BUSINESS AND ECONOMICS STATISTICS II
STAT2112-Section 12 – CRN 35769– Fall 2012
[08/28/12 - 12/07/12]
MW, 12:45 – 2:00 PM
Main Campus, Room: FNGR 208

Instructor: Thomas A. Vadakkeveetil, Ph.D.
Office Hours: Before & after class and/or by appointment
Contacts: TVAlex@gwu.edu Tel: 202-966-5079

TEXTBOOK & COURSE MATERIALS
Software: Excel/Minitab/SPSS/SAS. Any one of them.

COURSE DESCRIPTION
STAT2112 is the second of the business statistics courses which builds upon basic statistical concepts covered in the previous introductory statistics courses such as STAT1051 and STAT1053. The course will review Chapters 6, 7 & 8 (Introduction to Inference, Inference for Distribution and Inference for Proportion) to ensure that the students knows the basic concepts and methods discussed in the prerequisite class.

The core of the class will be Chapter 9 (Inference for Two-Way Tables), Chapter 10 (Inference for Regression), Chapter 11 (Multiple Regression), Chapter 13 (Time Series Forecasting, Sections 1-3) and Chapter 14 (One-way Analysis of Variance). Only specific sections from these chapters will be covered, which will be announced in the class. Time permitting, selected sections from Chapter 12 (Statistics for Quality) and Chapters 16 (Nonparametric Tests) will be covered. The main topics are: estimation, hypothesis testing, categorical data analysis, simple linear regression and multiple regression. These statistical concepts and methods are used to analyze data in business, economics, social sciences and other areas of application. Students are responsible for all topics covered in the assigned reading or in class. Statistical software programs will be used for analysis.

The first two or three classes will be used for revisiting and reviewing inferential statistics and hypothesis testing.

COURSE PREREQUISITE
Successful completion of at least one introductory statistics course, such as STAT1051, STAT5053, STAT2111 or equivalent is a prerequisite. First two or three classes will be devoted to a review of the prerequisite such as summarizing data, interpreting confidence intervals, p-values and standard tests.
LEARNING OUTCOMES
By completing this course, students will be able to do the following tasks:
1. Carry out hypothesis tests and calculate confidence intervals.
2. Carry out and interpret the results of the basic statistical analyses, comparing means or proportions of two groups, simple linear regression and multiple regression.
3. Carry out and interpret the results of the chi-square test for categorical data and (if time permits) other analysis methods.
4. Will also learn the assumptions underlying the statistical procedures and know when each method is appropriate for the data set you need to analyze.

COURSE POLICIES

- Quizzes and tests are in-class tests; there will be no take-home tests. Quizzes are closed-textbook and closed-note; tests are open-textbook.
- There will be **no** make-up exam (except for very special reasons) or extra-credit assignments.
- Students must bring a calculator for quizzes and tests; sharing of calculators not allowed. Cell phones are not allowed during the quizzes and tests.
- Assignments will be discussed in the class well in advance, and students will be given sufficient time to complete them.
- Assignments submitted after the deadlines will not be accepted.
- Incomplete: A grade of INCOMPLETE will ONLY be given to a student who is **passing** the course and cannot complete the course due to well documented circumstances beyond their control. University policies on teaching are available at [http://www.gwu.edu/~academic/Teaching/main.htm](http://www.gwu.edu/~academic/Teaching/main.htm)
- email: The instructor will try to respond to emails sent during normal business hours on Monday-Thursday and by Friday within 24 hours. Email sent at night will be considered to have arrived the following morning and email sent over the weekend will be considered as arriving on Monday morning.
- Feel free to call the instructor. If the instructor is not available please a message with your call-back number. Please be clear and slow.
- There will be absolutely no tolerance of dishonest conduct during the exams, and severe measures will be taken against dishonest conduct. University academic honesty policies will be enforced – check [www.gwu.edu](http://www.gwu.edu)
- Religious Holidays: Students are allowed to take religious holidays off.
- Courtesy rules: No cell phone calls; please turn off your cell phones during class sessions. No consumption of food is allowed; drinks are allowed when consumed in a quiet manner.
- [NOTE: for university policies on teaching, see [http://www.gwu.edu/~academic/Teaching/main.htm](http://www.gwu.edu/~academic/Teaching/main.htm)]

COURSE REQUIREMENTS & GRADING
There will be three Quizzes, three in-class tests, two projects applying statistical software.
Grading:

- Three in-class exams (25% x 3): 75%. These exams will be cumulative but will emphasize material covered since the previous exam. The last exam will be given on the last day of class so there will not be a final exam.
- Three Quizzes (5% x 3): 15%
- Two projects (5% x 2): 10%
EXAM SCHEDULE
Quiz and test dates: To be announced.

GRADING SCALE
A = 94-100%;  A- = 90-93%;  B+ = 87-89%;  B = 83-86%;  B- = 80-82%;  C+ = 77-79%;  C = 73-76%;  C- = 70-72%;  D+ = 67-69%;  D = 63-66%;  D- = 60-62%;  F <60%

HOMEWORK
Specific homework problems will be assigned from each chapter.

ACADEMIC INTEGRITY
I personally support the GW Code of Academic Integrity. It states: “Academic dishonesty is defined as cheating of any kind, including misrepresenting one's own work, taking credit for the work of others without crediting them and without appropriate authorization, and the fabrication of information.” For the remainder of the code, see: http://www.gwu.edu/~integrity/code.html

SUPPORT FOR STUDENTS OUTSIDE OF THE CLASS ROOM
DISABILITY SUPPORT SERVICES (DSS)
Any student who may need an accommodation based on the potential impact of a disability should contact the Disability Support Services office at 202-994-8250 in the Marvin Center, Suite 242, to establish eligibility and to coordinate reasonable accommodations. For additional information please refer to: http://gwired.gwu.edu/dss/

UNIVERSITY COUNSELING CENTER (UCC): 202-994-5300
The University Counseling Center (UCC) offers 24/7 assistance and referral to address students' personal, social, career, and study skills problems. Services for students include:
- crisis and emergency mental health consultations
- confidential assessment, counseling services (individual and small group), and referrals
http://gwired.gwu.edu/counsel/CounselingServices/AcademicSupportServices

SECURITY
In the case of an emergency, follow the evacuation procedures for the building. After evacuation, seek shelter at a predetermined rendezvous location. An evacuation will be considered if the building we are in is affected or we must move to a location of greater safety. We will always evacuate if the fire alarm sounds. In the event of an evacuation, please gather your personal belongings quickly and proceed to the nearest exit.

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