BUSA 3110 – Spring 2014
Statistics for Business – Complete Syllabus
3 semester hours

Professor:  Dr. Kim Melton
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Office Hours  Dahlonega:  Tuesday, Thursday:  8:30 – 9:30 and Wednesday:  8:30 – 10:30
          Gainesville:  Tuesday, Thursday:  4:30 – 5:30
          other times by appointment (or by chance—just drop by)

Prerequisites  MATH 2400 with a grade of at least C and some experience using Excel

Texts  1)  Keller textbook and CengageBrain/Aplia bundle – includes selected chapters from
        Statistics for Management and Economics, 9th Edition by Keller (c) 2012 and an access
        code to the Aplia on-line learning system.  The entire book is available online through
        Aplia.
        2)  Melton Textbook, Statistics for Process Improvement Revised edition, Melton (c) 2004,
            Cengage/Thomson Learning
        3)  Material provided in the UNG’s Desire2Learn (D2L) site for this course
            D2L is accessible at https://ung.view.usg.edu/
           Information about how to access Aplia for BUSA 3110 is located in the News section
           of your D2L account and is posted at the public website
        5)  Public website:  http://faculty.ung.edu/kmelton/BUSA3110.html
        6)  Access to the web and Microsoft Excel 2010 for Windows is required for this course.
           See the section on Computer Software for more details.

Course Objectives
- to become familiar with common statistical methods for understanding
  and improving organizational performance
- to gain experience using software to analyze data
- to understand the limitations of the statistical methods covered
- to be able to communicate how statistical studies were conducted and the
  results of those studies.

Methods of Instruction
• Class will meet in a traditional classroom and use a combination of interactive lectures to
  present theoretical material and presentation of situations where the theory can be applied.  You
  will be expected to actively engage in the class through asking and answering questions.
• The focus will be on understanding concepts so that you can recognize situations where the
  tools and techniques can be applied.  As a result, we will be working to develop thought
  processes that can extend beyond working a single problem.
• Computation is a key part of any statistical analysis; but in today’s environment, most of the
  calculations can be done by a calculator or computer.  Excel Tutorials will be provided as a
  guide to the functions and processes needed for the topics covered in this course.
• Working homework will provided the experience necessary for you to use statistics
  successfully.
Course Content
The course content will be delivered to introduce statistical techniques that can be used to answer real-world questions. Statistical topics covered will include a review of MATH 2400 (including descriptive and inferential statistics), using Excel for statistical studies, statistical thinking, ethical issues related to statistics, data collection, sampling, regression, and statistical quality control. Emphasis will be placed on understanding the concepts and seeing how the same concepts are used in multiple scenarios.

“Secrets” for Success

“Whether you think you can, or your think you can't--you're right.” Henry Ford

==> Tell yourself that you can do statistics, and take action to make it happen. Actions include participating in class, doing homework, asking for help when you need it, and recognizing that success comes in lots of small steps.

"That's never been my focus -- numbers, milestones, records. My focus has been to be consistent and stick to a routine. The numbers and accomplishments of my career are just a byproduct." Tony Gonzalez

==> Although getting a good grade in the class (or the right answer to a problem) is desired, this is the byproduct of recognizing the question to be answered, identifying the tools and techniques available to gain insight into the problem, doing the analysis, and communicating the results in an understandable way.

Computer Software
We will use Microsoft Excel 2010 for Window. If you don’t have MS Office 2010, you can download the software (included in your student fees, so no extra charge for North Georgia students) by going to http://software.ung.edu . I have been told that the 2013 version of Office for Windows has the same functionality, but I do not have this version and cannot comment on whether the add-ins we use for our class are available or provide guidance on the methods for accessing these specific add-ins. The last three versions of Excel have each had different ways of accessing the Data Analysis Tools!

The newest Mac versions of Excel do not have the Add-Ins that we need. If you are using a Mac, you have a couple of options: 1) use a computer in a lab on campus or 2) use the “Virtual Lab” available through UNG. Information and access to the Virtual Lab is available at: https://my.ung.edu/departments/information-technology/Pages/Remote-Access.aspx . There is a link on the right side of the page with instructions. Note: Virtual Lab gives you access to much more than Excel 2010.

Course Resources
You will have a number of resources that are intended to supplement the classroom sessions. None of these resources stand on their own – each provides a different aspect of support.

Textbooks: The Keller (custom book) and Melton book provide written support for material presented in class and are the source of most homework problems that become the “test bank” for the final. The data needed for most of the problems in the Keller book is identified by a small “brownish” file name at the start of the problem (e.g., Xr18-10). These files are available in Aplia.
The data for the files in the Melton book are available on the public website. Although these homework problems are not graded during the semester, they do provide the practice needed to be prepared for class. You should complete all of these problems when they are assigned. [Note: Most students who work these problems during the semester do not need to take the final!]

Desire to Learn (D2L): D2L is the Learning Management System adopted by the University System. You login to this system (https://ung.view.usg.edu/) using the same login that you use for your e-mail. D2L is your primary “go to” place for materials specific to your section and will be used to post homework assignments, to provide copies of the slides used in class, and to post additional material that needs to be limited to students in the class. Homework assignments that will make-up the test bank for the final will be posted in D2L based on the day assigned (and should be completed prior to the next class meeting day). Links to the public website and to the Aplia login page will be posted in the news sections of the D2L site.

Public Website: This site (http://faculty.ung.edu/kmelton/BUSA3110.html) will be used to post all information for the first week of class and to post other material that may be of use to students beyond your section.

CengageBrain/Aplia (Aplia for short): Your custom textbook provides you with an Aplia access code. The course key specific for the Spring 2014 Melton sections of this class is VVZW-4GRL-9WJY. Aplia contains an electronic version of the entire Keller textbook, the Excel files (zipped) that are needed to work the problems in the Keller book, and an on-line graded homework system. Aplia requires that all assignments be posted by week and based on the due date. Weeks run from Monday through Sunday. Most of the Aplia graded homework assignments use a “grade it now” function that allows you to obtain immediate feedback and then attempt up to two more problems covering the same topics.

Grading
Your grade will come from a combination of three different types of assignments—required assignments, “optional” assignments, and performance on the final.

- Each of the required assignments will be graded out of 8 points (and count 8% of your final grade). You will have four quizzes, three in-class exercises, and four applied problems. Note: If the only graded work that you complete in the class is the required assignments, you cannot earn a grade higher than a B.

- “Optional” assignments mean you have options for which assignments you will do. The number of points that you can earn from optional assignments is 38% of the points you earned from the highest ten required assignments. [e.g., if the sum of your highest ten required assignments is 70, then you could earn up to .38 x 70 = 26.6 points from optional assignments. The types of optional assignments include:
  - Demonstrated mastery of Excel tutorials (each graded out of 4 points)—Everyone will be expected to complete the Excel tutorials. Each tutorial will be accompanied by an additional problem beyond the one used in the tutorial. To earn points, you must complete the extra problem and submit it for grading. Directions for submitting an attempt electronically will be included with the assignment. If your submission is less than passing, you will receive feedback for improvement and the opportunity to resubmit it with a deadline for submitting the rework. No points will be awarded until the submission is considered passing.
  - Current events (each graded out of 4 points) [max of two allowed]—For these you need to submit a printed article or a link to an article or video clip and a description of how this relates to statistical topics we have discussed in class. “Current” is defined as a publication...
or air date December 1, 2013 or more recent. The homework assignment from the first night of class related to nutritional testing of restaurant menu items provides an example.

- Challenge questions (points vary depending on the question)—These will be “thought” questions intended to help you apply the statistical theory.
- Aplia graded assignments (each graded out of 2 points)—Most weeks there will be a graded Aplia assignment posted. Any assignment where you earn at least 75% of the available credit on that assignment, you will receive that percent of 2 points.
- Your lowest grade from the eleven required assignments
- Others options may be added as we go through the semester.

- The final will give you an opportunity to replace two of the required assignments from the semester. Your final will consist of five to eight problems drawn from the homework assignments posted for each class period. You will be allowed to select two of these, and each will be graded out of 8 points. The maximum number of “optional” points that you can earn will not change as a result of the final. Your final exam time is scheduled by the University as:

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<tr>
<th>Class Time</th>
<th>Final Time</th>
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<tr>
<td>9:30 Tuesday/Thursday</td>
<td>10:20 – 12:20 Tuesday, April 29, 2014</td>
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<tr>
<td>11:00 Tuesday/Thursday</td>
<td>10:20 – 12:20 Thursday, May 1, 2014</td>
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<td>5:30 Tuesday/Thursday</td>
<td>5:30 – 7:30 Thursday, May 1, 2014</td>
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General Expectations

Attendance: You are expected to attend class each day. Students who quit attending class will receive a grade of WF—I will consider missing three consecutive graded assignments without contacting me as having quit attending.

Preparation: Students should arrive on time, stay for the entire class, and be prepared for class. “Prepared” means that each student should have read the assigned material and attempted all assigned problems. Students who are unable to complete an assigned problem should come prepared to ask questions about the problem. Students who are unable to determine how to start a problem should seek help during office hours or via e-mail prior to class time. Failure to work homework problems will make understanding more advanced topics more difficult. Students should plan to spend approximately six hours per week on class material outside of class.

Participation: Statistics is like a foreign language to many students; and, like learning a foreign language, learning statistics requires active involvement on your part. Part of the process of learning statistics involves new ways of thinking. You are expected to attempt to answer questions in class and to ask questions as they arise. Answers that appear to be “common sense” can be misleading when variation is taken into account. As a consequence, you will often be asked to explain the thought process that you used to reach an answer. Sometimes the greatest steps in learning come from understanding when/why a specific answer is not appropriate in a given setting.

Graded Assignments: Dates for in-class graded assignments will be announced in class and on D2L. If an in-class graded assignment is scheduled for a day when class is cancelled due to inclement weather, that assignment will be moved to the next regularly scheduled class meeting.

Dates and instructions for submitting out-of-class assignments will be included with the assignment. Most out-of-class graded assignments will be posted well before the “absolute” deadline. Earlier submission is usually better, and late submissions will not be accepted. Unless otherwise specified, electronic submission should be in a format readable by MS Office 2010 for Windows. FAXed
assignments are not accepted without prior approval.

**Make-ups:** If a student will miss an in-class graded assignment due to an excused absence, arrangements must be made **prior to the time of the assignment** for a make-up. If the absence is unplanned, timely notification and documentation will be required to consider a make-up. No make-ups will be given for unexcused absences and a grade of 0 will be recorded.

**Individual and Collaborative Work:** Students may collaborate on homework problems that form the test bank for the final. This means that students may work together; this does not mean that students may divide an assignment so that each student does separate parts.

All work on assignments that are submitted for grading is to be completed by the individuals named on the submitted assignment. If an assignment is listed as individual (or to be done independently), **no conversation** about the assignment may take place between individuals; for graded group assignments, the submitted work must be completed by the individuals in the group submitting the paper. Inappropriate communication (virtual or otherwise) will be treated as a violation of the Academic Integrity Policy (as described in the Student Handbook). Internet search engines or plagiarism detection software may be used to determine if students have plagiarized material and violated this policy.

**Calculator:** Each student is expected to have (and know how to use) a calculator with statistical mode. Calculators on cell phones may not be used for quizzes.

**Extra Credit:** The optional problems and the grading approach for the final exam effectively provide extra credit. Occasionally, required assignments will include an extra credit question. The only other kind of extra credit will come when a student reports a significant mistake in support material provided on D2L or the public website. The first student to report the error will be eligible for the extra credit.

**Telephones:** North Georgia uses Blackboard Connect Emergency Notification System to communicate emergency messages to the university community. If you have not already gone to your Banner account and registered your number(s), please consider doing so. During class, please set your cell phone to vibrate, put it away, and refrain from answering calls or checking text messages if your phone is the only one “ringing.” **Telephones must be put away during class.**

**Supplemental University Information:**
Please see [http://ung.edu/academic-affairs/policies-and-guidelines/supplemental-syllabus.php](http://ung.edu/academic-affairs/policies-and-guidelines/supplemental-syllabus.php) for university policies related to:

| Disability Services | Academic Exchange |
| Academic Integrity | Inclement Weather* |
| Disruptive Behavior | Course Grades |
| Class Evaluations   | Withdrawal Process |

**NOTE:** My 5:30 Tuesday/Thursday section will not meet if evening classes are cancelled due to inclement weather for the Dahlonega or the Gainesville campus.

Also, see [http://ung.edu/academics/academic-calendar.php](http://ung.edu/academics/academic-calendar.php) for important dates for the semester (drop/add, withdrawal, breaks, etc.).