

MA100 SYLLABUS – DR.TREVORROW

DATE	TOPIC	SECTION	IDEAS	HOMEWORK	DISCUSSION AND CONCEPT QUESTIONS
	Problem Solving	1.1	Polya, Pascal, Patterns,	4,6,7,8,10,14-17 25-28, 40,41, 49, 50	Terms - Arithmetic, Mathematics, Numeral, Number, Symbol, Equation, Operators
	Types of Reasoning	1.2	Inductive, Deductive, Scientific Method	1-10, 15-17, 24-26, 47-52, 55	Why are there different types of reasoning, what are their assumptions and limitations. Are there other types of reasoning
	Scientific Notation, Estimation	1.3	Exponential , Scientific Notation, Estimation, Orders of Operation	1-10,15,24-34, 41,48,50,55	Research the difference between estimating and approximating. How is scientific notation different than exponential notation? Why is scientific notation used? European Billion vs. US Billion.
	Interest	9.1	Simple, Exact, Ordinary, Compound, Future Value, Inflation	1-10,12,18,24, 28,33,35,43,48 , 50	Why is interest charged? When might simple interest be used? When the media reports inflation are they using "e".
	Installment Buying	9.2	Types of loans, Apr, Credit Card Interest	1-10,12,18-22,25,35,41-45,47, 49, 51,53	What is the main difference between an Apr loan and a Simple Interest Loan? If both Apr and SI are the same number, which is more expensive, why? How do you convert SI to Apr?
	MID TERM				
	Probability	11.1	Experiment , Event, Sample Space, And/Or Events	1-5,9,11,13,23, 25,27, 41,49,53, 56	If the theoretical <> experimental probability give 2 explanations. What is a probabilistic model? What is the most likely sum for a pair of dice?
	Mathematical Expectation	11.2	Expected Value, Fair Game, Average Return	1-5,7-10,13,15, 17 ,19,20,23,25 ,27,30, 45,49, 51 ,52	Explain Ev in layman terms. Why must complimentary probability always equal 1?
	Frequency Distribution and Graphs	12.1	Tally, Frequency, Types, Misleading	1-5,9,10,17,19 35,37, 42,45,55	Why are graphs used? What are the advantages and disadvantages of using graphs? According to the text what type of graph is most common, and why? From newspapers or magazines what do think is the most common type of graph today?
	Descriptive Statistics	12.2	Measures of Central Tendency, Dispersion, Box Plot	1-4,6-10,13,15 30,31,37,41,53 ,55	What does a box plot show? If the mean, median and mode are all the same what does this mean? How are range and variance different?
	END TERM				