Syllabus for Economics 339-500
Applied Statistical Analysis
(Summer 2, 2019)

Associate Professor Ryan Phelps
Department of Economics and Finance
Nelson Rusche College of Business
Lectures: On D2L under “Content” > “In Class Videos” (Not Optional)

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Phone: (936) 468-1501
web: http://faculty.sfasu.edu/phelpsrt/

Office Hours:
In Office Hours: BU 303-D
Tues. Wed. and Thur. (8:45 – 9:15 a.m.)
Fri. (8:45 – 11:45)

Online Hours:
Mon. through Thur. (2:00 – 3:00 p.m.)

In Lab BU 324 when there is demand:
Tuesday and Thursday (12:15 – 1:00 p.m.)
I encourage you to take full advantage of office hours this term. You are always welcome to stop by.
For available times, and to ensure your slot please book via https://calendly.com/phelpsrt.

Because this is an online course, it is particularly important that you read this entire syllabus!
I communicate with the class through D2L announcements. Make sure you are getting notifications.
According to the federal definition of a credit hour (not my choice), this course requires a minimum of 7.5 hours of your time each full week.

Attendance Policy: Attendance is defined as working through the In-Class Videos including Excel work and notes.

Catalog Description:
The application of statistical and quantitative methods. Prerequisites: MTH 220, MGT 272 or 6 hours of Computer Science

Learning Objectives:
Students successfully completing this course should be able to:
1. Use quantitative, abstract, and logical reasoning
2. Obtain basic knowledge in mathematics and statistics
3. Acquire skills in the use of contemporary information resources and technology
4. Utilize analytical thinking, critical analysis, logic, creativity, and integrative problem solving
5. Work with descriptive statistics in a sampling situation
6. Perform a variety of statistical tests and make inferences
7. Compute and interpret regression equations using raw data
8. Use standard tables for the normal distribution, F-distribution and chi-square distribution

Teaching Philosophy & Methods
I love teaching and look forward to interacting with you throughout the semester. I am available to
discuss your concerns (class-related or other). We are partners in an effort that can make us all better
people. The course is designed to be a transformative learning experience. In the In-Class Videos, we
will work together on the more challenging content. In-Class Videos pair with the course note-packet.
These videos will make your experience as close to the face-to-face experience as possible. The videos
will be a mixture of guided discovery and active learning. They will motivate, clarify, extend, and
synthesize the material. Active learning will consist of opportunities to work through problems in the
note-packet prior to the correct answers being revealed.
**Course Materials:**

The course Note Packet (around $20.00) is only available at the SFA Barnes & Noble and at Jack Backers. The note packet together with the In-Class Videos will make this course feel like a face-to-face course. Taking notes from the video and following along with the computer work is equivalent to attending class. **You must show that you own a new course packet by 8/30/2019 to receive any class participation credit (90 points).**

You will need access to Excel 2016 on a PC. There are machines available in the Business Building. You will also need access to a reliable internet connection. **Spotty internet access may result in you losing credit** for timed assignments and exams. SFA students have FREE access to Microsoft Office 2016 through Office 365. [http://www.sfasu.edu/mysfa/o365/](http://www.sfasu.edu/mysfa/o365/)

Use Chrome as your browser and do **not use a VPN or other type of IP address cloaking software.**

**I do not recommend using a Mac or a Google computer for this course.** An exception to this rule is if you are willing to partition your hard drive to run windows. You will need to back up your files as they may be deleted. I do not support this process, but it may be a better option for some. [https://support.apple.com/en-us/HT204009](https://support.apple.com/en-us/HT204009)

The primary text is, *Statistics for Managers Using Microsoft Excel (8th Edition)* by Levine, Stephan, and Szabat. It is published by Pearson (ISBN-13:9780134466033). We will also make use of Excel. Students are expected to have some basic level of working knowledge in Excel.

Our textbook comes with MyStatLab. **You will need access to MyStatLab to pass the course.** As a result, I can only recommend buying the book through the Pearson website or at the University bookstores. Purchasing from Pearson through the D2L link is the safest and cheapest option. A loose-leaf hard copy is an $80.00 upgrade. Buying the loose-leaf bundle at the university bookstore will cost more.

**To register for the MyStatLab Course/E-Book Access:**

1. There is no course ID.
2. In our D2L course, click on the Pearson link on the lower right of the home page.
3. Make sure that you allow pop-ups from Pearson. You will see a button on the right hand side of the URL address bar.
4. Follow the prompts to register.
5. Enter your existing Pearson account username and password to sign in.
   - You have an account if you have ever used a Pearson MyLab & Mastering product, such as MyMathLab, MyITLab, MySpanishLab, MasteringBiology or MasteringPhysics.
   - If you do not have an account, select “Create” and complete the required fields.
6. Select an access option.
   - Buy access through Pearson using a credit card or PayPal account (recommended).
   - Temporary access is available by selecting the link near the bottom of the page.
     - To update before the deadline select “Upgrade Access”.
     - Enter an access code or buy access with a credit card or PayPal account.
   - Enter the access code that came with your textbook or was purchased separately from the bookstore.

**To sign in later:**

1. In our D2L course, click on the Pearson link on the lower right of the home page.
**Program Learning Outcomes:**
Program learning outcomes define the knowledge, skills, and abilities students are expected to demonstrate upon completion of an academic program. These learning outcomes are regularly assessed to determine student learning and to evaluate overall program effectiveness. You may access the program learning outcomes for your major and particular courses at [http://www.sfasu.edu/cob/ug-plo.asp](http://www.sfasu.edu/cob/ug-plo.asp).

**General Student Policies:**

**Academic Integrity (A-9.1)**
Abiding by university policy on academic integrity is a responsibility of all university faculty and students.

Definition of Academic Dishonesty
Academic dishonesty includes both cheating and plagiarism. Cheating includes, but is not limited to (1) using or attempting to use unauthorized materials on any assignment or exam; (2) falsifying or inventing of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were one’s own. Examples of plagiarism include, but are not limited to (1) submitting an assignment as if it were one's own work when is at least partly the work of another person; (2) submitting a work that has been purchased or otherwise obtained from the Internet or another source; and/or (3) incorporating the words or ideas of an author into one's paper without giving the author credit. Penalties may include, but are not limited to reprimand, no credit for the assignment or exam, re-submission of the work, make-up exam, failure of the course, or expulsion from the university. Please read the complete policy at [http://www.sfasu.edu/policies/student_academic_dishonesty.pdf](http://www.sfasu.edu/policies/student_academic_dishonesty.pdf).

**Course Grades (University Policy 5.5)**
At the discretion of the instructor of record and with the approval of the academic unit head, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F, except as allowed through policy related to active military service. If students register for the same course in future semesters, the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average. Please refer to the complete policy at [http://www.sfasu.edu/policies/course-grades.pdf](http://www.sfasu.edu/policies/course-grades.pdf).

**Students with Disabilities**
To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Room 325 in the Human Services Building, 468-3004/468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to [http://www.sfasu.edu/disabilityservices/](http://www.sfasu.edu/disabilityservices/).

**Student Conduct (University Policy 10.4)**
Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the full Student Conduct Code at [http://www.sfasu.edu/policies/student-code-of-conduct_10.4.pdf](http://www.sfasu.edu/policies/student-code-of-conduct_10.4.pdf)). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic, or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/ inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the iCare Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.
Grading System: See Pass/Fail Conditions Below
Your final grade will be based on points: A: 900, B: 800, C: 700, D: 600, F: 599 and below.

To prevent testing dishonestly, you will receive an “F” if one the following conditions is met:
1. The average of the first three exams is 20% higher than that of the proctored final.
2. You do not pass the proctored final. The final is consistently the exam with the highest average.

<table>
<thead>
<tr>
<th>Task</th>
<th>Points</th>
<th>% of Grade</th>
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</thead>
<tbody>
<tr>
<td>Class Participation</td>
<td>90</td>
<td>9.0%</td>
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<tr>
<td>Homework</td>
<td>160</td>
<td>16.0%</td>
</tr>
<tr>
<td>Dropbox Projects</td>
<td>105</td>
<td>10.5%</td>
</tr>
<tr>
<td>Exam 1</td>
<td>100</td>
<td>10.0%</td>
</tr>
<tr>
<td>Exam 2</td>
<td>100</td>
<td>10.0%</td>
</tr>
<tr>
<td>Exam 3</td>
<td>100</td>
<td>10.0%</td>
</tr>
<tr>
<td>Final Exam Prep</td>
<td>45</td>
<td>4.5%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>300</td>
<td>30.0%</td>
</tr>
<tr>
<td>Total</td>
<td>1000</td>
<td>100%</td>
</tr>
</tbody>
</table>

Class Participation:
To receive any class participation points you must prove ownership of a new course note packet (See D2L > Content > Getting Started Checklist). I will then check out your course note packet late in the semester. Your activity in Excel, while watching the In Class Videos, will also factor into your class participation grade. To get full credit you must have completely filled in your packet and followed along with all Excel work while completely viewing the In-Class Videos. This is the easiest way to learn the material. It is your responsibility to make sure that your participation grade matches your current participation level. Fully Participating students will have a perfect participation grade at all times. Watch In-Class Videos in D2L do not use the app.

Homework (MyStatLab) and Dropbox Projects (D2L > Content > Dropbox Projects):
Completing the projects is vital to learning the material. These assignments provide feedback to you about your personal level of understanding and feedback to me about the overall level of understanding in the class. Make sure that you are doing and turning in your own personal work.
- **Do not share your work with others.**
- **Cite any sources external to the course.**
- **Late work will not receive a grade.**
- **Dropbox checklists must be complete to submit your work.**

Exams and Exam Preps: If you miss an exam without a documented excuse, you will receive a zero for the exam. If you miss an exam for an unforeseen reason, you should contact me as soon as you are physically able to pick up the phone.
- **Exams and Exam Preps are to be treated as exams. Any use of resources not listed below is cheating.**
- The internet can only be used to access the exam.
- **You must complete them alone.**
- **You must not pause or exit the exam once you have begun.**
- **You are encouraged to use the Excel templates** that we build in class on all exams.
- **Note-Sheets:** You are permitted a note-sheet during the Exams/Exam Preps.
  - It must be the size of a standard sheet of paper or smaller. It can only be one-sided. **It must be hand written.** Building these note-sheets is a great study exercise.
- **Calculators are not allowed.**
- Blank scratch paper is allowed.

The final exam is cumulative. The final exam will be proctored through ProctorU or SFA Testing Services. You are permitted to use your templates from class and a **two-sided note-sheet** (standard paper size) for the final. **The note-sheet must be hand written.** I also recommend that you laminate the sheet for future use. You must schedule your test in advance. **Schedule early to avoid additional fees!** Your final exam must be scheduled between 8:00 a.m. 12/9/19 and 7:00 p.m. on 12/13/2019. Be sure to start the exam at least **two and a half hours** before the deadline or Testing Services closing time.
Course Expectations:

- **Consistently** using the In-Class Videos to **fill in the note-packet** and following along in Excel is essential for acceptable performance in this course.
- **Treat the In-Class Videos like a face-to-face class.** Watch them once and take good notes. You do not have time to go through the videos multiple times.
- If you are **having trouble keeping up with the Excel work**, then practice with the intro to Excel **YouTube videos** until you are able to keep up using only the audio cues.
- If you have a question, **never let it go unanswered**. Look for an answer in the packet, the FAQ files, post questions to the FAQ discussion board, or stop by or web conference with me.
- **Read the note-packet** frequently after filling it out using the In-Class Videos. If you look at new material at least once within forty-eight hours of first seeing it, you will learn the material more thoroughly and studying for the exam will be easier.
- **Improve the Course:** If you know of a way to make the course better, please share your ideas with me.

**Tentative Outline**

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Read Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTF: Introduction to the book and course</td>
<td>(Read)</td>
<td>Read: {All}</td>
</tr>
<tr>
<td>Chapter 1: Foundational Knowledge</td>
<td>(Review on Your Own)</td>
<td>Read: {All}</td>
</tr>
<tr>
<td>Chapter 2: Organizing and Visualizing Variables</td>
<td>(10% of Course)</td>
<td>Read: {All}</td>
</tr>
<tr>
<td>Chapter 3: Numerical Descriptive Measures</td>
<td>(Short In-Class Recap 7%)</td>
<td>Read: {3.1, 3.2, 3.4, 3.5, 3.6}</td>
</tr>
<tr>
<td>Chapter 6: The Normal Distribution</td>
<td>(Short In-Class Recap 8%)</td>
<td>Read: {6.1, 6.2, 6.6}</td>
</tr>
<tr>
<td>Chapter 7: Sampling Distributions</td>
<td>(10% of Course)</td>
<td>Read: {All}</td>
</tr>
<tr>
<td>Chapter 9: Hypothesis Tests</td>
<td>(15% of Course)</td>
<td>Read: {9.1, 9.2, 9.3, 9.4, 9.5}</td>
</tr>
<tr>
<td>Chapter 13: Simple Linear Regression</td>
<td>(20% of Course)</td>
<td>Read: {13.1, 13.2, 13.3, 13.4, 13.5, 13.7, 13.9}</td>
</tr>
<tr>
<td>Chapter 14: Multiple Regression</td>
<td>(15% of Course)</td>
<td>Read: {14.1, 14.2, 14.3, 14.4, 14.5, 14.6}</td>
</tr>
<tr>
<td>Chapter 10: Two Sample Tests</td>
<td>(15% of Course)</td>
<td>Read: {All}</td>
</tr>
<tr>
<td>Chapter 17: Getting Ready to Analyze Data in the Future</td>
<td>(Read and Review Above)</td>
<td>Read: {All}</td>
</tr>
</tbody>
</table>
Schedule

In-Class Videos will expire at 11:00 p.m. on the dates listed in the folders (D2L > Content > In-Class Videos). **Once the In-Class Videos have expired, they are no longer available.** Watch online in D2L. **Videos viewed in the app “Pulse” will not count** for participation. Using two screens is recommended see D2L > Content > Frequently Asked Questions > Second Screen Solutions.

Not participating with the In-Class Videos as you would a face-to-face class will very likely cause you to fail the course. Use your class participation grade as a predictor of your final grade. The correlation between participation and the rest of the course grade ranges from .86 to .94.

Class Participation Schedule

<table>
<thead>
<tr>
<th>Module</th>
<th>Content</th>
<th>Opens</th>
<th>Closes</th>
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<tbody>
<tr>
<td>1</td>
<td>Ch 1-2 pp. 1-8</td>
<td>8/21/2019</td>
<td>8/31/2019</td>
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<tr>
<td>2</td>
<td>Ch 1-2 pp. 9-14</td>
<td>8/31/2019</td>
<td>9/7/2019</td>
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<tr>
<td>3</td>
<td>Ch 3-6 pp. 1-10</td>
<td>9/7/2019</td>
<td>9/14/2019</td>
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<td>4</td>
<td>Ch7 pp. 1-11</td>
<td>9/14/2019</td>
<td>9/21/2019</td>
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<td>5</td>
<td>Finish 7 and Ch 9 pp. 1</td>
<td>9/21/2019</td>
<td>9/28/2019</td>
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<td>6</td>
<td>Ch 9 pp. 2-8A</td>
<td>9/28/2019</td>
<td>10/5/2019</td>
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<td>7</td>
<td>Finish 9 and Ch 13 pp. 1-5</td>
<td>10/5/2019</td>
<td>10/12/2019</td>
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<td>8</td>
<td>Ch 13 pp. 6-11</td>
<td>10/12/2019</td>
<td>10/19/2019</td>
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<td>9</td>
<td>Ch 13 pp. 12-17</td>
<td>10/19/2019</td>
<td>10/26/2019</td>
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<td>10</td>
<td>Finish Ch 13 and Ch 14 pp. 1-3.5</td>
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<td>12</td>
<td>Finish Ch 14 and Ch 10 pp. 1-4</td>
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<td>14</td>
<td>Review</td>
<td>11/30/2019</td>
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Watch out for D2L announcements. I may need to make adjustments throughout the semester. Assignment schedule on the next page.

If you have a question after reading this syllabus, you should review the **Frequently Asked Questions Module.** The FAQ module is broken down into subject areas and contains correspondence from previous semesters. If you cannot find your answer in the FAQ page related to your question, then post your question to the discussion board linked to the FAQ topic. Often, a peer will answer your question right away. Each time a student posts a quality answer (to a question not addressed elsewhere) before I do, they will receive two extra credit points (up to 25 points). I have subscribed to all of the discussion boards and will be instantly notified of your question. **For more complex issues stop by or web conference with me.**
## Assignment Schedule

<table>
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<tr>
<th>Assignment</th>
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<th>Close</th>
<th>Delivery</th>
<th>Points</th>
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<td>9/3/2019</td>
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<td>9/12/2019</td>
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<td>12/13/2019</td>
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### Disclaimer:
I reserve the right to make changes and amendments to this syllabus through D2L announcements during the semester.