QMB 2100 –
Business & Economic Statistics I
Face to face Spring 2013

INSTRUCTOR: T. Philippe Ph.D.  Office Hours: by appointment

e-mail:  Classroom: STG114

DESCRIPTION: Data description and analysis; probability theory; types of
variables and distributions; sampling and sampling distributions; point and
interval estimations; hypothesis testing and quality control charts.

PREREQUISITE: College Algebra (MAC 1105)

OBJECTIVE: At the completion of this course you should be able to:
1) Understand the theory and application of probability (assigning probabilities,
   events and conditional probability).
2) Determine if a given problem is a discrete or continuous probability distribution
   and which specific distribution (binomial, poisson, normal, etc.) fits.
3) Develop the null and alternative hypothesis for one and two tailed hypothesis tests
   as well as manually calculating the appropriate answer.
4) Understand the basis for “statistical process control” and be able to
   Develop X-bar and R charts.
5) Demonstrate the ability to place confidence intervals for population parameters.
6) Be able to make inferences about population variances.

TEXTBOOK:
Card Package
ISBN-10: 0132930439
ISBN-13: 9780132930437 ©2013 • Prentice Hall • with Access Card,

METHOD / COMPUTER REQUIREMENTS: This is a class lecture/discussion course or
online class that uses Canvas, and is supported by the computer software MyStatLab.

Business Program Learning Goals (Skill(s) and Perspectives)
Addressed in This Course:

Program goals that are addressed in this course are listed below, with a 1 to 5 ranking (‘1’ meaning it is given light
treatment and ‘5’ being the highest degree of integration), with a brief explanation of how I will specifically address each
skill during the semester.
BUSINESS PROGRAM LEARNING GOALS:

ANALYTICAL AND CRITICAL THINKING SKILLS
- Problem solving skills (from the “defining the problem” step to “implementation”) — test and homework questions
- Ability to evaluate, then choose, alternative strategies/courses of action, test questions
- Data analysis skills — test questions

INFORMATION TECHNOLOGY SKILLS
- Ability to use word processing, presentation, and spreadsheet software—(Most chapters), Test questions about Excel spreadsheet data, how to enter data, etc.

ETHICAL AND SOCIAL CONSCIOUSNESS
- Value systems — homework questions
- Personal conduct — homework questions

TESTING & GRADING POLICY:
All tests are multiple choice or subjective questions, and include definitions, theory, computations and interpretations.

The course has 3 parts for a total of 100 points.
- Test 1 20 points
- Test 2 20 points
- Test 3 20 points
- Home work 20 points From Mystatlab
- Chapter post tests 20 points From Mystatlab
- 100 points

All homework and Chapter post test are to be done in Mystatlab.

Final letter grades will be determined based on the total points earned using the following scale:
No extra credit or special individual grade needs will be considered in this course. Homework assignments and post tests from Mystatlab are important and mandatory.

**Academic Dishonesty:** See USF Policy on Academic Dishonesty and Disruption of Academic Process at [www.ugs.usf.edu/catalogs/0304/adadap.htm](http://www.ugs.usf.edu/catalogs/0304/adadap.htm): Cheating will result in penalties that may include a grade of “F” for a specific exam and/or for the course.

**Cell Phone:** All cell phones must be turned off or should not be brought to class. 

**Food:** We will follow the college rules of no eating or drinking in class.

**Setting-up the Blackboard (BB):** If you have not previously set up a USF Net Account, go to [https://my.usf.edu/](https://my.usf.edu/) click on Sign Up. When the page opens, click on Are you a new user? and Sign Up. You will need your USF ID card to complete the sign up screen. If you need more info about the USF ID, go to [http://www.nelson.usf.edu/av/studentID.htm](http://www.nelson.usf.edu/av/studentID.htm) Once you have set up your account, or if you have previously set up a USF Net Account, go to [https://my.usf.edu/](https://my.usf.edu/) Enter the logon information. The first Net Account screen has tabs across the top, click on the Courses tab. All the courses for which you are enrolled should appear. Click on the course title for this course and you will be at the course page. Syllabus, Assignments, Course Documents, Your test scores, and final grade will be posted in your personal secure grade folder of the Blackboard.

**Miscellaneous Policies:**

1. Cheating will not be tolerated. The university policy on Academic Dishonesty is explained at the website [http://www.stpete.usf.edu/ugc/documents/MicrosoftWord-Gr.pdf](http://www.stpete.usf.edu/ugc/documents/MicrosoftWord-Gr.pdf).

2. Any student with a disability is encouraged to meet privately with the instructor during the first week of classes to discuss accommodations. The student must bring a current Memorandum of Accommodations from the Office of Student Disability Services (TER 200). This is a prerequisite for receiving accommodations. Note: If you need extra time on exams, you must make arrangements to take your exams with the SDS office. You cannot receive extra time if you choose to take your exams with the course instructor.

3. Students who must miss a class period due to a major religious observance must notify the instructor of this absence, in writing, by the end of the second week of classes.

4. Please do not hold conversations with your classmates during the lecture. Your cell phone must be off.

5. All unauthorized recordings of class are prohibited. Recordings that accommodate individual student needs must be approved in advance and may be used for personal use during the semester only; redistribution is prohibited.

6. A grade of “I” indicates incomplete work and will only be assigned when most of the coursework has already been completed with a passing grade. [http://www.stpete.usf.edu/ugc/documents/MicrosoftWord-Gr.pdf](http://www.stpete.usf.edu/ugc/documents/MicrosoftWord-Gr.pdf).

7. S-U Policy: Students who want to take this course for a grade of S-U must sign the S-U contract no later than the end of the third week of classes. There will be no exceptions. [http://www.stpete.usf.edu/ugc/documents/MicrosoftWord-Gr.pdf](http://www.stpete.usf.edu/ugc/documents/MicrosoftWord-Gr.pdf).
8. In the event of an emergency, it may be necessary for USF to suspend normal operations. During this time, USF may opt to continue delivery of instruction through methods that include but are not limited to: Blackboard, Elluminate, Skype, and email messaging and/or an alternate schedule. It’s the responsibility of the student to monitor Blackboard site for each class for course specific communication, and the main USF, College, and department websites, emails, and MoBull messages for important general information.

All homework and Chapter post test are to be done in Mystatlab.

**Tips for success and getting help:**
1. Read the text book sections before every class session.
2. Get to know and help each other.
3. Attempt your homework problems before seeking help
4. Self-test exercises are available in each chapter of the text
5. The Academic Success Center, located in TER 301 is a resource center to get additional help. It is open Monday to Friday. Please check with the center for the opening times and type of assistance they provide.
6. Arrange to meet your instructor outside of class. Send me an e-mail, or talk to me just before or after class to schedule the time for the meeting.

**Time Conflicts with the Scheduled Final Exam time:**
- Students who normally work during the scheduled time of the final exam are expected to make arrangements with their employer to get time off.
- Students who have another common final exam scheduled during this same time period will be permitted to take a makeup. You must submit proof that a conflict exists.
- Students who miss the final exam for any other reason should not expect to be given a makeup exam.

**Calendar: Subject to be modified as needed.**

<table>
<thead>
<tr>
<th>Date</th>
<th>Chapter</th>
<th>Topic</th>
<th>Homework &amp; Due date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug.27</td>
<td>1</td>
<td>Introduction, Data and Statistics</td>
<td>Mystatlab:</td>
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<td></td>
<td></td>
<td>Displaying Descriptive Statistics:</td>
<td>HW Ch 1 &amp; Ch 1 post test Sep.1</td>
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<tr>
<td>Sep. 3</td>
<td>2</td>
<td>Calculating Descriptive Statistics</td>
<td>Mystatlab:</td>
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<tr>
<td>Sep.10</td>
<td>3</td>
<td>Introduction to Probability</td>
<td>HW Ch 3 &amp; Ch 3 post test Sep.15</td>
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<tr>
<td>Sep.17</td>
<td>4</td>
<td>HW problems &amp; Review</td>
<td>Mystatlab:</td>
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<tr>
<td>Sep.24</td>
<td>Ch. 1 - 4</td>
<td>(Chas. 1-4)</td>
<td>HW Ch 4 &amp; Ch 4 post test Sep.22</td>
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<td>Oct. 1</td>
<td>Ch. 1 - 4</td>
<td>Test # 1 (20 points)</td>
<td>Sep.29</td>
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<td>Oct. 1 ###</td>
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<tr>
<td>Date</td>
<td>Ch.</td>
<td>Topic</td>
<td>HW/Dates</td>
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<tr>
<td>Oct. 8</td>
<td>5</td>
<td>Discrete Probability Distribution</td>
<td>Oct. 13 HW Ch 5 &amp; Ch 5 post test</td>
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<tr>
<td>Oct. 15</td>
<td>6</td>
<td>Continuous Probability Distribution</td>
<td>Oct. 20 HW Ch 6 &amp; Ch 6 post test</td>
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<td>Oct. 22</td>
<td>7</td>
<td>Sampling &amp; Sampling Distribution</td>
<td>Oct. 27 HW Ch 7 &amp; Ch 7 post test</td>
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<td>Oct 29</td>
<td>Ch. 5-7</td>
<td>HW problems &amp; Review (Chas. 5-7)</td>
<td>Nov. 3 Test # 2 (20 points)</td>
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<td>Nov. 5</td>
<td>Chas. 5 - 7</td>
<td>In class during class time</td>
<td>Nov. 5 ### HW problems &amp; Review (Chas. 5-7)</td>
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<tr>
<td>Nov. 12</td>
<td>8</td>
<td>Confidence Intervals</td>
<td>Nov. 17 HW Ch 8 &amp; Ch 8 post test</td>
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<td>Nov. 19</td>
<td>9</td>
<td>Hypothesis Testing for a Single Population</td>
<td>Nov. 24 HW Ch 9 &amp; Ch 9 post test</td>
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<tr>
<td>Nov. 26</td>
<td>10</td>
<td>Hypothesis Testing Comparing Two Populations</td>
<td>Dec 1 HW Ch 10 &amp; Ch 10 post test</td>
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<td>Dec. 3</td>
<td></td>
<td>No class</td>
<td>Dec. 10 ### HW Ch 10 &amp; Ch 10 post test</td>
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<td>Dec. 10</td>
<td>Chas. 8-10</td>
<td>In class during class time</td>
<td>Dec. 10 ### HW Ch 10 &amp; Ch 10 post test</td>
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