SCMA 3300 - BUSINESS STATISTICS
FALL 2017
ROBERT FRESE

Revised: 8/28/17

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Office hours: Fri 8:55-9:25 or MW by Appointment.

Lectures: Section 004 MWF 8:00-8:50 AM in ESH 0003
          Section 001 F-F 9:30-12:10 AM in ESH 0003

Prerequisites: Mathematics 1100, 1105, Business Administration 1800 and a 2.0 campus GPA.
If you do not meet these prerequisites, the College of Business will unilaterally drop you from the class.

Course Description: Construction and use of statistical models for business management.
Students will learn techniques used for relational analysis and business forecasting and how to apply them in a business context. Tools include Chi-Square tests of statistical independence; analysis of variance; simple linear regression and correlation; multiple linear regression; and extrapolative techniques such as moving averages and exponential smoothing. Emphasis is placed on problem definition, construction of statistical models, analysis of data, and interpretation of results. Computers are utilized to facilitate completion of homework assignments.

Primary Text:
Statistics for Business and Economics by Anderson, Sweeney, and Williams, 12th edition, South-Western Publishing (2014, 2012) Note: No other editions of text will be referenced

Software:
Microsoft Office EXCEL as directed in class
Interface for course: mygateway.umsl.edu

Grading:
36% (180 pts) Homework assignments (100 pts) & quizzes (80 pts) (only the lowest score on homework assignments will be dropped). Homework will be a combination of computerized and hand-written assignments; all quizzes will be completed as open-book, in-class written exercises.
40% (200 pts) Two midterms with weights of 20% each (100 pts ea); study points provided.
24% (120 pts) Final Exam (comprehensive): Sec 004 12/11 at 7:45; Sec 001 12/15 at 10:15 AM

Grading Scale: A = 90%+   B = 80-89%   C = 70-79%   D = 60-69%   F = Below 60%

NOTE: +/- grades will be used in the assignment of course grades
No projects for “extra credit” at the end of the semester will be offered
**Communication:** Students will be contacted via email using student email addresses in order to relay announcements, homework problems, and/or datasets. Generally, assignments and announcements will be posted on the mygateway.umsl.edu site.

**Additional Resources:** Notes in the form of Power Point slides will be posted on the mygateway site for most chapters. It will be helpful for most student to review the PPT slides and read the text before each class. You should read the text SLOWLY and in all likelihood MORE THAN ONCE. EXCEL software will be utilized to facilitate solving problems from several chapters. Expectations regarding the use of Excel are discussed on the last page.

**Exams/Assignments:** Homework assignments must be submitted on time in written or printed format; no make-ups for missed quizzes. A midterm can be scheduled in the Test Center only if you schedule ahead. If valid extenuating circumstances cause you to miss a midterm, the percent earned on the Final will become the basis for the missed score.

**Class Preparedness:** Students should come prepared for each class with textbook, pencil, and calculator. Items can NOT be shared on exams and are NOT provided by the instructor.

**Attendance:** Note that 10 bonus points can be earned at the end of the term if you miss at most one class on those days when attendance is taken. Regardless of the frequency you choose to attend, you are responsible for ALL material presented in class - whether you are present or not.

**Special Needs:** If you have documented special needs, it is your responsibility to notify the instructor and provide required documentation so that necessary accommodations can be made.

**Classroom Decorum:** Appropriate behavior is expected in the classroom. Conversations with classmates should take place outside of class. Please make every effort to arrive by the class start time; in addition, it is disrespectful to everyone if you leave before class is dismissed.

**Academic Honesty:** According to the University Standard of Conduct, Section 6.0101, “The Board of Curators recognizes that academic honesty is essential for the intellectual life of the University. Faculty members have a special obligation to expect high standards of academic honesty in all student work. Students have a special obligation to adhere to such standards.” Any student(s) caught cheating in any manner on any exam/assignment may receive a grade of zero for that exam/assignment. Also, a recommendation may be made to the appropriate university official for further formal disciplinary action. DO NOT TAKE THIS LIGHTLY!

**Note on Homework Assignments:** Although discussion of homework assignments with other students is encouraged, note that each student must prepare his/her own solutions. This means it is NOT acceptable to xerox or simply “cut and paste” someone else’s work and then add your name to it. THIS WILL BE CONSIDERED TO BE ACADEMIC DISHONESTY!

**Note on Exams/Quizzes:** Cell phones and/or any other electronic devices capable of transmitting any kind of text must be placed on the floor in backpack, book-bag, purse, etc. The appearance of such items on your desk creates the suspicion of possible ACADEMIC DISHONESTY!
**Tutoring:** Tutoring assistance will now be available from Deanna Pan (238) and Juan Zhang (240) in Express Scripts Hall. **Office hours will be:** Mon (9:00-1:00 Deanna); Tue (10:45-1:45 Juan); Wed (9:00-11:00 and 4:00-6:00 Juan); Thr (10:30-11:30 Juan and 4:30-5:30 Deanna); Fri (9:00-11:00 Deanna). No word on SI. **These resources come at no cost to you!**

**On your own:**
Expand your familiarity with the Excel software package. If you do not have your own computer with EXCEL, it is available in the Student Computer Labs on campus. EXCEL provides a vehicle for creating a printable, neat summary of your analysis as well as a means of facilitating extensive data calculations and statistical function lookups. Knowledge of EXCEL will be very useful as well as necessary to solve some homework problems. Although the development of student proficiency in EXCEL is important, you will **not** be tested on EXCEL per se.

**TENTATIVE SCHEDULE**

**INITIAL REVIEW FROM MATH 1105:**
You should carefully review Chapter 5 on Discrete Probability Distributions and Chapter 6 on Continuous Probability Distributions – primarily the standard normal distribution.
Chapter 7 (Sec 1-8): Sampling & Sampling Distributions
Chapter 8 (Sec 1-4): Interval Estimation  Chapter 11 (Sec 1): Inferences about Variances

**COURSE MATERIAL** (subject to change):

| Wk of SEP 3 | [LD .6, 8] 8 | Chapter 9 - Hypothesis Testing |
| Wk of SEP 10 | [11,13,15] 15 | CH 9 (cont) |
| Wk of SEP 17 | [18,20,22] 22 | Chapter 10 - Mean Inferences w/Two Populations |
| Wk of SEP 24 | [25,27,29] 29 | Chapter 11 - Inferences about Variances |
| **Wk of OCT 1** | [2,4,6] 6 | **EXAM 1**; Chapter 12 - Tests of Goodness of Fit |
| **Wk of OCT 8** | [9,11,13] 13 | CH 12 (cont); Chapter 13 – ANOVA |
| **Wk of OCT 15** | [16,18,20] 20 | CH 13 (cont) |
| **Wk of OCT 22** | [23,25,27] 27 | Chapter 14 - Simple Linear Regression |
| **Wk of OCT 29** | [30,1,3] 3 | Chapter 15 – Multiple Regression |
| **Wk of NOV 5** | [6,8,10] 10 | **EXAM 2**; Chapter 17 - Forecasting |
| **Wk of NOV 12** | [13,15,17] 17 | CH 17 (cont) |
| **Wk of NOV 19** | ----- | **Thanksgiving Break** |
| **Wk of NOV 26** | [27,29,1] 1 | Chapter 20 - Index Numbers |
| **Wk of DEC 3** | [4,6,8] 8 | Chapter 18 - Nonparametric Testing |
| **Wk of DEC 10’** | **11, 15** | **FINAL EXAM** |

* See notes near bottom of pg 1 for specific exam times