

## *IT 223 Syllabus*

### **Course Information**

IT223: Data Analysis  
Spring 2013  
Monday, Wednesday 11:50AM-1:20PM  
Loop Campus, CS&TC 222

### **Instructor Information**

Instructor: Daniela Stan Raicu  
Office: CDM Center, Room 718  
Office Hours: Monday, 1:30pm-3:00pm  
Advising Hours: Monday, 3:00pm-6:00pm  
Other times by appointment  
Phone: (312) 362-5512  
Fax: (312) 362-6116  
Email: [draicu@cti.depaul.edu](mailto:draicu@cti.depaul.edu)  
Home page: <http://facweb.cs.depaul.edu/~dstan>

### **Summary of the course:**

This is an introductory course in statistical methods for undergraduate students.

The following topics will be covered in the course:

- Introduction to descriptive statistics
- Correlation and Regression
- Producing Data
- Probability and Chance Variability
- Sampling Distribution
- Confidence Intervals and Tests of Significance

Descriptive statistics and mathematical foundations of statistical inference will be illustrated with examples from a variety of disciplines including medicine, business and engineering. The statistical package SPSS will be used where appropriate as a teaching tool and computational aid.

### **Course Goals**

By the end of this course, the students will:

- develop an understanding of the basic concepts of probability and statistics,
- describe the range of applications of statistics
- identify and use appropriate techniques to collect, analyze, visualize, and interpret data, and
- be proficient in using a statistical software package,

### **Textbook and Printed Resources**

**Required:** Introduction to the Practice of Statistics, McCabe & Moore, W.H. Freeman & Co., 2012, ISBN: 978-1429240321.

**Prerequisites:** MAT 130 or placement

### **Grading**

The homework will be worth 40% of the course grade, the midterm will be worth 30% of the final grade, and the final exam will be worth 30%. The midterm will be on Wednesday, May 8<sup>th</sup> and the final exam will be on Wednesday, June 12<sup>th</sup>, 11:45am -2:00pm. The summary of the weights of each is as follows:

| Assignment | Weight in final grade |
|------------|-----------------------|
| Homeworks  | 40%                   |
| Midterm    | 30%                   |
| Final Exam | 30%                   |

The final grade will be assigned according to the following scale:

| Percentage Grade | Letter Grade | Manner of fulfillment |
|------------------|--------------|-----------------------|
| 95-100           | A            | Excellent             |
| 90-94            | A-           |                       |
| 85-89            | B+           | Very Good             |
| 80-84            | B            |                       |
| 75-79            | B-           | Satisfactory          |
| 70-74            | C+           |                       |
| 65-69            | C            |                       |
| 60-64            | C-           | Poor                  |
| 55-59            | D+           |                       |
| 50-54            | D            |                       |
| 0 – 50           | F            |                       |

### ***Homeworks and Exams Policies***

#### Homework/programming assignments

There will be 6 homeworks, which are due at the beginning of class one or two weeks after they are assigned. 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 assignments must be submitted online on the Course on Line site at <https://col.cti.depaul.edu>. Students must verify that their submitted homework on COL is their right version of the homework as this will not be a valid reason to waive the late penalty.

Extra credit points will be given for additional problems in assignments and active participation in the lectures and Discussion Forum.

#### Midterm:

There will be a midterm exam given on Wednesday, May 8th, that will be worth 30% of the course grade; the midterm is a closed book and notes exam, but students are allowed to bring a calculator (no phones are allowed) and a one page (single-sided) of formulas.

#### Final Exam

The final exam is cumulative, worth 30%, and will be given on Wednesday, June 12<sup>th</sup>, 11-45am-2:00pm. The exam is a closed book and notes exam, but students are allowed to bring a calculator (no phones are allowed) and one page (single-sided) of formulas.

#### ***Software***

The use of SPSS will be taught in class. There will be also three lab sessions scheduled during the second, fourth, and eighth week (on Wednesdays) of school. Students will be using the software for the assignments when specified to do so.

#### ***Attendance***

It is expected that you will attend every class; it is the single most important action you can take in mastering the course objectives. You are responsible for all material covered, assignments delivered or received, and announcements made in class sessions that you miss.

### ***Changes to Syllabus***

This syllabus is subject to change as necessary to better meet the needs of the students. Significant changes are unlikely, and will be thoroughly addressed in class. Minor changes, especially to the weekly agenda, are possible at any time. You will be informed of all such changes.

### **Class Cancellation**

Unless DePaul University closes because of weather, we will have class.

### ***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.

#### ***Academic Integrity Policy***

I expect that you have read and understood DePaul's policy on Academic Integrity: <http://academicintegrity.depaul.edu/> It is part of this syllabus; follow it.

#### ***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. Students must formally request an incomplete by filling out a Request for Incomplete Grade form, available at the CDM main office, and submitting it to me.

#### ***Resources for Students with Disabilities***

Students who feel they may need an accommodation based on the impact of a disability should contact the instructor privately to discuss their specific needs. All discussions will remain confidential. To ensure that you receive the most appropriate accommodation based on your needs, contact the instructor as early as possible in the quarter (preferably within the first week of class), and make sure that you have contacted either:

PLuS Program (for LD, AD/HD) at 773-325-4239 in SAC 220

The Office for Students with Disabilities (for all other disabilities) at 773-325-7290 Student Center 307