GEORGE WASHINGTON UNIVERSITY
DEPARTMENT OF STATISTICS

Syllabus

STAT 1053.12 (CRN 90652) – Introduction to Statistics in Social Science – Fall 2011

Lectures: Tuesday and Thursday 3:45 PM – 5:00 PM at Funger Hall, Room #108

Instructor: Ravi Kalpathy

Office Address: Department of Statistics
2140 Pennsylvania Avenue NW, Room #B05
Phone: 202-994-6625
Email: kalpathy@gwu.edu
Web: http://home.gwu.edu/~kalpathy

Office Hours: Tuesday and Thursday 5:00 - 6:00 PM

Lab: The class is divided into five discussion sections with 30 students in each section. Please make sure that you attend the lab for which you are enrolled. The lab sessions will be conducted by the respective TA’s.

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<th>Section</th>
<th>Time</th>
<th>TA</th>
<th>Email</th>
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<tr>
<td>STAT 1053.35</td>
<td>Thu, 9:35-10:25</td>
<td>Owen Martin</td>
<td><a href="mailto:owenm@gwmail.gwu.edu">owenm@gwmail.gwu.edu</a></td>
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<td>STAT 1053.36</td>
<td>Thu, 12:45-1:35</td>
<td>Wenjing Xu</td>
<td><a href="mailto:jeanjane@gwmail.gwu.edu">jeanjane@gwmail.gwu.edu</a></td>
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<td>Wenjing Xu</td>
<td><a href="mailto:jeanjane@gwmail.gwu.edu">jeanjane@gwmail.gwu.edu</a></td>
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<tr>
<td>(CRN: 93894)</td>
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Course Homepage: http://blackboard.gwu.edu Please check this page frequently. I will post important information (homework, quizzes, projects, lecture notes, etc.).

Course Description:
This is an introductory class in the statistical sciences. Below is the summary of topics. Numerical measures of central tendency and variability, frequency distributions & graphical presentations, probability, random variables, sampling distributions, estimation, confidence intervals, testing of hypotheses, linear regression and correlation.

Software: SPSS Statistics Student Version 18.0 for Windows and Mac OS X. The software is available in computer labs on campus. If you want, you may purchase it at the bookstore.

Calculator: You will need a scientific calculator to do the problems.

Learning Outcomes:
At the end of the semester you should be able to
--apply laws of probability
--construct and interpret large-sample and small-sample confidence intervals
--evaluate evidence for and against hypotheses using statistical tests
--find the least-squares equation for simple linear regression and assess the utility of the model

Homeworks: Homework problems will be assigned and students are expected to work through them. These problems are intended to help reinforce the material from lecture. The homeworks will be graded and will count towards the final grade. The lowest homework score will be dropped.

Quizzes: There will be a quiz during lab and it will be based on material covered in the lectures. The quizzes will be graded and will count towards the final grade. The lowest quiz score will be dropped.

Projects: An SPSS project will be assigned during the course of the semester. The project will involve analyzing data using SPSS and interpreting the results. The project will be graded. You may work in teams of up to three people.

Exams: There will be a midterm and a final. The final exam is cumulative. The exams will be closed book; however, you will be allowed a one-page handwritten note sheet for the midterm, and a two-page handwritten note sheet for the final. No make-up exams are allowed. The exam dates are listed below:
Midterm Exam: Thursday, October 20, 2011 (tentative)
Final Exam: To be announced and decided by the University. It will roughly be between, Dec 13 – 21. Check out the following links:
GWU Final exam schedule [http://my.gwu.edu/mod/exam_schedules](http://my.gwu.edu/mod/exam_schedules)
GWU Academic calendar [http://www.gwu.edu/ac.cfm](http://www.gwu.edu/ac.cfm)

NOTE: IN ACCORD WITH UNIVERSITY POLICY, THE FINAL EXAM WILL BE GIVEN DURING THE FINAL EXAM PERIOD AND NOT THE LAST WEEK OF THE SEMESTER. PLEASE CHECK THE GWU FINAL EXAM SCHEDULE BEFORE MAKING PLANS TO LEAVE AT THE END OF THE SEMESTER.
Grading Policy: The final grade is computed as follows:
Quizzes and Homework: 30%
SPSS Project: 5%
Midterm Exam: 30%
Final Exam: 35%

Make-Up Policy: No make-up exams are allowed, except under extraordinary circumstances such as a death in the family or a medical emergency. In such cases, I will require written proof of the cause of the absence. If you will miss a graded assignment due to a religious holiday, you must notify me during the first week of classes.

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/~ntegrity/code.html

SUPPORT FOR STUDENTS OUTSIDE THE CLASSROOM
DISABILITY SUPPORT SERVICES (DSS)
Please inform the instructor if you have a documented disability and need special arrangements for tests or quizzes. To establish eligibility and coordinate reasonable accommodations for exams, please contact the Disability Support Services Office (202-994-8250), in Rome Hall, Suite 102, or at http://gwired.gwu.edu/dss/

UNIVERSITY COUNSELING CENTER (UCC)
The University Counseling Center 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 & small group), and referrals
Visit http://gwired.gwu.edu/counsel/CounselingServices/AcademicSupportServices or call 202-994-5300.

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.

Note: STAT 1051, 1053, 1091, 2104, 1111 and 1127 (Old course numbers STAT 51, 53, 91, 104, 111, and 127) are similar in subject matter, and credit for only one of these courses may be applied toward a degree. You should not enroll in STAT 1053 if you have taken, or plan to take any other one of these courses.