MTH 111 – Introduction to Probability and Statistics

with Integrated Review

Syllabus

Text: M. F. Triola, *Elementary Statistics (14th ed.) with Integrated Review & MyLab, Pearson, 2021. ISBN-13: 978-0-13-7374748*

Below is a sample listing of the regular class meetings including computer lab meetings. Each lesson is a 2 hour class. When the computer labs will be held depends on room allocation for each section of the course. The class meetings containing the integrated review are listed separately.

Lesson	Date	Chapter	Topic
1		1	Introduction; Statistical and Critical Thinking;
2		1	Collecting sample data; Computer Lab #1
3		2	Frequency Distributions, Histograms; Statistical Graphics; Bad Graphs
4		3	Measures of center; Computer Lab #2
5		3	Measures of variation
6		3	Measures of relative standing; Computer Lab #3
7			**Review for exam 1**
8			**Exam 1**
9		4	Basic concepts of probability; Computer Lab #4
10		4	Addition rule, multiplication rule
11		4	Counting (permutations, combinations)
12		5	Random variables, binomial probability distributions
13		6	The standard normal distribution
14		6	Applications of normal distributions; Central Limit Theorem
15		6	Approximating binomial with normal distributions; Computer Lab #5
16			**Review for Exam 2**
17			**Exam 2**
18		7	Confidence Intervals; estimating a population proportion
19		7	Estimating a population mean I; Computer Lab #6
20		7	Estimating a population mean II; Computer Lab #7

21		8	Basics of Hypothesis Testing
22		8	Testing claims about proportions and means
23		9	Inferences from two samples: proportions, means; Computer Lab #8
24		11	Goodness of fit
25		11	Contingency tables; Computer Lab #9
26		10	Correlation and Regression
27			**Review for Final Exam, Q&A**
28			**Review for Final Exam, Q&A**

For the integrated review, each lesson is a 2 hour class. There is one meeting per week.

Lesson	Topic
1	Elementary Algebra
2	Units of Measurement
3	Exponents
4	Significant Digits, Scientific Notation, Rounding
5	Fractions
6	Convert between Fractions, Decimals, and Percent
7	Graphing Skills
8	Order of Operations, Square Roots
9	Evaluate Expressions and Formulas, Solving linear equations
10	Review of basic Set Theory (Union, Complement, Intersection)
11	Area
12	Inequalities, Interval Notation
13	Evaluation of Complicated Formulas
14	Review of Linear Functions and Lines