

MATH1369- Elementary statistics

Spring 2018- Course Syllabus

Instructor : Kasun Dewage
Class Hours : MWF 8:00 -9:00 am in LDB 209
Office Hours : MW 10.00-11.00am or by appointment in LDB 414
Email : Ktd010@shsu.edu

COURSE OBJECTIVES:

The learning outcomes for this course shall include but not be limited to the following:

1. Statistics as the science of learning from data and its use in decision making to everyday real world problems.
2. Gain knowledge on different graphical representations of data.
3. An understanding of the meanings of various descriptive statistics.
4. Develop proficiency in solving various probability problems.
5. Gain an understanding and be able to apply the Central Limit Theorem.
6. A collection of statistical methods (point estimation, confidence interval, hypothesis testing and simple linear regression) for analyzing and interpreting the data and an understanding of the reasoning for statistical inference.
7. An understanding of the reasoning by which finding from sample data can be extended to general conclusions..

COURSE DESCRIPTION: Introduction to Statistics, organization and description of data, basic probability principles, some discrete and continuous probability distributions, sampling distribution, point estimation, confidence interval estimation, hypothesis testing, small sample inferences, comparing two treatments, and simple linear regression.

We will focus on the real world problems from 1 different field such as medical sciences, social sciences, life sciences, business & engineering among others to provide necessary background on data analysis techniques. We will spend ample amount of time in clarifying the basic concepts by illustrating varieties of examples.

QUIZZES: Every Week there is a short quiz based on on previous homework. The quizzes will be closed book and closed notes. There will be no make-up quizzes. The lowest one quiz grade will be dropped.

ACTIVE LEARNING & HOMEWORK: Students are asked to read the textbook and try and do the assigned problems prior to the class. Every Friday random students has to go to the board and explain what they understood about the homework problems. Based on his written work and explanations, points will be added and if the called student is not present, no marks will be given.

Please Note- You are highly encouraged to work as groups, get help from your classmates to do your homework, even use their work as a reference but expect to write the answer in your own words, refer online sources but you have to understand the concepts and not allowed to copy it as it is. Also you have to mention your reference. Your understanding will be evaluated when you ask to explain the problems in front of the class. Also helping your classmates are highly appreciated. "There is no self-made man who does not take others help or does not help others" "Consider your class buddies as a team.

EXAMS: Many exam problems will be similar to Homework problems, Quiz problems or worked examples in the class.

If you arrive late to an exam, you may still take the exam in the remaining time as long as no body has finished the exam yet.

No exams will be dropped, and there will be no do overs.

GRADING POLICY:

| | |
|---------------------|------|
| Active Learning | 10% |
| Quizzes | 10% |
| Three Midterm Exams | 40% |
| Final Exam | 40% |
| Total | 100% |

GRADING SCALE:

| | | |
|--------------|---|----------|
| 90% or above | - | A |
| 80%-89% | - | B |
| 70%-79% | - | C |
| 60%-69% | - | D |
| Below 60% | - | F |

CLASSROOM ETIQUETTE: Classroom behavior that interferes with (a) the instructor's ability to conduct the class or (b) the ability of students to benefit from instruction is not acceptable. Examples of such behaviors include routinely entering the class late or departing early; use of beepers, cellular phones, or other electronic devices; repeatedly talking in class without being recognized. If a student must carry a beeper/cell phone to class, prior notice and approval of the instructor is required.

MAKE UP EXAM POLICY: If you miss an exam, you will be expected to show appropriate cause in writing. If you must miss an exam, I expect you to contact me beforehand. If that is impossible, then you must contact me no later than 24 hours after the exam. If you miss an exam and have not contacted me by this time, you forfeit the right to a makeup

ACADEMIC DISHONESTY: All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an examination or other academic work which is to be submitted,

plagiarism, collusion and the abuse of resource materials. The university policy and procedures in case of alleged academic dishonesty is explained in Academic Policy Statement 810213:

<http://www.shsu.edu/dotAsset/728eec25-f780-4dcf-932c-03d68cade002.pdf>

INCOMPLETE GRADE POLICY: An "X" grade indicates incomplete coursework and may be awarded students. See full policy

at <http://www.shsu.edu/gradcat/scholasticrequirements.html>

STUDENT DISABILITY POLICY: It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance should register with the Office of Services for Students with Disabilities located in the Lee Drain Annex (telephone 936-294-3512, TDD 936-294-3786, and e-mail disability@shsu.edu). They should then make arrangements with their individual instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired. SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Services for Students with Disabilities and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: No accommodation can be made until you register with the Services for Students with Disabilities. See the university policy at:

http://www.shsu.edu/dotAsset/7_819c3-39f3-491d-b688-db5a330ced92.pdf

RELIGIOUS HOLIDAYS: University policy states that a student who is absent from class for the observance of a religious holiday must be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence. Students must be excused to travel for observance of a religious holiday. A student who wishes to be excused for a religious holiday must present the instructor with a written statement describing concerning the holiday(s) and the travel involved. The instructor should provide the student with a written description of the deadline for the

completion of missed exams or assignments. See the university policy for religious holidays at:

<http://www.shsu.edu/dotAsset/0953c7d0-7c04-4b29-a3fc-3bf0738e87d8.pdf>

ACADEMIC POLICY MANUAL: For a complete listing of the university policy, see <http://www.shsu.edu/dept/academic-affairs/aps/aps-students.html>