Math 375 – Introduction to Statistics, Spring 2020

Instructor: Dr. Dao Nguyen
Office: Hume Hall 322
Office hours: M W 10:00am-11:15 am
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COURSE INFORMATION:
Text: Statistics for Engineers and Scientists, 4th edition, by William Navidi
Course website: http://connect.mheducation.com/class/d-nguyen-spring-2020-mwf-100-150pm
Time/Place: M W F 1:00-1:50pm; Hume Hall 113

DESCRIPTION:
This course is an introduction to statistics for students in mathematics, engineering and computer science. We will cover the following topics: descriptive statistics, basic probability with coverage on Bayes rule and application to reliability analysis, random variables, common distributions including Binomial, Poisson, Exponential, Normal and t distribution, Central Limit Theorem, large/small sample confidence intervals and hypothesis tests, simple linear regression with emphasis on model diagnostic procedures. Statistical software R will be implemented for demonstration of statistical methods. One-semester calculus background is assumed.

LEARNING OBJECTIVES:
After completing this course, students enable to

- Understand basic probability concepts and probability models;
- Know which statistical method is appropriate given a typical problem;
- Apply statistical procedures to data and interpret results;
- Have familiarity with Statistical Software R;
- Enhance critical statistical thinking.

GRADE INFORMATION:

- Class attendance – Attendance is mandatory.
- Homework – There are 10 online assignments totally worth 30% of the course grade.
- Tests – There are 2 midterm exams each counting for 20% and a final exam counting for 30%. The test dates are listed below. No make-up tests will be given except in cases of verified emergencies.

A 93-100%	A- 90-92%	B+ 87-89%	B 83-86%	B- 80-82%
C+ 77-79%	C 70-76%	D 60-69%	F below 60%	

ACADEMIC CONDUCT AND DISCIPLINE:
Students are expected to adhere to the University of Mississippi Creed and the Standards of Honesty as described in Policy Code ACA.AR.600.001 and written in the M Book. If you violate the Standards of Honesty, you will be reported and subject to the appropriate sanction which may include expulsion from the University.

DISABILITY ACCESS AND INCLUSION:
The University of Mississippi is committed to the creation of inclusive learning environments for all students. If there are aspects of the instruction or design of this course that result in barriers to your full inclusion and participation, or to accurate assessment of your achievement, please contact the course instructor as soon as possible. Barriers may include, but are not necessarily limited to, timed exams and in-class assignments, difficulty with the acquisition of lecture content, inaccessible web content, and the use of non-captioned or non-transcribed video and audio files. If you are approved through SDS, you must log in to your Rebel Access portal at https://sds.olemiss.edu to request approved accommodations. If you are NOT approved through SDS, you must contact Student Disability Services at 662-915-7128 so the office can: 1. determine your eligibility for accommodations, 2. disseminate to your instructors a Faculty Notification Letter, 3. facilitate the removal of barriers, and 4. ensure you have equal access to the same opportunities for success that are available to all students.

TENTATIVE AGENDA: If changes are made, you will get advance notification in class.

Week/Date	Topic	Activity
Week 1	*Chapter 1: Sections 1.1-1.3*	*HW 1*
Weeks 2-3	*Chapter 2: Sections 2.1, 2.3, 2.4*	*HW 2, HW 3*
Weeks 4-6	*Chapter 4: Sections 4.1-4.3, 4.5,4.7,4.10, 4.11*	*HW4, HW5*
March 4	*Chapters 1,2,4*	*Midterm Exam 1*
Weeks 7	*Chapter 5: Sections 5.1-5.2*	*HW6*
Weeks 8	☺	*Spring break*
Weeks 9-12	*Chapters 5-6*	*HW7, HW8, HW9*
April 15	*Chapters 5-6*	*Midterm Exam 2*
Week 13-14	*Chapter 7: Sections 7.1-7.4*	*HW10*
Week 15	*Review for final exam*	
May 6, Wednesday@12:00pm	*Cover all chapters*	*Final Exam*