

OFFICIAL SYLLABUS
QR 101 – QUANTITATIVE REASONING
Effective Fall 2013

Catalog Description: Focuses on mathematical reasoning and real-life problems. Including management science, coding, social choice and decision making, size and shape, and modeling.

Textbook: Using and Understanding Mathematics: A Quantitative Reasoning Approach plus MyMathLab/MyStatLab Student Access Code Card, 5/E

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ISBN-10: 0321708954 ISBN-13: 9780321708953

Course Outline and Topics:

Chapter 2: Approaches to Problem Solving

- 2A: The Problem-Solving Power of Units
- 2B: Standardized Units: More Problem Solving Power
- 2C: Problem-Solving Guidelines and Hints

Chapter 3: Numbers in the Real World

- 3A: Uses and Abuses of Percentages
- 3B: Putting Numbers in Perspective
- 3C: Dealing with Uncertainty
- 3D: Index Numbers: The CPI and Beyond
- 3E: How Numbers Deceive: Polygraphs, Mammograms, and More

Chapter 4: Managing Money

- 4A: Taking Control of Your Finances
- 4B: The Power of Compounding
- 4C: Savings Plans and Investments
- 4E: Loan Payments, Credit Cards, and Mortgages
- 4F: Understanding the Federal Budget

Chapter 5: Statistical Reasoning

- 5A: Fundamentals of Statistics
- 5B: Should You Believe a Statistical Study?
- 5C: Statistical Tables and Graphs
- 5D: Graphics in the Media
- 5E: Correlation and Casualty

Chapter 10: Modeling with Geometry

- 10A: Fundamentals of Geometry
- 10B: Problem Solving with Geometry

Chapter 12: Mathematics and Politics

- 12A: Voting: Does the Majority Always Rule?
- 12B: Theory of Voting
- 12C: Apportionment: The House of Representatives and Beyond