UNIVERSITY of MEMPHIS **DEPARTMENT of MATHEMATICAL SCIENCE**MATH 1530-502

Probability and Statistics Spring-2019 SYLLABUS

INSTRUCTOR: Dr. Joseph Kelman E-mail: <u>jkelman@memphis.edu</u>

PREREQUISITE: MATH 1100 or MATH 1420 or MATH 1710

with a minimum grade of C- or a minimum score of 46 on the ALEKS Math Assessment

DESCRIPTION: 3.0 Credit Hours

Underlying ideas of statistical and

quantitative thinking

TEXT/MATERIALS: Statistical Reasoning for Everyday Life by

Bennett, Briggs and Triola, Pearson

Publishing, 2014, 4th edition

The textbook will come with online access

code to MyMathLab

MyMathLab Course ID: kelman24813

Graphing Calculator TI-83 or 84 is strictly required

COURSE OBJECTIVIES: To expand the students' knowledge of

randomization in sample survey methods and design of experiments; double blind experiments and observational studies; descriptive and summary statistics; measurement errors; probability models; normal approximation; tests of significance and p-values, basic concepts of correlation

and regression analyses.

STUDENT POPULATION: Lower division students. The course satisfies a

General Education requirement

METHODS: This course is lecture based

HOMEWORK:

Homework assignments should be done on line using MyMathLab. It gives to the students additional help needed for successfully passing the course. Immediate help can be obtained by using the following options: "Help Me Solve This", "View an Example", "Textbook". Students can also use the option "Ask My Instructor" to send a question to the instructor. Instructor will respond within 24 hours. The homework will be checked at a time of grading.

EVALUATION:

Three multiple-choice current tests and one multiple-choice comprehensive final exam will be given in class on paper during the semester. In case of failure, a student with the perfect attendance record (no class is missed, timely arrival and departure) and complete homework (the grade for each homework assignment should be at least 90% and all assignments should be complete) will be allowed to retake one current test per semester. A make-up test should be taken within one week after test results are announced.

INSENTIVITES:

The instructor will add extra 5% to a current test score rewarding for the perfect attendance (no class is missed, timely arrival and departure) and extra 5% rewarding for excellent homework performance (all homework assignments should be gone with at least 90% score). However, the grade for a test cannot exceed 100%.

GRADE CALCULATIONS:

A test score will be calculated by the formula: $T = \frac{N-I}{N}$, where N is the total number

of questions on the test and I is the number of questions answered incorrectly. The course grade will be calculated by the formula: $C = 0.75 \times A + 0.25 \times F$, where A is the average score of four current tests and F is the final exam score.

GRADING SCALE:

A: 90%-100%, B: 80%-89%, C: 70%-79%, D: 60%-69%, F: below 60%

COURSE OUTLINE:

Month	Date	Day	Section/Assignment
January	15	Т	1.1, 1.2, 1.3, 1.4
	22	Т	2.1, 2.2, 2.3
	29	Т	3.1, 3.2, 3.3
February	5	Т	3.4, Review, 4.1
	12	Т	Test # 1
	19	Т	4.2, 4.3, 4.4
	26	Т	5.1, 5.2, 6.1
March	5	Т	Spring Break
	12	Т	6.2, 6.3, Review
	19	Т	Test # 2
	26	Т	6.4, 6.5
April	2	Т	7.1, 7.2, 7.4
	9	Т	7.3, 8.1, 8.2
	16	Т	8.3, 9.1, Review
	23	Т	Test # 3, Review
	30	Т	Final Exam