STAT 3300, June B Term

Professor: Charles South Office hours: TBD

Office: Heroy 119

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Website: https://www.smu.edu/OIT/Services/Canvas/

Prerequisite: STAT 2331

REQUIRED TEXT: The Practice of Statistics for Business and Economics (custom copy for STAT 3300 at SMU). New York: W.H Freedman.

Computing Software: R

There are thousands of new jobs created every month in the data science/statistics field and many of them use a computing software called R. Checking out job and employment boards, many companies are looking for graduates with Statistics and R experience. R has extremely powerful analysis functionality, amazing graphical presentation ability, has become and industry standard AND is completely free! Please download R before the first day of class by following this link: https://www.r-project.org/ You will need to follow the links to download the software; it is available in both Windows and Mac OS.

GRADING:

Item	% of Final Grade	Comments	
Homework	20	3 lowest scores dropped Attendance & In-Class Exercises	
Participation	20		
Exam I	20	Each cover a portion of the material given in class – none are cumulative	
Exam II	20		
Exam III	20		

Participation (20%):

Attendance during a short course is critical. Missing a single day of a short course is equivalent to missing over a week during a regular semester! This portion of your grade is fulfilled by attending every class and being actively engaged – that is, completing all the in-class exercises, being attentive, and asking questions.

Homework (20%):

The purpose of homework assignments is to help you learn the course material. Assigned homework problems are shown in class or on Canvas. Problems are assigned daily. 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. Other pertinent information:

- HOMEWORK is due every day, at the beginning of the class.
- If you miss class the day an assignment is due, you must turn in the assignment BEFORE missing class.
- If you miss three homework assignments due to an excusable absence, you are not required to have your documentation checked, and your grade will not be penalized.
- If you miss more than three homework exercise due to an excusable absence, you will need to turn in your documentation for all the absences in order not to be penalized. Thus, you should save the documentation for all excused absences in case you exceed the limit.
- You should feel free to work together on the assigned problems, just remember that in order for the homework to do its job (teach you something), you should understand it.
- A substantial fraction of test questions will be modeled on homework items.
- Homework solutions may be discussed in class.

Exams (20% each):

There will be three tests during the semester; the final exam is not comprehensive. **Make-up exams will NOT be given. No exam can be dropped.** Note that no make-up exams will be given based on a student's plan to travel out of town. In the event of a medical emergency preventing a student from taking an exam, the average of the remaining exams will be used in the place of the missed exam (provided that appropriate documentation – i.e., a doctor's note – is provided; otherwise a grade of 0 will be assigned). If two exams are missed, the student will be dropped from the class.

NO MAKE-UP will be given for exams, in-class quizzes, or homework.

NO LATE WORK WILL BE ACCEPTED.

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

You should be assigned a new Canvas account if you have enrolled in this course. Your **user name** should be your **8-digit SMU ID and** your **initial password** should be your 'my.smu' password. Please contact me as soon as possible if you cannot access your account or in your account you cannot find a link to STAT 3300 course web pages.

Grading:

Your 3 lowest homework grades will be dropped before computing your term grade. These "drops" are to alleviate some of the pressure associated with taking a full course in a small window of time. If you have a personal issue that affects your performance in class, it is up to you to notify Dr. South with supporting documentation so that he can accommodate it before it's too late. After the final grade is determined, there will be NO change in your grade.

All grades will be uploaded on Canvas. If your score is not uploaded, you need to talk to your TA prior to the end of the term. Otherwise, the score will NOT be changed.

Assistance Outside of Class:

Assistance on any of the course material, assignments, computer usage, etc. can be obtained in a variety of ways. Both the course instructor and the teaching assistants (TA's) hold regular office hours. Office hours are times that the instructor and TA set aside specifically to work with our students. No appointments are necessary during office hours – just pop in if you have a moment. Appointments can be made outside of regular office hours by contacting the TA or the course instructor by email.

Classroom Environment:

<u>SMU Student Code of Conduct 2.09:</u> Students will, at all times and in all activities, respect the rights of others, maintain responsible behavior conducive to the teaching and learning environment, and uphold the integrity of the University both on and off campus. We should maintain a proper academic learning environment in the classroom. Toward that end, here are some rules.

- ALL cell phones are to be put **on Silent or Vibrate mode.** Remain seated. Do not walk around. Make your best effort to use the bathroom before or after class.
- Computers are allowed to be used in class, but you are expected to be on task, not browsing shopping websites.
- Don't talk with your neighbors while Dr. South is lecturing. This can be a serious distraction!

For a student who is **disruptive** in class, I reserve the right to **reduce his/her quiz grade**, **remove him/her from the classroom** and **inform his/her advisor**. If the problem is repeatedly addressed by Dr. South and not resolved, I reserve the right to **drop him/her from the course** or assign him/her **a grade of F.**

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	Analyzing One and Two-Sample Means	-	
2	Two-Sample Means/Power, Type I, Type II Errors/Intro to R	HW #1	
3	Analyzing One and Two-Sample Proportions	HW #2	
4	Two-Sample Proportions/Using R/Exam I Review/Exam I	HW #3	
5	Simple Linear Regression	HW #4	
6	Multiple Linear Regression, Part I	HW #5	
7	Multiple Linear Regression, Part II/Exam II Review/Exam II	HW #6	
8	One-Way Analysis of Variance	HW #7	
9	Two-Way Analysis of Variance	HW #8	
10	Logistic Regression/Intro to Machine Learning	HW #9	
11	Exam III Review/Course Review/Exam III	HW #10	