

No Pre-requisites. Quantitative Reasoning is an entry level course.

Viewing Life Mathematically' (2nd Edition): Hawkes Learning. (*Available through Day One in BlazeVIEW.*)

Scientific calculator

This course emphasizes quantitative reasoning skills needed for informed citizen0 (ti)48i zen0

1. Recognize the impact of quantitative reasoning and mathematics on society and their disciplines.
2. Make informed decisions after engaging in mathematic reasoning.
3. Interpret numbers by grounding their meaning in reality.
4. Solve multi-step problems using different modes of reasoning.
5. Model quantitative information by interchangeably using symbolic, visual, numerical, and representations.
6. Construct logical arguments based on the rules of inference and develop strategies for quantitative problems.
7. Engage in proportional reasoning to solve real-world problems.
8. Understand the basic concepts of probability.
9. Appropriately use the concepts of central tendency, variation, and distribution, and statistical reasoning in order to make sense of data.
10. Utilize technology in order to model, analyze, and interpret data.
11. Discern and appreciate the usefulness of mathematics in domains such as the art



- 3.1 Logic Statements and Their Negations
- 3.2 Truth Tables
- 3.3 Logical Equivalence and De Morgan's Laws
- 3.4 Valid Arguments and Fallacies
- 5.4 Linear Inequalities in Two Variables
- 5.5 Linear Programming
- 5.6 Modeling with Quadratics
- 5.7 Exponential and Logarithmic Functions
- 7.1 Numerical Systems Based on Position
- 7.2 Early Numeral Systems
- 7.3 Working with Base Number Systems
- 8.1 Prime Numbers
- 8.2 Modular Arithmetic
- 9.3 Angles and Trigonometry
- 10.5 Binomial Probability
- 10.6 Expected Value
- 11.4, The Normal Distribution
- 11.5 Confidence Intervals
- 12.1 The Science of Data
- 12.2 Data Wrangling
- 12.3 Data Exploration
- 12.4 Data Storytelling
- 13.1 How to Determine a Winner
- 13.2 Flaws in Voting Methods
- 13.3 Apportionment
- 13.4 Weighted Voting Systems
- 14.1 Introduction to Graph Theory
- 14.2 Trees
- 14.3 Matchings
- 14.4 Planar Graphs

6-14 days