMENT

*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 'Akoakoa 213 for more information.
or visit <http://windward.hawaii.edu/Disabilities>*