MATH 100

FOUNDATIONS OF MATHEMATICAL REASONING COURSE OUTLINE

LESSON #	TOPIC & CONTEXT	NUMBER OF WEEKS
1 & 2	Large and small numbers in civic life: Reasoning with and representing small and large numbers; scientific notation	1.5
3	Percentages and estimation in personal finance: Percent increase, decrease; relative and absolute change	0.5
4 & 5	Data displays in personal finance and civic life: Spreadsheets; stem-and-leaf, dotplots, histograms, boxplots, pie charts, line graphs	1.5
6&7	Statistical summaries and interpreting quantitative information: Measures of center and dispersion, shapes; numeracy in finance	1.0
8&9	Risk assessment: Two-way contingency tables; reasoning with probability	1.5
10	Ratios and proportions in civic life	0.5
11	Geometric reasoning in personal finance	0.5
12	Dimensional analysis	0.5
13 & 14	Algebraic Formulas in civic life and in risk assessment	1.5
15, 16, 17 & 18	Proportional reasoning and linear equations	3.0
	Systems of linear equations	0.5
	Reviews and tests	1.5
	Total:	14.0

Textbook: Charles A. Dana Center at the University of Texas at Austin, <u>Student in-Class</u> <u>Notebook for Foundations of Mathematical Reasoning</u> and student access code to MyMathLab. Boston: Pearson, 2016. ISBN 0134467515