JINAN UNIVERSITY

Introduction to Statistics

Lecturer:TBA
Time: Monday through Friday (July1, 2019-August 2, 2019)
Office hours: 2 hours (according to the teaching schedule)
Contact hours: 60 (50 minutes each)
Credits: 4
Location: School of Tourism
Office: School of Tourism 210
E-mail: TBA

Course Description

Statistics and probability constitute the mathematics of uncertainty. This is an introductory course that gives the student's knowledge on both descriptive and inferential statistics. Topics include graphic and numerical representations of various types of data; probability and statistics, discrete and continuous probability distributions; sampling and estimations; statistical inferences.

Required Text:

David M. Levine, Kathryn A. Szabat, David F. Stephan, Business Statistics : A First Course, 7th edition, Pearson.

Course Hours

The course has 25 sessions in total. Each class session is 120 minutes in length. The course meets

from Monday to Friday.

Calculator: A calculator with a square root key will be needed for the homework, quizzes and exams. You should bring your calculator to class every day.

Assignments and Graded Work:

Homework: There will be regular homework assignments. It is very important to do all the homework. Students are encouraged to work together on the homework problems.

Attendance Students are expected to be in class every day for the full class period. Material will be covered very quickly; it will be difficult to catch up, should one fall behind.

Exams: There will be four exams and a comprehensive final exam. Cell phones must be turned off and put away during exams.

Grading Policy

Homework, Attendance and In-class work   15%

Midterm exams   60% (15% each)

Final Exam   25%

Total   100%

Make-Ups:

There will be no make-ups, however the lowest test score will be replaced by the final exam score.

Grading Scale

The instructor will use the grading system as applied by JNU:

Definition	Letter Grade	Score
Excellent	A	90-100

Good	B	80-89
Satisfactory	C	70-79
Poor	D	60-69
Failed	E	Below 60

Approximate Day-to-Day Schedule: This syllabus is subject to change

Course Schedule

WEEK ONE:

- Collecting Data

- Types of Sampling Methods

- Discrete and Continuous Variables

- Organizing Categorical Variables

- Organizing Numerical Variables

- Numerical Descriptive Measures

WEEK TWO

- Basic probability

- Discrete Probability Distributions

- Expectation

- Variance, covariance, correlation

- Bayes' Theorem

- Binomial and Poisson probability distributions

WEEK THREE

- Normal distribution

- Sampling distributions

- The Central Limit Theorem

- Distribution approximation

WEEK FOUR

- Large-sample estimation, test of hypotheses

- Point, interval and difference estimations

- Sample-size calculations

- Testing hypotheses and P-values

WEEK FIVE:

- Statistical inferences from small samples

- Student's t distribution

- Small sample inferences

- Two sample tests of hypothesis

- Linear Regression and correlation

Academic Honesty

Jinan University defines academic misconduct as any act by a student that misrepresents the students' own academic work or compromises the academic work of another. Scholastic misconduct includes (but is not limited to) cheating on assignments or examinations; plagiarizing (i.e. misrepresenting as one´s own work any work done by another); submitting the same paper or substantially similar papers to meet the requirements of more than one course without the approval and consent of the instructors concerned; or sabotaging another´s work. Within these general definitions, however, instructors determine what constitutes academic misconduct in the courses

they teach. Students found guilty of academic misconduct in any portion of the academic work will face penalties ranging from lowering of their course grade to awarding a grade of E for the entire course.