

# IT403 Statistics and Data Analysis

Winter 2018/19

**Instructor** Dr. Raffaella Settimi

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**Contact Hours:** Mon 3:45PM - 5:15PM

**Course website:** <https://d2l.depaul.edu/>

## Summary of Course

Course teaches introductory statistical methods for the analysis and visualization of data and basic concepts of probability theory. Course topics include descriptive statistics, data visualization techniques, an introduction to statistical inference (confidence intervals and hypothesis testing) for decision making, linear regression models, data sampling techniques. The students will learn the statistical package SPSS to analyze data sets from real-world applications. The objectives of this course are:

- to develop an understanding of the basic concepts of probability and statistics,
- to help students to be informed and critical readers of quantitative arguments,
- to provide sufficient skills to apply simple statistical techniques with the aid of a computer,
- to appreciate the role of statistics in empirical research and scientific study,
- and to gain flexible problem-solving skills applicable to unfamiliar statistical settings.

**Prerequisites:** none

## Required Textbook and Printed Resources:

Introduction to the Practice of Statistics, Ninth Edition, by D.S. Moore, G.P. McCabe and B. Craig (2018).  
(NOTE: Previous editions of the book are fine)

Notes about SPSS will be posted at the course website. It is the student's responsibility to download and be familiar with all the course documents and notes posted at the course website.

Other good free resources:

- Online statistical textbook at <http://onlinestatbook.com/2/index.html>
- Open Intro Statistics at <http://www.openintro.org/stat/textbook.php>

## Statistical package

The statistical package used in this course is SPSS and is available in all DePaul labs. You can also access SPSS remotely by using our CDM terminals. More information about the software is posted on the course website.

## Grading Policy

The final grade has the following components:

- *Quizzes (10%)*
- *Homework assignments (60%)*: Weekly assignments including small group projects. Late submissions will be accepted no later than three days after the due date. Notice that a 20% point penalty will be applied for late submissions. Extensions may be granted only for exceptional reasons. Requests for extensions must be received BY EMAIL before the due date.
- *Final exam (30%)*: The final exam will be cumulative. The test will be proctored and students will be allowed to use a limited amount of notes during the exam. Students should bring a calculator (no phones are allowed). See section on Final exam for more details.

Students receiving more than 90% of possible points are guaranteed at least an A-, more than 80% at least a B-, more than 70% at least a C-, and more than 60% at least a D.

**Remarks about homework** Working through homework exercises and applying the statistical concepts to real problems is a critical step for building your understanding of data analysis. Only by trying to apply the statistical techniques you can test if you really understand them. Homework assignments should be regarded as a genuine “learning experience.” Study groups are encouraged, but you should, however, be sure that the effort is truly collaborative. The best strategy for completing the assignment is to begin tackling the questions alone, then discussing with others, and finally writing up your answers by yourself. Feel free to consult the instructor if you have any questions.

## Students are expected:

- To read this document in full!
- To check email messages regularly and to keep the current email account information on <http://campusconnect.depaul.edu>.
- To visit the course website and read course announcements on a regular basis.
- To participate actively to class discussions and activities and to work on the practice problems and exercises that are designed to improve students’ understanding of the class topics.
- To be familiar with all the course documents and notes posted at the course website.
- To read all the sections in the textbook relevant to the modules. The reading assignments are listed in each module. Notes are meant to complement the course textbook NOT TO REPLACE IT.
- **To contact me regularly and ask me questions related to the course.** If you are on campus, you can stop by my office (room 904 of CDM building) during contact hours, or by appointment at other times. The best way to contact me is through email at [rsettimi@depaul.edu](mailto:rsettimi@depaul.edu). Most emails will be answered within 24 hours. You can also call my **office phone number (312 3625556)**.
- To post on the discussion forum messages that are of interest to the entire class.
- To work independently on course assignments and not to copy or submit someone else's work as your own. See also University academic integrity policy below.

## Tutors

CDM offers free tutoring for many of its courses. The tutors' schedule is at:

<http://www.cdm.depaul.edu/advising/Pages/TutoringProgram.aspx>.

If you have any difficulty with the course topic, you should contact me or come and see me during office hours.

## College Policies

### Changes to Syllabus

This syllabus is subject to change as necessary during the quarter. If a change occurs, it will be thoroughly addressed during class, posted under Announcements in D2L and sent via email.

### Online Course Evaluations

Evaluations are a way for students to provide valuable feedback regarding their instructor and the course. Detailed feedback will enable the instructor to continuously tailor teaching methods and course content to meet the learning goals of the course and the academic needs of the students. They are a requirement of the course and are key to continue to provide you with the highest quality of teaching. The evaluations are anonymous; the instructor and administration do not track who entered what responses. A program is used to check if the student completed the evaluations, but the evaluation is completely separate from the student's identity. Since 100% participation is our goal, students are sent periodic reminders over three weeks. Students do not receive reminders once they complete the evaluation. Please see <https://resources.depaul.edu/teaching-commons/teaching/Pages/online-teaching-evaluations.aspx> for additional information.

### Academic Integrity and Plagiarism

This course will be subject to the university's academic integrity policy. More information can be found at <https://offices.depaul.edu/oaa/faculty-resources/teaching/academic-integrity/Pages/default.aspx>.

### Academic Policies

All students are required to manage their class schedules each term in accordance with the deadlines for enrolling and withdrawing as indicated in the [University Academic Calendar](#). Information on enrollment, withdrawal, grading and incompletes can be found at:

<http://www.cdm.depaul.edu/Current%20Students/Pages/PoliciesandProcedures.aspx>

### Incomplete Grades

An incomplete grade is a special, temporary grade that may be assigned by an instructor when unforeseeable circumstances prevent a student from completing course requirements by the end of the term and when otherwise the student had a record of satisfactory progress in the course. All incomplete requests must be approved by the instructor of the course and a CDM Associate Dean. Only exceptions cases will receive such approval. Information about the Incomplete Grades policy can be found at <http://www.cdm.depaul.edu/Current%20Students/Pages/Grading-Policies.aspx>

## Students with Disabilities

DePaul University is committed to ensuring equal access to its educational and extracurricular opportunities for students with disabilities. The Center for Students with Disabilities (CSD) offers reasonable academic accommodations and services to support our students. We also serve as a resource to the many university departments that have a responsibility to accommodate students. Please see <https://offices.depaul.edu/student-affairs/about/departments/Pages/csd.aspx> for Services and Contact Information.

## Proctored exams for OL courses (if applicable)

If you are an online learning student living in the Chicagoland area (within 30 miles of Chicago), you will need to come to one of DePaul's campuses to take an exam. Online learning students outside of the Chicagoland area are required to locate a proctor at a local library, college or university. You will need to take the exam within the window your instructor gives. Students should examine the course syllabus to find exam dates and the instructor's policy on make-up exams. Detailed information on proctored exams for online learning students can be found at <http://www.cdm.depaul.edu/onlinelearning/Pages/Exams.aspx>

## Attendance

Students are expected to attend each class and to remain for the duration. Coming 15 minutes late or leaving 15 minutes early constitutes an absence for the student. The overall grade for participation drops one-third after any absence. Three absences for any reason, whether excused or not, may constitute failure for the course.

## Class Discussion

Student participation in class discussions will be measured in two ways. First, students are highly encouraged to ask questions and offer comments relevant to the day's topic. Participation allows the instructor to "hear" the student's voice when grading papers. Secondly, students will be called upon by the instructor to offer comments related to the reading assignments. Students must keep up with the reading to participate in class discussion.

## Attitude

A professional and academic attitude is expected throughout this course. Measurable examples of non-academic or unprofessional attitude include but are not limited to: talking to others when the instructor is speaking, mocking another's opinion, cell phones ringing, emailing, texting or using the internet whether on a phone or computer. If any issues arise a student may be asked to leave the classroom. The professor will work with the Dean of Students Office to navigate such student issues.

## Civil Discourse:

DePaul University is a community that thrives on open discourse that challenges students, both intellectually and personally, to be [Socially Responsible Leaders](#). It is the expectation that all dialogue in this course is civil and respectful of the dignity of each student. Any instances of disrespect or hostility

can jeopardize a student's ability to be successful in the course. The professor will partner with the Dean of Students Office to assist in managing such issues.

#### Cell Phones/On Call:

If you bring a cell phone to class, it must be off or set to a silent mode. Should you need to answer a call during class, students must leave the room in an undistruptive manner. Out of respect to fellow students and the professor, texting is never allowable in class. If you are required to be on call as part of your job, please advise me at the start of the course.