MATH/STAT 3379: section 15, ONLINE, Fall 2017

STATISTICAL METHODS IN PRACTICE, Distance Learning

Instructor:

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Instructional Methodology

This course is taught as an Internet-based distance learning class.

IS the ONLINE class right for you?

Consider the following statements:
1. I usually complete homework and assignments **on time**.
2. In doing homework **I can usually do it with little or no help**.
3. I can easily follow the textbooks.
4. I am a self-motivated learner when it comes to studying.
5. It is not important to me to meet with my instructor.
6. I classify myself as a highly independent learner.
If you agree with the statements above, you are probably suited to Online class.

OFFICE HOUR: LDB 439C

T, Th: 10:00 - 10:50 a.m.
M, W: 1:00 - 2:00 p.m., or by appointment.

REQUIRED MATERIALS:

Textbook: Introductory Statistics, Weiss 10 e, Pearson.
ISBN: 9780321989352 (No need to buy the book when you enter the following access code)

Access Code for this course: WMSLSS-MUSIL-BAUTH-SKEAN-GLAIR-DENSE

Upgrade book: ISBN 978 0134193663 for $89 (If you want to print the material of the book).

Calculator: TI-83/plus or TI 84 plus.

Enter Your Blackboard Course:

1. Sign in to Blackboard and enter your Blackboard course.

2. Click on the MyStatLab button on the left navigation menu in your Blackboard Course.

3. Click on MyStatLab Assignments

4. This will start the registration process. Please see steps below to continue.

Get Access to Your Pearson Course Content:

1. Enter your Pearson account username and password to Link Accounts.

   You have an account if you have ever used a Pearson MyLab & Mastering product, such as MyMathLab, MyITLab, MySpanishLab, MasteringBiology or MasteringPhysics.

   If you don't have a Pearson account, select Create and follow the instructions.

2. Select Enter an access option and enter: WMSLSS-MUSIL-BAUTH-SKEAN-GLAIR-DENSE

3. From the You're Done page, select Go to My Courses.

Note: We recommend you always enter your MyLab & Modified Mastering course through Blackboard.
Get Your Computer Ready
For the best experience, check the system requirements for your product at:
http://www.pearsonmylabandmastering.com/system-requirements/
Need help?
For help with MyLab & Modified Mastering with Blackboard, go to:
http://help.pearsoncmg.com/mylabmastering/bbi/student/en/index.html
Tech Support Phone Number 24/7

800-677-6337

COURSE DESCRIPTION:

This course introduces the fundamentals of statistical concepts and will guide the student through basic statistical procedures to permit critical insight into the science of collecting, classifying, presenting, and interpreting information from the data. The three primary topics covered are 1) descriptive statistics (geographic presentation of data, histograms, plots, charts, measures of central tendency, dispersion, position, bivariate data analysis, linear correlation and regression analysis), 2) probability concepts and rules for calculating probabilities of compound events. The probability coverage also includes the more commonly occurring probability distributions such as the binomial and normal distributions. Finally, the third area of coverage is that of inferential statistics, including inferences involving one and two populations.

COURSE OUTLINE:

I will cover all of the sections in Chapters 1 through 12, except Chapter 11.

Skip Section 9.6; 9.7; 9.8; 10.4; 10.6; 10.7.

LEARNING OBJECTIVES:

1. Know how to differentiate of population versus sample, random variables, type of data, techniques of descriptive statistics including frequency distributions, histograms, stem and leaf plots, boxplots, and scatterplots.

2. Calculate and interpret measures of central tendency and dispersion, including mean, median, standard deviation, percentiles and quartiles.

3. Apply the rule 68-95-99.7 to bell-shaped distributions and use the normal tables to answer questions about the proportion of scores in a certain range or find various percentiles.

4. Analyze relationships between two quantitative variables using correlation and linear regression.

5. Use the basic ideas of probability and apply them to statistics.

6. Know how to calculate the mean and standard deviation of dicrete probability distribution, binomial, and normal distribution.

7. Apply ideas of appropriate sampling distribution using central limit theorem.

8. Use the sampling distributions of sample proportions and sample means to answer appropriate questions.

9. Estimate single means, difference of two means, single proportions and difference of two proportions using confidence intervals. Interpret the results.

10. Demonstrate skills in hypothesis testing for means and proportions, for single populations and comparison of two populations.

11. Know how to find sample size when you try to conduct a survey both for mean and proportion.

You will use a TI83 or 84/plus to do most of the calculations.

EXPECT FROM THIS COURSE:

Upon successful completion of this course, students will be able to:

1. Explain the use of data collection and statistics as tools to reach reasonable conclusions.

2. Recognize, examine, and interpret the basic principles of describing and presenting data.

3. Compute and interpret empirical and theoretical probabilities.

4. Explain the role of probability in statistics.

5. Solve linear regression and correlation problems.

6. Examine, analyze, and compare various sampling distributions for both discrete and continuous random variables.

7. Describe and compute confidence intervals.

8. Perform hypothesis testing using statistical methods.

STUDENT PARTICIPATION:

To be succesful in this Distance Learning course, you need to spend and work in and out of class about 9-12 hours per week. To be most effective, this should be spread over at least three different days each week.

1. Time requirement per week in this Distance Learning Course:

   a. 1-2 hours. Carefully compare your quiz work for the previous week to the solution keys to find any areas that you did not fully master.

   b. 3 hours: Work through the instructor prepared lessons.

   c. 3-4 hours: Work on problems from the textbook. (It is probably a good idea to combine this with working through the instructor-provided lessons, spending 6-7 hours on the combination of these.)

   d. 3 hours: Work on the homework and quiz.

2. Approximately every four weeks, take a paper-and-pencil test at Location you choose (2 hours). Bring your SHSU ID to the Exams. There is no proctor free exam for this class.

HOMEWORKS:

Every two or three days I will give you a homework through MyStatLab. Due 11:59 P.M
QUIZZESS: I will give you quiz once a week and due 11:59 P.M. on Monday.
EXAMS: You will be allowed to bring some notes in that can include definitions and formulas (but not specific examples). You must turn in those notes with your test.

1. Exam1: Chapter 1 to Chapter 4

2. Exam2: Chapter 5 to Chapter 7

3. Exam3: Chapter 8 to Chapter 12

4. Final: Comprehensive Exam (similar to Exam 1, 2, and 3).

The majority of the test coming from Chapter Exercises in the book. A few multiple choice questions will be asked probably about 20%.

Important for Exams

There is no Proctor Free Exam for this Course. Too much problems from the previous Exams, Laptop was not compatible, requirement was not satisfied etc. All of the exams in this course must be proctored in a face-to-face environment. The SHSU Online Campus does not provide a Testing Center. Distance education students needing to complete a face-to-face proctored exam must locate a testing center in their geographical region, and will need to take full responsibility for scheduling and paying for a face-to-face proctoring service, including all lab fees. In some instances, local area libraries may offer face-to-face proctoring services at no cost. It is the students responsibility to make the necessary arrangements with local area libraries if this option is pursued. Regardless of the option selected, all face-to-face proctoring environments must be pre-approved by the professor before students complete their exam.

GRADING POLICY:

Item	Total point	Date
Homework	100	
Quiz	100	every Monday
First Mid-Term Exam	100	Tue, Sept 19, 2017; 8:00 A.M. - 11:50 P.M.
Second Mid-Term Exam	100	Thu, Oct 19, 2017; 8:00 A.M. - 11:50 P.M.
Third Mid-Term Exam	100	Tue, Nov 21, 2017; 8:00 A.M. - 11:50 P.M.
Final Exam	200	Tue, Dec 5, 2017; 8:00 A.M.-11:59 P.M.

Your final course will be determined by your cumulative score out of a maximum possible of 700. There is no set formula used to determine the letter grade for the course, but the following are some guidelines,

Total point	Grade
$630 - 700$	A
$560 - 629$	B
$490 - 559$	C
$420 - 489$	D
≤ 419	F

ACADEMIC HONESTY:

I encourage you to work with other students, tutors, and all the material available to you and all activities except on homeworks, quizzes and tests.

All work that is handed in for evaluation (quizzes and tests) is to reflect solely your individual performance. Cheating will not be tolerated. A violation will result a grade of F for the semester.

COMMUNICATION with ME:

If you need to email me you must use your SHSU email and the subject line must be STAT3379.015.

STUDENTS WITH DISABILITIES 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. For a complete listing of the university policy, see: http://www.shsu.edu/dept/academic-affairs/documents/aps/students/811006.pdf