INTRO TO STATISTICS IN SOCIAL SCIENCE
STAT1053-Section 14 – CRN 45462 – Spring 2015
Monday & Wednesdays, 9:35 – 10:50 AM
[Additionally, there will be a Recitation Session]
[01/12/15 - 04/27/15]
Main Campus: FNGR 210

SYLLABUS

Instructor: Thomas A. Vadakkeveetil, Ph.D.
Office Hours: Wednesdays 12:30-1:30 PM and by appointment, Statistics Department
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TEXTBOOK & COURSE MATERIALS
Strongly Recommended: Student Solution Manual
Software: SPSS (Available in most GWU computer labs, need not buy.)

SPECIAL REQUESTS FROM YOUR INSTRUCTOR. Please ……
- Your emails must have your full name, course number (STAT1053) and a mention of the issue in the SUBJECT line of the email.
- Bring your textbook to class.
- Turn off your cell phones during the class.
- Do not engage in conversation with your neighbors while the instructor teaches.
- Do not disturb the class or your classmates.
- Avoid tardiness. Come to class on time and do not leave before the class ends.

COURSE DESCRIPTION
This is a general survey course in elementary statistics that will broadly cover descriptive statistics, probability, sampling, and inference, hypothesis testing and simple linear regression. The goal of the course is for students to obtain a good basic understanding of statistics. The course covers Chapters 1 through 9 and 11 excluding “Optional” sections, in the textbook. STAT 51, 53, 91, 104, 111, and 127 are related in their subject matter, and credit for only one of the six may be applied toward a degree.

COURSE PREREQUISITE
None. High school algebra is essential.

LEARNING OUTCOMES
Students will learn to use a variety of fundamental statistical principles integrated with business, economic and social science applications. They will learn to analyze data using appropriate statistical techniques and to interpret the findings. Students will also learn the statistical/quantitative techniques necessary for further study in business, economics, and
social sciences. More specifically, upon successful completion of this course, the student, among other skills, will be able to:

1. Describe the differences between the various types of data.
2. Apply various descriptive graphical techniques.
3. Calculate and interpret measurements of central tendency.
4. Describe the characteristics of discrete and continuous probability distributions.
5. Calculate the standardized values of a normal distribution.
6. Calculate estimates of population parameters using sample data.
7. Develop confidence intervals.
8. Calculate and interpret measurements of central tendency.
9. Use SPSS™ software for statistical analysis.
10. Use SPSS™ software for generating statistical graphs.

COURSE REQUIREMENTS
Four Quizzes, In-Class Midterm, In-Class Final, Two SPSS Projects and regular class attendance.

GRADING POLICY
• Quizzes: 20%     •Mid-Term: 25%  •Final Exam: 35%  •Assignments/Projects: 20%

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%
EXAM SCHEDULE
● Mid-Term: To be announced. Final Exam: To be announced by the University.
● There will be a quiz (TBA) for every two chapters.

PROJECTS
● Project 1 involves conducting an opinion survey using a questionnaire, analyzing the
  survey data applying the statistical concepts and skills learned in the class, and
  preparing a report. The report is due by midterm. SPSS will be used for data analysis.
● Project 2 will be on simple linear regression. Data will be provided. Student will analyze
  the data (using SPSS), develop simple linear models, interpret the findings, and prepare a
  report. The report is due by the last week of the course.

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 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.
HOMEWORK

Must practice all the solved examples in the chapters (excluding those in “Optional” sections). All the Problems in “Understanding the Principles” and “Learning the Mechanics” sections of the exercises are strongly recommended. Answers to select odd-numbered problems are given in in Appendix (starting on Page 818). Also, some specific problems will be assigned. Do as many problems as possible. Homework will not be graded.

Chapter 1:
All the “Learning the Mechanics” problems and the other problems with answers.

Chapter 2:
All the “Learning the Mechanics” problems and the other problems with answers.

Chapter 3:
All the “Learning the Mechanics” problems and the other problems with answers.

Chapter 4:
All the “Learning the Mechanics” problems and the other problems with answers.

Chapter 5:
All the “Learning the Mechanics” problems and the other problems with answers.

Chapter 6:
All the “Learning the Mechanics” problems and the other problems with answers.

Chapter 7:
All the “Learning the Mechanics” problems and the other problems with answers.

Chapter 8:
All the “Learning the Mechanics” problems and the other problems with answers.

Chapter 9
All the “Learning the Mechanics” problems and the other problems with answers.

Chapter 11
All the “Learning the Mechanics” problems and the other problems with answers.

Additional problems will be assigned from each chapter for practice.