



Outline of Math in Society

Course Description

This course examines real world applications of mathematics and contains more concept and vocabulary than a conventional math course. Since the course focuses on application it is assumed that incoming students already have a good understand of Algebra and Intermediate Algebra. For students in healthcare, Math 107 often serves as a 100 level math pre-req that is in addition to Intro Statistics (MATH 146).

Course Mechanics:

- 3-5 hours of lecture a week (or 5 hours of online video)
- Weekly homework, quiz, and writing assignment
- One final (almost always in class)

A typical student should expect to spend about 3-5 hours in class (or watching online videos) and an additional 10-15 doing homework and studying per week.

Topics Covered and Required Prereq skills

Topic	Prereq required
Problem Solving	Intermediate Algebra Working with Functions
Voting Theory	Pre-Algebra Ratios, Proportions and Percent
Graph Theory/ Growth Models	Algebra I Graphing Functions/Exponents
Finance	Intermediate Algebra Working with Functions
Collecting Data/ Describing Data	Pre-Algebra Ratios, Proportions and Percent
Probability	Pre-Algebra Ratios, Proportions and Percent

PREPARING FOR THE COURSE

The following things can be done to help prepare for the course.

Prepare a notebook: Prepare a binder for keeping all of your returned math homework and quizzes. The final is most likely comprehensive; having all your completed and graded work neatly grouped by topic will help a lot with studying for the final. It may also be helpful to keep a running list of vocabulary in your notebook.

Purchase a scientific calculator: If you do not already own a scientific calculator, purchase one that allows you to see and edit your previous entry. Some calculators that can do this are: TI-30X IIS and the Ti-83 both from Texas instruments.

Brush up on your Algebra/Intermediate Algebra: If you have old algebra books revisit: ratios, proportions, percentages, working with functions, graphing equations (linear and conic), and exponents.

ADDITIONAL RESOURCES

ONLINE INTERMEDIATE ALGEBRA REVIEW:

[HTTPS://WWW.KHANACADEMY.ORG/MATH/ALGEBRA2](https://www.khanacademy.org/math/algebra2)

(Focus on: Functions and their graphs, and Exponential and Logarithmic Functions)

ONLINE ALGEBRA I AND II REVIEW:

<https://www.khanacademy.org/math/algebra>
(Relevant topics: Linear Equations, Graphing Linear Functions, Functions, Ratios and Proportions)

Training Fund Tutoring:

Both online and in-person group tutoring is available by request. Check out:

<http://healthcareerfund.org/tutoring/>