MATH 3332/1, Probability and Inference

Course Syllabus

Kennesaw State University, Summer 2020

1. Instructor

Name:	Bo Yang
Office:	Science Building (SC) 527
Phone:	470-578-6102
E-mail:	Email me through D2L
Office hours:	Online on a daily basis, Links will be provided in D2L

2. Reference Book

Probability and Statistical Inference (11th Edition), by Robert V. Hogg and Elliot Tanis.

3. Class Meetings

Online at D2L.

4. Course Description

(Prerequisite: A grade of "C" or better in MATH 2202)

This course is an introduction to probability and statistical inference. Topics include counting techniques, discrete and continuous univariate and multivariate random variables, expectation, moment generating functions, the Central Limit Theorem, estimation, and confidence intervals.

5. Evaluation and Grading

Your grade will be determined by your performance on online quizzes, homework assignments, three in-class exams, and one two-hour comprehensive final exam. The exam dates are listed below.

Exam 1	6/15/2020 (M) 8:00 AM – 9:00 AM
Exam 2	6/29/2020 (M) 8:00 AM – 9:00 AM
Exam 3	7/10/2020 (F) 8:00 AM – 9:00 AM
Final Exam	7/17/2020 (F), 8:00 AM – 10:00 AM

Note that the exam dates are subject to change. If you are not able to attend one of the scheduled exams for some reason, let me know and I will provide a different time slot for you. Note that being unprepared

is not a reason for missing an exam.

A student can earn up to 730 points in the course based on the following activities:

Three In-class Exams	360 points (120 points each in-class exam)
Final Exam	200 points
Online Quizzes	80 points
Homework Assignments	90 Points

At the end of the semester, the letter grade with be based on the number of points the student earns according to the following scheme:

657 – 730 points	A
584 – 655 points	B
511 – 583 points	C
438 – 510 points	D
0 – 437 points	F

6. Learning Outcomes

Upon successfully completing this course, students will be able to:

1. Compute classical probabilities using counting techniques and conditional probabilities.
2. Compute probabilities using discrete and continuous distributions, including the Hypergeometric, the Binomial and the Poisson.
3. Use moment generating functions to find properties of a random variable.
4. Be able to apply the Central Limit Theorem to estimation and confidence interval problems.
5. Build confidence intervals to estimate population parameters such as means, and proportions from statistical data.