DCM 308 Introduction to Statistics

Winter 2017

Instructor: John Hemmerling
Classroom: Naperville Camus, Room TBA
Class Dates: Tuesday, January 3 – March 7, 2017
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Course Description

Reading the newspaper, perusing consumer reports, and analyzing political data are all activities in which we engage on a daily basis. People who want to persuade us, or attract our dollars use statistics to help us make up our minds. This course will teach students the basic concepts of statistics. As a group, we will investigate topics in descriptive statistics, correlation, normal distributions, probability, sampling distributions and hypothesis testing. By the end of this course, students will able to complete a statistical analysis of datasets using Microsoft Excel as the primary tool. We will also devote considerable time to discussing how statistics are used and abused.

Course Learning Goals

After completing this course, you will be able to:
- Understands the terminology of statistics.
- Can organize data into frequency distributions.
- Can use measures of central tendency and variability to describe frequency distributions.
- Understands the concept of correlation and can use it describe the relationship between two variables.
- Can use sample populations to statistically describe specific tendencies of whole populations.
- Can use statistics to think critically.
- Can use basic statistical functions of Microsoft Excel to solve statistics problems.

Course Competencies

In this course, all students will develop the following competencies, if you are a student in the BA with an Individualized Focus Area, you can register for one or both of the following:

Competence	Competence Statement
FX	Can use statistics to describe and analyze a problem or issue related to Individualized Focus Area.
S2X	Can use mathematics or statistics to describe the patterns and processes of everyday life.

Required Reading:

Statistical Reasoning for everyday life 4th edition, w/My Stat Lab Student Access Kit (MML SAK)
Bennett, Briggs & Triola
Pearson/ Addison Wesley
ISBN-10: 0321890132

If you do not need a hard copy of the book, you will have access to a web version through the Pearson My Stats Lab website which is required for this class. You can purchase access to the website directly from the Course Compass website: http://www.pearsonmylabandmastering.com/northamerica/

Go to this website and register as a student. You will need a credit card and a Course ID that is provided by the instructor to purchase access to the website that supports the textbook. The book is posted in that website.
Course Name: DCM 308 Introduction to Statistics Winter 2017
Course ID: hemmerling34677

The DePaul Bookstore has three purchase options: the book, the book with the access code and just the access code.

Recommended reading (not required):

Stat-Spotting: A field Guide to Identifying Dubious Data
Joel Best
University of California Press
ISBN: 9780520257467
This book is quoted in the course study guide. His book, Damned Lies and Statistics is another good read on uses and abuses of statistics.

Super Freakonomics
Levitt & Dubner
Harper Collins Publisher
ISBN 9780060889579
This is a collection of stories on research methodology. Their first book, Freakonomics, is also a good read.

Additional Resources:

Statistics for the Utterly Confused
Jaisingh
Mcgraw Hill
ISBN 0-07-135005-5
This book covers the mathematics covered in this class in more detail than the required text. It is relatively inexpensive. It is recommended for students who want to learn how to work more with a calculator.

Course Grading Scale

A = 95 - 100	A- = 91 - 94	B+ = 88 - 90
B = 85 – 87	B- = 81 – 84	C+ = 77 - 80
C = 73 – 76	C- = 69 – 72	D+ = 65 – 68
D = 61 – 64	D- = 60	F = 59 or Below

Students may have the option of taking all SNL undergraduate courses as Pass/Fail even if a class is initially structured for a letter grade assessment. A Pass is awarded when student work is completed at a level that would otherwise earn a grade of "C-" or higher. If a student wishes to switch the method of assessment, either to or from the Pass/Fail option, this must be requested from the instructor in writing during the first two weeks of the quarter. The assessment style may not be changed after this period, with no exceptions.

Course Schedule

This course consists of 10 modules. Each module lasts one week. The following grid outlines the course:

Module #	Readings	Assignments
Module 1	Text Chapter 1	-Journal Assignment: Where Did These Numbers Come From? -Module Quiz
Module 2	Text Chapter 2	-Module Quiz
Module 3	Text Chapter 3	-Module Quiz -Journal Assignment: Are the Rich getting Richer? -Excel Project 1: Descriptive Statistics 1
Module 4	Text Chapter 4	-Module Quiz -Excel Project 2: Descriptive Statistics 2
Module 5	Text Chapter 5	-Module Quiz
Module 6	Text Chapter 6	-Module Quiz
Module 7	Text Chapter 7	-Module Quiz -Excel Project 3: Correlation -Journal Assignment: Using the Gap Minder Website
Module 8	Text Chapter 8	-Module Quiz
Module 9	Text Chapter 9	-Module Quiz -Journal Assignment: Climate Change Data
Module 10	None	-Excel Project 4: Report Writing

Assessment of Learning

Assignment	Assessment of Learning	Distribution of Grade
Quizzes	Quizzes will be on MyMathLab. For each chapter there will be a multiple choice quiz. You will have three (3) attempts to take each quiz and the highest score will be recorded.	40%
Journal Assignments	Each Journal Assignment is 20 points.	30%
Excel Projects	Each project has a set number of points associated with each section of them project. The points are detailed in the instructions and/or the answer form. Feedback will be provided when points are deducted.	30%

All writing assignments are expected to conform to basic college-level standards of mechanics and presentation. Consider visiting the Writing Center to discuss your assignments for this course or any others: http://condor.depaul.edu/writing/what/Writing%20Center/wc.html

Policies

This course includes and adheres to the college and university policies described in the links below:

Academic Integrity Policy (UGRAD)
Incomplete Policy
Course Withdrawal Timelines and Grade/Fee Consequences
Accommodations Based on the Impact of a Disability
Protection of Human Research Participants

Course Resources
SNL Writing Guide
Dean of Students Office