

MATH 100 SURVEY OF MATHEMATICS

INSTRUCTOR: Robert Garry

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OFFICE: Mana'opono 110a

OFFICE HOURS: Tuesday and Thursday 11:30 – 12:30 or by Appointment

TELEPHONE: (808) 236-9276

EFFECTIVE DATE: Spring 2017

CRN 64217 Days TR Time 8:30 – 9:45 Room Manao 115

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.

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

Student Learning Outcomes

The student learning outcomes are:

1. Construct diagrams that will facilitate the visual conception of a phenomenon or problem.
2. Utilize basic properties and/or operations related to Set Theory, Logic, Statistics, Linear and Quadratic functions and Counting methods.
3. Employ symbolic/mathematical techniques to solve applied problems.
4. 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.

Foundations Symbolic 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 to practice and show students how to traverse this bridge.

Required Materials

Text: Thinking Mathematically 6th ed by Blitzer

Calculator: A basic 5 function calculator is allowed

MyMathLab online access (an access code is included with the textbook, or available for purchase separately). Course ID: garry15964

Course Content

- Problem Solving and Critical Thinking Ch. 1 all sections
- Graphing and Functions Ch. 7.1
- Linear Functions and Their Graphs Ch 7.2
- Modeling Data: Ch. 7.6
- Set Theory Ch. 2 all sections
- Logic Ch. 3 all sections
- Probability Theory Ch. 11.1 – 11.7
- Statistics Ch. 12.1 – 12.5

Assessment

- Homework 60%
- Midterms 30%
- Final Exam 10% Thursday May 11th at 8:30

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

N grade See: Math Department Policies.

Learning Resources:

- AHI: Amber Hakkei-Nagaoka Email: amberhn@hawaii.edu
- Testing Center: La'akea (Library Learning Commons) Room 228 Phone: (808) 235-7498
http://windward.hawaii.edu/Testing_Center/index.php
- Math Lab: La'akea (Library Learning Commons) Room 220
http://windward.hawaii.edu/Math_Lab/
- Brainfuse Online Tutoring: <http://windward.hawaii.edu/brainfuse/>
- OLA (UH Online Tutoring): <http://manoa.hawaii.edu/ola/>

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.