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| **Course Outline BSTAT 3321: Business Statistics I Summer 2014** | | | | | | | | | |  |  |
|  | **Professor** | **Mary M. Whiteside, Ph.D.** |  |  | **Section** | 001 | **ID** | 50387 | |  |  |
|  | **Prerequisites** | INSY2303 and Math1315 (or business calculus) plus use of a spreadsheet | | | | | |  | |  |  |
|  | **Hours & Room** | Monday, Tuesday, Wednesday, Thursday 10:30 - 12:30 | | | | | COBA 152 | | |  |  |
|  | **Text** | *BSTAT3321/5301 The University of Texas at Arlington,* Pearson Custom Business | | | | | | | |  |  |
|  |  | Only if you are not required to take BSTAT 3322; otherwise *BSTAT3322/5325.* | | | | | | | |  |  |
|  | **Software** | Excel |  |  |  |  |  |  | |  |  |
|  | **Office Hours** | M 1:00 - 2:00, Th 9:00 - 10:00 and by appointment Room B513 | | | | |  |  | |  |  |
|  | **Phone** | (817) 272-3517 | **FAX** | (817) 272-5801 | | | whiteside@uta.edu | | |  |  |
|  | **GTA** | Ujala |  |  |  |  |  |  | |  |  |
|  | **GTA Office Hours** |  |  |  |  |  |  |  | |  |  |
|  | **Webpage** | [http://wweb.uta.edu/insyopma//whiteside/](file:///\\Jupiter\wh\) | |  |  |  |  |  | |  |  |
|  | **Class List** | The name of our list is BS1. To subscribe send an email after June 2nd to | | | | | |  | |  |  |
|  |  | listserv@listserv.uta.edu Subject and message are 'Subscribe bs1 <name>' | | | | | | | |  |  |
|  | **Grading Policy** | Class exercises & homework (10/12+ if 10/12 homework are submitted)) | | | | | | 20% | |  |  |
|  |  | Exams (3) |  |  |  |  |  | 30% | |  |  |
|  |  | Project |  |  |  |  |  | 20% | |  |  |
|  |  | Final Exam |  |  |  |  |  | 30% | |  |  |
|  | Homework assignments are due at the beginning of class and will not be accepted late. | | | | | | | | |  |  |
|  | An extra credit opportunity for the **homework** portion of your grade is available on the web. | | | | | | |  | |  |  |
|  | Class exercises are unannounced. There will be no make-up exercises or exams. If you must | | | | | | |  | |  |  |
|  | miss an exam for any reason, please notify me at the first opportunity. At my discretion you | | | | | | |  | |  |  |
|  | may be allowed to count the Final Exam as 40% of your grade to replace the missed exam. | | | | | | |  | |  |  |
| **Days** | **Date** | **Topics** |  |  |  | **Text** |  | **Homework: due** | |  |  |
| 1 | 2-Jun | Introduction/Graphs with Excel |  |  |  | Chapter 1-2 | |  | |  |  |
| 2 | 3-Jun | Numerical Descriptive Measures | |  |  | Chapter 3 |  |  | |  |  |
| 3 | 4-Jun | Numerical Descriptive Measures | |  |  | Chapter 3 |  |  | |  |  |
| 4 | 5-Jun | Review |  |  |  |  |  | 1 | |  |  |
| 5 | 9-Jun | **Exam 1 Chs. 1- 3/**Probability |  |  |  | Chapter 4 |  | 2 | |  |  |
| 6 | 10-Jun | Probability/Binomial Distribution | |  |  | Chapter 5 |  |  | |  |  |
| 7 | 11-Jun | Binomial Distribution/Normal Distribution | |  |  | Chapter 6 |  | 3 | |  |  |
| 8 | 12-Jun | Normal Distribution/Review |  |  |  | Chapter 6 |  | 4 | |  |  |
| 9 | 16-Jun | **Exam 2 Ch. 4 - 6/**Sampling Distributions | |  |  | Chapter 7 |  | 5 | |  |  |
| 10 | 17-Jun | Sampling Distributions |  |  |  | Chapter 7 |  |  | |  |  |
| 11 | 18-Jun | Estimation |  |  |  | Chapter 8 |  | 6 | |  |  |
| 12 | 19-Jun | Estimation/Hypothesis Testing |  |  |  | Chapter 9 |  |  | |  |  |
| 13 | 23-Jun | Hypothesis Testing |  |  |  | Chapter 9 |  | 7 | |  |  |
| 14 | 24-Jun | Review |  |  |  |  |  | 8 | |  |  |
| 15 | 25-Jun | **Exam 3 Chs. 7 - 9** |  |  |  |  |  | 9 | |  |  |
| 16 | 26-Jun | Regression |  |  |  | Chapter 10 (13) | |  | |  |  |
| 17 | 30-Jun | Regression |  |  |  | Chapter 10 (13) | | 10 | |  |  |
| 18 | 1-Jul | Regression |  |  |  | Chapter 10 (13) | | 11 | |  |  |
| 19 | 2-Jul | Review |  |  |  |  |  | **Projects Due** | |  |  |
| 20 | 7-Jul | **Final Exam 10:30 - 12:30** |  |  |  | Chapter 1-10 (13) | | 12 | |  |  |
| ***Course Objective:*** | | **To enable the students to find and solve problems in business and economics** | | | | | | | |  |  |
|  |  | **using selected statistical methods. See attached learning outcomes.** | | | | | |  | |  |  |
|  | **If you require an accommodation based on disability, I would like to speak with you.** | | | | | | | | |  |  |
| **Vision statement for BSTAT3321** | | | | | | | | |
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| Our vision for STAT3321 is that students will become competent consumers of statistical information | | | | | | | | |
| they will encounter in their professional and personal lives. Students will be able to perform basic statistical | | | | | | | | |
| analyses and to think critically when interpreting statistical results. | | | | | | | | |
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| **Learning outcomes for BSTAT3321** | | | | | | | | |
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| 1. The student will be able to \*evaluate verbal, numeric, and graphic descriptions of a data set. | | | | | | | | |
| 2. The student will be able to select a simple random sample and to evaluate the role of randomness in data collection (both sampling and experimentation). The student will restrict causal inferences to data collected from experiments. | | | | | | | | |
| 3. The student will be able to analyze probability problems by choosing and applying basic laws of probability, computing and interpreting results. | | | | | | | | |
| 4. The student will be able to distinguish between discrete and continuous random variables, find binomial and normal probabilities using tables, and compute expected value and variance for a binomial | | | | | | | | |
| distribution. The student will be able to analyze binomial and normal probabilities. | | | | | | | | |
| 5. The student will be able to analyze scenarios appropriate for the Central Limit Theorem and choose the sampling distributions to find and interpret probabilities for the sample mean and sample proportion. | | | | | | | | |
| 6. The student will be able to set up, calculate, and interpret confidence intervals for a population mean and a population proportion and to determine sample sizes for given levels of confidence and margins of error. | | | | | | | | |
| 7. The student will be able to set up and test hypotheses about a population mean and a population proportion and to interpret the results. | | | | | | | | |
| 8. The student will be able to fit and interpret simple linear regression models along with the usual inferences. | | | | | | | | |
| 9. The student will be able to use a software package in order to perform appropriate statistical analyses. | | | | | | | | |
| 10. The student will be able to select and justify appropriate statistical techniques for a given scenario. | | | | | | | | |
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| \*For all topics, the student will be able to demonstrate knowledge and comprehension, for example by defining the new terms in the topic and describing and restating the concepts covered in each topic. The abilities to apply, analyze, synthesize and evaluate are assumed to be hierarchal. In other words, the ability to evaluate and synthesize presumes an ability to analyze and apply. Likewise the ability to analyze presumes an ability to apply. | | | | | | | | |
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| **The course grade reflects the proportion of topics that the student masters.**  **University Policies**  **Attendance:** Regular class attendance is an expectation for this course and will be reflected in class exercise grades.  **Expectations for Out-of-Class Study**: Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend at least an additional 9 hours per week of their own time in course-related activities, including reading required materials, completing assignments, preparing for exams, etc.  **Drop Policy:** Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. Students will not be automatically dropped for non-attendance. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (http://wweb.uta.edu/ses/fao).  **Americans with Disabilities Act:** The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the Americans with Disabilities Act (ADA). All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability or by calling the Office for Students with Disabilities at (817) 272-3364.  **Academic Integrity:** All students enrolled in this course are expected to adhere to the UT Arlington Honor Code: *I pledge, on my honor, to uphold UT Arlington’s tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence. I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.*  Instructors may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System Regents’ Rule 50101, §2.2, suspected violations of university’s standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student’s suspension or expulsion from the University.  **Student Support Services:** UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at www.uta.edu/resources.  **Electronic Communication:** UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at http://www.uta.edu/oit/cs/email/mavmail.php.  **Student Feedback Survey:** At the end of each term, students enrolled in classes categorized as lecture, seminar, or laboratory shall be directed to complete a Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student’s feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington’s effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit http://www.uta.edu/sfs.  **Final Review Week**: A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week unless specified in the class syllabus. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.  **Emergency Exit Procedures:** Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, which is located down the single flight of stairs immediately outside the classroom. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.  **As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course.** | | | | | | | | |
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