Data Analysis and Stat. Software I (CSC 323-503)

Quarter: Winter 2003  
Time: T TH 01:30 - 03:00  
Campus: Loop Campus  
Room: LEWIS 01508

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Instructor homepage

• Course homepage: http://facweb.cs.depaul.edu/Dstan/teaching/winter03/csc323-503/index.htm

Summary of the course:

This is an introductory course in statistical methods for undergraduate students. The first part of the course is an introduction to descriptive statistics for data, covering topics such as frequency tables, histograms and stemplots, the median, IQR & boxplots, the mean & standard deviation, scatterplots, regression, correlation and causality. Other topics covered in the first part include the normal distribution, experimental design and sampling procedures. The second part of the course introduces the statistical inference; topics covered include probabilities, confidence intervals and hypothesis testing. The mathematical foundations of statistical inference will be illustrated with examples from a variety of disciplines such as medicine, business and engineering. The statistical package SAS will be used where appropriate as a teaching tool and computational aid. The following list indicates the chapters of the textbook covering the above statistical concepts and methods:
• Introduction (Chapter 1)
• Correlation and Regression (Chapter 2)
• Producing Data (Chapter 3)
• Probability and Chance Variability (Chapter 4)
• Sampling Distribution (Chapter 5)
• Confidence Intervals and Tests of Significance (Chapters 6, 7, 8)
• Inference for Regression (Chapter 10)
If time permits, we may cover additional topics.

Textbooks and printed resources:


Prerequisites:

CSC 110 or CSC 150, Mathematics 130 or BMS 125
Grading:

The homework and programming assignments will be worth 30% of the course grade. There will be 2 quizzes; each quiz is worth 7.5% of the course grade. There will be a midterm exam given on February 6th that will be worth 20% of the course grade, and a final exam on March 17th (11:45-2:00pm) that will be worth 35%. Both midterm and final exams are closed book exams; students are allowed to bring one single page of notes and a calculator.

The final grade will be assigned according to the following scale:
- A, 95 -100%;
- A-, 90 - 94%;
- B+, 86 - 89%;
- B, 82 - 85%;
- B-, 78 - 81%;
- C+, 74 - 77%;
- C, 70 - 73%;
- C-, 66 - 69%;
- D+, 63 - 65%;
- D, 60 – 62%;
- F, <59%;

Homework and Programming Assignments Policies

There will be 6 homework and programming assignments, which are due at the beginning of class one week after they are assigned. Each programming assignment must be turned in on a diskette accompanied by a printout of the source code. I will not be accepting submissions by email. Late assignments will be accepted up to one lecture later than the assigned due date with a 25% penalty – this penalty will be assessed in full to assignments turned in from the end of class on the day that the assignment is due up until the beginning of next lecture. No assignments will be accepted beyond the beginning of class one lecture beyond the due date. The lowest grade of the 6 assignments will be dropped. Please note that given the high percentage of the course grade is determined by the assignments, you are very unlikely to get a good grade in this course if you do not complete all assigned work.

Every homework/programming assignment submission should include a cover page containing your name, section number, date, and homework number. Please staple all pages together. The diskette accompanying printout of the source code for a programming assignment must be clearly labeled with your name and the assignment number.

School policies:

Online Instructor Evaluation

Course and instructor evaluations are critical for maintaining and improving course quality. To make evaluations as meaningful as possible, we need 100% student participation. Therefore,
participation in the School’s web-based academic administration initiative during the eighth and ninth week of this course is a requirement of this course. Failure to participate in this process will result in a grade of incomplete for the course. This incomplete will be automatically removed within seven weeks after the end of the course and replaced by the grade you would have received if you had fulfilled this requirement.

Email

Email is the primary means of communication between faculty and students enrolled in this course outside of class time. Students should be sure their email listed under "demographic information" at http://campusconnect.depaul.edu is correct.

Plagiarism:

The university and school policy on plagiarism can be summarized as follows: Students in this course, as well as all other courses in which independent research or writing play a vital part in the course requirements, should be aware of the strong sanctions that can be imposed against someone guilty of plagiarism. If proven, a charge of plagiarism could result in an automatic F in the course and possible expulsion. The strongest of sanctions will be imposed on anyone who submits as his/her own work a report, examination paper, computer file, lab report, or other assignment which has been prepared by someone else. If you have any questions or doubts about what plagiarism entails or how to properly acknowledge source materials be sure to consult the instructor.

Incomplete:

An incomplete grade is given only for an exceptional reason such as a death in the family, a serious illness, etc. Any such reason must be documented. Any incomplete request must be made at least two weeks before the final, and approved by the Dean of the School of Computer Science, Telecommunications and Information Systems. Any consequences resulting from a poor grade for the course will not be considered as valid reasons for such a request.