Department of Mathematics and Statistics  
MTH 3342.002—Statistical Methods  
Fall 2020

Name: Jacob Turner, Ph.D.  
Email: turnerja2@sfasu.edu  
Phone: 936-468-1692  
Office: 342 NM  
Office Hours:

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:30pm-4:30pm</td>
<td>10:00am-11:00am</td>
<td>3:30pm-4:30pm</td>
<td>10:00am-11:00am</td>
<td></td>
</tr>
</tbody>
</table>

You can also meet with me by appointment. I will also announce some additional office hours for this specific class on the first day of class.

Class meeting time and place: Tue/Thur 12:30-1:45pm  Zoom Meeting (Link will be emailed and provided on D2L)

Course Description: Probability, random variables, mean and variance, binomial distribution, normal distribution, statistical inference and linear regression.

Text and Materials
2. R Studio statistical software (free online)

Grading Policy
The final average will be computed using the following weights:

- **HW 40%**  
  - HW will be assigned regularly
- **Cheat sheet assignment 10%**  
  - To be completed throughout the course
- **Midterm and Final exam 25% each**  
  - Conceptual questions timed during lecture  
  - Analysis portion given as take home

Homework and Group Exercises: HW assignments will be provided through D2L. It will be labeled as a “quiz” but this will be where you complete your weekly assignments. The assignment is not timed, but it will have a due date roughly a week after it is assigned depending on the length. Some could be due within a shorter period of time, some longer.

Exams (TBD): The midterm will consist of two parts (“in-class” and “take-home”). The in-class portion will be conducted via D2L using a timed quiz and will be scheduled to
start during our normal meeting time. This part will be short and sweet and will mainly cover key terms/definitions, key conceptual ideas and facts, providing criticisms, and general decision making processes. We’ll have a review to help get you prepared. The take home portion will be all about you showing your statistical analysis chops on a few open scenarios. The key to success here is to show that you can identify which statistical tool is needed to answer the research question, perform the analysis in R software, and write a thorough conclusion.

There are no make-ups for missed exams, so make every effort to be at class on exam day. If you know ahead of time that you will miss an exam, see me at least one class before the scheduled exam and we will work something out. Department policy requires that you bring and be recognizable from either your SFASU Student ID or another valid photo ID before you are permitted to take each exam. If you need accommodations, I would appreciate a verbal reminder as we get close to test time.

**Final Exam (Dec 8th 10:45 – 1:15pm):** The final exam for this course will follow the same format as the midterm with the only difference that there will be more statistical methods to consider on the take home portion. I will most likely be leaning more towards the later material, but we can’t really forget anything as we move throughout the course.

**Cheat Sheet Assignment:** The cheat sheet assignment will be a word document (I will provide a template for you) that provides a brief snapshot of the statistical methods that we cover. For each method it will answer questions like, “What question does this method answer?”, “When can I use it and when I cannot?”, “What are the pros and cons” of the method?” If you complete this assignment as you go, rather than waiting to the end of the semester, you will have a wonderful review tool for examinations. Also, the document will give you something to take away from this course and when you come to a point where you need a statistics review...this will be your go to document. I will most likely take up your cheat sheet somewhere midterm to give feedback so there are no surprises when you turn it in at the end of the semester.

**Grading Scale (100%):** A: 90-100, B: 80-90, C: 70-80, D: 60-70, F: Below 60

**COVID-19 MASK POLICY**
If this class were to ever meet in person, masks (cloth face coverings) must be worn over the nose and mouth at all times in this class and appropriate physical distancing must be observed. Students not wearing a mask and/or not observing appropriate physical distancing will be asked to leave the class. All incidents of not wearing a mask and/or not observing appropriate physical distancing will be reported to the Office of Student Rights and Responsibilities. Students who are reported for multiple infractions of not wearing a mask and/or not observing appropriate physical distancing may be subject to disciplinary actions.

**Attendance Policy**

Attendance is expected and will be reflected in everything you submit. It will be increasingly difficult to get a good grade or even pass if you miss class regularly. When a student misses class, s/he is expected to proactively and promptly acquire the missed information before the next calendar class day and meet all requirements administered by the instructor and the student must: Submit an official, dated note from attending doctor, parent, or supervisor, depending on the nature of the absence. Documentation must be submitted promptly.

The following is an excerpt from SFA Policy 5.4:

*The federal definition of a credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates:*

1. Not less than one hour of classroom or direct faculty instruction and a minimum of two hours out-of-class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or 10 to 12 weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time, or;
2. At least an equivalent amount of work as outlined in item 1 above for other academic activities as established by the institution including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours.

To this end, all students in courses offered by the Department of Mathematics and Statistics that wish to be successful should plan to spend a minimum of two hours outside of class for every credit hour associated with this course. Expected activities to be completed in the time outside of class include reviewing notes from previous class meetings, reading assigned course resources, completing all assigned exercises and projects, and performing periodic assessment preparation.