Lesson Structure
Math 201 Online

Online homework is found in MyOpenMath and is graded electronically. All assignments have due dates. Each online homework and quiz completed 24 hours early with a score of 100% will receive 2 extra percentage points. Forum assignments are located under the Forum tab on MyOpenMath and are graded. You may repeat online homework unlimited times and quizzes three times until the deadline.

Written homework is in the text book and is due on exam days but in order to be successful in this class best to do homework daily. The assignments are on the Unit Checklist. <u>Do not wait until the last minute to do your homework; it does not work</u>. Follow the structure found on the Sample Written Homework document. Plan on spending 9 to 12 hours per week.

This course consists of 4 units

Unit 1: Problem Solving
Voting Theory
Apportionment

Unit 2: Growth Models
Finance
Sets

Unit 3: Statistics
Describing Data
Normal Distribution
Probability

Unit 4: Logic
Counting Systems
Cryptography

Typical Unit Tasks

- Download the Unit Checklist to guide you through the tasks for the unit
- Watch the video lesson found on MyOpenMath
- Use the Forum to ask questions and make comments about the material
- Attend the Virtual Classroom sessions
- Do the online homework and use the tutorials if you need help
- Complete the written homework from the text book
- Complete the online quiz
- Read the Exam Review found on the MyOpenMath
- Take the Practice Exam found on MyOpenMath
- Attend the Exam Review session on the Virtual Classroom
- Keep a positive attitude!

Course Content

Problem Solving
. Percent
. Absolute and Relative Change
. Proportions and Rates
. Dimensional Analysis
. Unit Conversions
. Geometry
. Estimation

Voting Theory
. Preference Schedules
. Plurality
. Instant Runoff Voting
. Borda Count
. Copeland's Method
. Approval Voting

Apportionment
. Hamilton's Method
. Jefferson's Method
. Webster's Method
. Huntington-Hill Method
. Lownde's Method

Growth Models
. Linear Growth
. Exponential Growth

Finance
 Simple and Compound Interest
. Annuity
. Loans

Statistics
. Populations and Samples
. Quantitative and Categorical Data
. Sampling Methods
. Sampling Bias

Describing Data
. Frequency Tables
. Graphs
. Measures of Center and Variation
. Boxplots

Normal Distribution
. Empirical Rule

Probability
. Basic Concepts of Probability
. Complementary Events
. Independent Events
. Mutually Exclusive Events
. Conditional Probability
. Expected Value

Sets
. Union, Intersection, and Complement
. Venn Diagrams
. Cardinality

Historical Counting Systems
. Inca Counting Boards
. The Quipu
. Hindu- Arabic Number System
. Different Number Bases
. Mayan Numeral System

Cryptography
. Substitution Ciphers
. Transposition Ciphers
. Public Key Cryptography
. Modular Arithmetic

Logic
. Boolean Logic
. Statements and Conditionals
. Truth Tables
. Inductive and Deductive Arguments
. Logical Fallacies