STAT 2331, June A Term

Professor: Charles South Office hours: TBD

Office: Heroy 119

Email: csouth@smu.edu

Teaching Assistants: TBD

Student Learning Outcomes:

• Students will solve problems using algebraic, geometric, calculus, statistical and/or computational methods.

• Students will interpret and/or draw inferences from mathematical models, data, graphs or formulas.

Required Text: STAT 2331 Introduction to Statistical Methods, by W.H Freedman.

Grading:

Item	% of Final Grade
Exam #1	20
Exam #2	20
Homework	20
Labs	20
Exam #3	20

NO MAKE-UP will be given for exams, homework, or weekly labs¹.

NO LATE WORK WILL BE ACCEPTED.

ALL COURSE-RELATED MATERIALS ARE/WILL BE AVAILABLE ON CANVAS!

All students should have a Canvas account. Your **user name** should be your **8-digit SMU ID and** your **password** should be your 'my.smu' or e-mail password. Please contact Dr. South immediately if you cannot access Canvas or cannot find the STAT 2331 course page.

Software:

This course will make extensive use of statistical software modules on Microsoft Excel. You will need to have a working copy of Excel installed on your laptop; if you need a laptop or a copy of Microsoft Excel you should notify Dr. South the first day of class.

Grading:

Your two lowest homework grades will be dropped before computing your term grade. If you miss an assignment, you are still responsible for all material covered on that assignment. If you miss a class due to religious observance, athletics or some other university sponsored activity, all assignments due on that day, including exams, must be turned in or made-up BEFORE the missed class period. More details on excused absences are given at the end of the syllabus. After the final course grade is determined, there will be NO changes to your grade.

Exams:

There will be three exams. Dr. South will provide a formula sheet for each exam. On the final exam, you will be responsible for all material covered during the course. Please note that no make-up exams will be given based on a student's plan to travel out of town. No exam grades will be dropped.

Homework:

Homework assignments are given daily. You may work together on the homework assignments, though you are still required to adhere to the SMU honor code (https://www.smu.edu/StudentAffairs/StudentLife/StudentHandbook/HonorCode). In other words, each student must write up his/her own unique solutions in his/her own voice. Other relevant tidbits:

- A substantial fraction of test questions will be modeled on homework items.
- Homework problems that are associated with an Excel data set should be done in Excel, unless noted on the assignment.
- A computer network that is down in the last few hours before the homework is due is not an adequate reason for a late homework, nor is a malfunctioning computer, unless the entire SMU or Canvas system is down for a full 24 hours before the homework is due.
- You are expected to complete and submit every homework assignment, unless you have an extended illness or other excusable absence, for which you must present written documentation.

¹ Unless you have an excused absence due to a university sponsored event or religious holiday.

Labs:

The laboratory component of the course will provide instruction in the use of Excel, the software package used for computation in this course. Lab time is also used for data collection and analysis activities. The labs will be completed during the regular meeting time, once a day.

Scores from all assignments will be uploaded on Canvas. Please check your grade often!

Calculator:

It is recommended that you bring a calculator to class with you each day. An expensive calculator is not necessary; the only requirement is that it be able to do basic mathematical functions. You may NOT use your phone's calculator during exams, though during class it is acceptable.

Assistance Outside of Class:

Assistance on any of the course material, assignments, computer usage, etc. can be obtained in a variety of ways.

- 1. Both the course instructor and the teaching assistants (TA's) hold regular office hours. Office hours are times that the instructor and TA's set aside specially to work with our students. No appointments are necessary during office hours just pop in if you have a question. Appointments can be made outside of regular office hours by contacting the TA's or the Dr. South via email.
- 2. Private tutors are acceptable but are only recommended after exhausting the options above, as private tutors are not guaranteed to be familiar with the course curriculum.

Classroom Environment

We all need to work together to ensure a proper academic learning environment. For starters, you are expected to adhere to the SMU Student Code of Conduct at all times. (https://www.smu.edu/StudentAffairs/StudentLife/StudentHandbook/ConductCode). Toward that end, here are some (hopefully obvious) rules:

- Come to class on time. Life happens, but make every effort to arrive prior to the start of lecture.
- ALL cell phones are to be turned ON SILENT during class. The only reason it should be out is if you are using it as a calculator.
- Remain seated unless instructed by Dr. South during a group activity.
- Do not use your laptop or tablet unless it is to view PowerPoint slides.
- Please do not have conversations with your neighbors while Dr. South is lecturing it is distracting both to him and your peers. Also, please do not sleep during class!

Any student with **disruptive behavior** in class will be **removed from the classroom** and Dr. South will **inform his/her advisor**. For students who repeatedly disrupt class, Dr. South reserves the right to **drop him/her from the course**.

Disability Accommodations:

Students needing academic accommodations for a disability must first register with Disability Accommodations & Success Strategies (DASS). Students can call 214-768-1470 or visit http://www.smu.edu/Provost/ALEC/DASS to begin the process. Once registered, students should then schedule an appointment with the professor as early in the semester as possible, present a DASS Accommodation Letter, and make appropriate arrangements. Please note that accommodations are not retroactive and require advance notice to implement.

Religious Observance (see University Policy No. 1.9):

Students must notify Dr. South in writing by the 12th day of the semester of any such absences that will occur during that semester as a result of this policy. Accommodations will be made without penalty.

Excused Absences for University Extracurricular Activities:

Students who participate in officially sanctioned, scheduled University extracurricular activities will be given an opportunity to make up exams/assignments missed as a result of this participation or related travel. Students will not be penalized in any way for these excused absences. It is the responsibility of the student to make arrangements with the instructor prior to any missed exams/assignments for making up this work, and to obtain any class notes or other course material missed due to absence prior to taking any subsequent examinations or submitting any subsequent graded assignments.

Tentative Course Outline			
Day	Topics	Due	
1	Displaying/Describing Data; Lab 1	-	
2	Normal Distributions/Scatterplots and Correlation; Lab 2	HW #1	
3	Least Squares Regression/Exam I Review; Lab 3	HW #2	
4	Exam I/Sampling Design/Design of Experiments; Lab 4	HW #3	
5	Towards Statistical Inference/Probability Pt. 1/Random Variables; Lab 5	HW #4	
6	Random Variables/Probability Pt. 2/Central Limit Theorem; Lab 6	HW #5	
7	Exam II Review/Exam II/Confidence Intervals; Lab 7	HW #6	
8	Confidence Intervals/Hypothesis Testing; Lab 8	HW #7	
9	Hypothesis Testing/Inference for the Mean; Lab 9	HW #8	
10	Inference for the Mean, Exam III Review; Lab 10	HW #9	
11	Course Review/Lab 11/Exam III	HW #10	