THE GEORGE WASHINGTON UNIVERSITY
Department of Statistics

STAT 2118-10 (CRN 31911) – SYLLABUS
Fall 2012
Lectures: MW 11:10AM – 12:25PM, 1957E B12
Lab: register for one recitation section

Instructor: Dr. Subrata Kundu, Rome Hall 557, 801 22nd ST NW.
kundu@gwu.edu Phone: 994-6355
Office Hours: Mondays and Wednesdays: 1:00 PM. - 2:00 PM.
GTA: Ms Swetha Valluri and Mr Liyi Jia. Your TA will lead the recitation section.
TA Office: 2140 Pennsylvania Ave. NW. Basement.

Course Structure: The class consists of two lectures and one lab per week. Your grade is based on
class-participation, homework, quizzes, projects, two midterms and the final.

Textbooks: Required: Applied Linear Regression Models, Revised Edition with Student CD, 4th edition,
You need a calculator for this course and please bring it to class everyday.

Course Content and Learning Outcomes: The aim of the course is to introduce basic concepts
of Simple and multiple linear regression, inference, partial correlation, residual analysis, stepwise model
building, multicollinearity and diagnostic methods, indicator variables, logistic regression, and their
applications. The course will cover the material in chapters 1–10, parts of chapters 11, 12 and 14. Any
changes will be announced in class. Blackboard will be used extensively.

Learning Outcomes: As a result of completing this course, students should be able to:
i) Understand basic concepts of correlation, regression, model diagnostics and model building.
ii) Know how to fit and interpret regression models and apply them in various fields(e.g. Finance,
Economics.)
iii) Analyze and interpret Regression data using SAS.
iv) Compare different competing regression models and select the best one among them.

Homework and Quizzes: Homework will be assigned almost every week. Most of the homework will
be collected and graded. HW will be collected on the due date before lecture. Late submission will not
be accepted. Your TA will go over problems similar to the HW problems and SAS examples during lab
sessions. Upto six (some unannounced) quizzes (closed book and notes) will be given in the lecture/lab.
You will have 15–20 minutes to solve the problems. Lowest quiz/hw score will be dropped. No make up
quiz will be given.

SAS Project: There will be at least two (one individual and one group) computer projects involving
the use of SAS to statistically analyze data. A report along with the SAS code and SAS output has to
be turned in.

Midterm: Two closed book midterm examination will be given. If a midterm is missed, you will
receive zero credit for that part of the grade. No make-up midterm will be given. In exceptional
circumstances (e.g. well-documented medical problems), a missed midterm will not be counted.
**Final Exam:** The Final examination is cumulative. In the event that you are going to miss an examination, you must notify me/TA prior to the examination. There will be no make-up final. In accord with the university policy, the final exam will be given during the final exam period.

**Course Grading:** Your final letter grade will be based on a total score computed as follows:

- Class Participation, Quizzes and Homework: 30%
- Computer Projects: 10%
- Midterms: 40%
- Final exam: 20%

The score you get in relation to the rest of the class will determine your grade. A grade of INCOMPLETE will *ONLY* be given to a student who is **passing** the course and cannot complete the course due to illness or other (well documented) circumstances beyond their control.

**Code of Academic Integrity:** All examinations, papers, and other graded work products and assignments are to be completed in conformance with The George Washington University 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/~ntegrity/code.html

**Student Services:** If you experience difficulty in this course for any reason, please consult with me. If you have a disability and require accommodations, please notify me with a letter from DSS so that we can make arrangements.

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

SECURITY: In the case of an emergency, if at all possible, the class should shelter in place. If the building that the class is in is affected, follow the evacuation procedures for the building. After evacuation, seek shelter at a predetermined rendezvous location (Gelman Library ground floor).

**Other:** You **MUST** keep your cell phone ringer off during classes. Absolutely no eating in the classroom.