

IDS/IE 571 Statistical Quality Control and Assurance¹

Course Syllabus

Fall 2012

CRNs 33552 - IE 571, 33553 - IDS 571

Credit 4 semester hours

Prerequisite At least one course in statistics, such as IE 342, STAT 381-481, or IDS 270-371. Additionally, IE 446 – Quality Control & Reliability – is recommended.

Textbooks

Required Textbook

Douglas C. Montgomery. Introduction to Statistical Quality Control, 7th ed. John Wiley & Sons, Inc., 2012. ISBN: 978-1-1181-4681-1.

Recommended Textbook

Douglas C. Montgomery. Student Solutions Manual for Introduction to Statistical Quality Control, 7th ed. Wiley.

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Office hours: Tuesday/Thursday - 2406 UH, 2:00-3:30pm or by appointment

Meetings Tuesdays and Thursdays, 12:30-1:45pm
Aug 28 – Dec 6, 2012 (except Thanksgiving Day, Thursday, Nov 22)

Locations

Tuesdays in classroom, Taft Hall 207

Thursdays in PC Lab, 205 B&C SES (Science & Engineering South)

Course Intent and Content

Survey of SPC (Statistical Process Control), DOX (Design of Experiments), and AS (Acceptance Sampling). Emphasis on hands-on use of software, Excel & Minitab.

¹ updated 17 Aug 2012, 22 Aug 2012

Exams

There will be 2 in class closed book exams. No laptops; no cell phones. A formula sheet handwritten on both sides may be allowed. Exams may cover reading material not covered in lecture.

Homework Quizzes

Many of the exam questions will be similar to the homework assignments which will be listed on the course home-page. Work the problems and save your solutions. These will not be collected and graded; rather, there will be a short quiz based on part or parts of each homework assignment. These quizzes will count for 20% of the final grade.

Project

Teams of 3-4 people are to find their own dataset and analyze it using methods related to those in the course. Students will present their projects to the class in the last three meetings of the semester. Further details will be available on Blackboard.

Weights of Tasks

Homework (via quizzes) 20%; Exams 50% (25% each); Project 25%; Attendance 5%.

Grading, Policies and Behaviors

Don't nitpick about the grading.

- Persons who complain will not be rewarded for it; those who have the decency not to complain would deserve the same break.
- A request to look at one problem leads to re-grading of the whole paper, which often leads to a lower grade.
- There will be no extra credit work. Everyone must have the same opportunity for course credit. If an assignment is NOT available for everyone, it is not fair. And, if an assignment is available for everyone, it is not extra.

Course Materials

Notes and datasets may be accessed on Blackboard at blackboard.uic.edu.

Reference Book List

The titles of several reference and textbooks are listed in a bibliography for the course on Blackboard. (No readings will be assigned from these books.)

Video Programs

- “The Deming of America”, UIC Library catalog no. T-1312
- Telecourse. “Against All Odds: Inside Statistics”, UIC Library catalog no. T-1067. Produced by the Consortium for Mathematics and Its Applications (COMAP) and Chedd/Angier, in cooperation with the American Statistical Association and the American Society for Quality Control.
- A link where the videos are available free online is www.learner.org/resources/series65.html

Computing

If you are a new student, or were on leave last semester, you may need to activate your account. You may be able to do this on-line, or you may need to see a computer-center consultant on the second floor of SEL or in BGRC to activate your account.

Attendance

Attendance is important. Though occasionally students must miss class, such absences are not excused. Do not schedule job interviews during class time. I plan to take attendance every class period. If you are absent 1 or 2 times, this won't hurt your grade. If you are absent for a long period, you will need to bring in a doctor's note and/or let me know ahead of time that you have a good reason to be absent.

Honor Code Violations and Enforcement

This course and its associated coursework are being administered under the policies of the University of Illinois at Chicago (UIC) College of Business Administration Honor Code. All students are expected to respect and uphold this code.

Violations of the Honor Code are just causes for discipline under the University of Illinois at Chicago Student Disciplinary Procedure, and all allegations of violation will be handled pursuant to that Procedure. (For a complete description of just causes for discipline, disciplinary procedures, and sanctions, see the pamphlet “Student Disciplinary Procedure of the Senate Committee on Student Discipline”, available from the Office of the Dean of Students, SSB, Suite 3030, 1200 W. Harrison St., M/C 318.)