

Texts: Billstein, Boschmans, Libeskind, Lott: A Problem Solving Approach to Mathematics for Elementary School Teachers (Pearson Publ.) 13th ed.

Supplemental activities will be provided by instructor.

Course Supervisor: Thea Pignataro, email: thea@ccny.cuny.edu

Sections in Billstein, et al, with number of class hours to cover material:

8-1, 8-2, 8-3, 8-4	10 class hours
9-1, 9-2, 9-3, 9-4,	10 class hours
10-1, 10-2, 10-3, 10-4 (no standard deviation)	8 class hours
11-1, 11-2, 11-3, 11-4	10 class hours
13-1, 13-2 13-3 13-4, 13-5 (volume only in this section)	10 class hours
Total hours:	48 hours (there are 56 in the semester)

Math 185 - Course Learning Outcomes (CLO)

After taking this course the student should be able to:

	Contributes to Departmental Learning Outcome(s):
1. apply a number of different strategies (Including simple algebra) to solve a variety of problems.	a, b, c
2. solve linear equations involving fractions, decimals, and percents.	a, b, c
3. identify when relationships involve ratios and proportions and solve problems involving them.	a, b, c
4. translate real-world relationships into equations and solve them.	a, b, c
5. demonstrate a knowledge of the relationship, as well as the distinction, between theoretical and empirical probability.	a, c, e1
6. analyze games, compute probabilities of complementary and compound events, and solve simple counting problems.	a, b, c, d, e1
7. interpret statistical graphs and numerical data, as well as calculate and use measures of central tendency and variation.	a, b, c, d
8. understand and distinguish units of length, area, and volume.	a, e1
9. understand and apply unit conversion in 1, 2, and 3 dimensions.	a, c, d
10. recognize two dimensional figures (e.g. rectangles, parallelograms, triangles, trapezoids and circles) and understand their properties, including the Pythagorean Theorem.	a, b, c, e1, e2
11. explore simple properties of solid figures.	c, e1, e2
12. explain orally and in written form the meaning of mathematical terms, operations and theorems, as well as solutions to problems.	a, e1, e2

Note: use of technology is limited to the use of a scientific calculator

DEPARTMENTAL LEARNING OUTCOMES

The mathematics department, in its varied courses, aims to teach students to

- perform numeric and symbolic computations
- construct and apply symbolic and graphical representations of functions
- model real-life problems mathematically
- use technology appropriately to analyze mathematical problems
- state (e1) and apply (e2) mathematical definitions and theorems
- prove fundamental theorems
- construct and present (generally in writing, but, occasionally, orally) a rigorous mathematical argument.