

COURSE OUTLINE – SUMMER 2015 COR1-GB.1305.42 - Statistics And Data Analysis Monday, Wednesday, and Friday: 9:00 AM – 12:00 PM

INSTRUCTOR:	Professor Avi Giloni
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CLASS ROOM:	TBD
OFFICE HOURS:	Monday and Wednesday 12:15-1:15

COURSE OBJECTIVES:

The basic objective of this course is to provide the MBA student with a strong fundamental understanding of statistics and its applications. Students will learn statistical applications utilizing real world examples and exercises from various fields. This course will survey the topics of descriptive statistics, inferential statistics, linear regression and their applications.

COURSE ORGANIZATION:

The course lectures, handouts, and homework assignments are the materials that you will be held responsible for. The lectures will follow the lecture notes/slides that will be handed out and are on NYU Classes. However, the lectures will often contain more information than what is on the slides. The textbook should be considered as supplementary reading.

We will use Minitab, Release 17, for data analysis. Minitab 17 will be available in the computer labs and on apps.stern.nyu.edu. You can also rent Minitab 17 for a fixed time period (a certain number of months) from <u>http://www.onthehub.com/minitab/</u>.

The course materials can be found on NYU Classes for this course. This will be the primary way that we will correspond with each other outside the classroom. However, I will be available for Office Hours as well.

REQUIRED TEXT(S) AND MATERIALS:

- Stine and Foster, <u>Statistics for Business: Decision Making and Analysis</u>, Second Edition, Pearson, (REQUIRED).
- 2. Minitab 17 (REQUIRED)
- 3. NYU Classes Course Site (REQUIRED).

GRADING POLICY:

We will have homework, a midterm, a final exam, and a project. Your grade will be based on these, as well as class participation.

Midterm	35%
Homework	15%
Group Project	10%
Final	40%

HOMEWORK:

Homework counts for 15% of your grade. The assignments must be completed and handed in on time. Late homework will not be collected. Students are expected to come to class prepared having read text and assigned readings prior to class. It is suggested that students keep a copy of their homework to study from (in case it is not returned before an exam).

PROJECT:

There will be a project, which counts for 10% of the grade. In the project, you will analyze a data set of your choice, using methods you have learned in the course. The project is a group project. Groups must be at least two students and no more than four students. More details on the project are available on the NYU Classes course site.

CLASS ATTENDANCE AND PARTICIPATION:

Participation is an essential part of learning in this course. Students are expected to participate in all facets of classroom learning. I expect you to take an active role in learning Statistics. I may call on you, and I want you to ask questions. There's no such thing as a "bad" question or comment, so don't be afraid to speak up (in an orderly fashion). This helps me to identify points that I need to explain further. If you demonstrate that you are actively and consistently participating and involving yourself in the learning process (this obviously includes attending class), I may boost your final grade *by up to* one point, for example, from a B₊ to an A-.

CLASSROOM NORMS:

Cell phones, smartphones and similar electronic devices are a disturbance to both students and professors. All such electronic devices must be turned off prior to the start of each class meeting.

Topic #	Topic Description	Chapter
Topic 1	Introduction to Statistics, Types of	Chapters 1-2,
	Data, Collecting Data, Populations	Handout 1
	and Samples	
Topic 2	Tables, Charts and Graphs for	Chapters 3-6,
	Categorical and Numerical Data,	Handout 1
	Measures of Central Tendency,	
	Variation and Shape	
Topic 3	Introduction to Probability	Chapters 7-8,
		Handout 2
Topic 4	Discrete Probability Distributions	Chapters 9-11,
		Handout 3
Topic 5	Continuous Probability	Chapter 12,
	Distributions	Handout 4
Topic 6	Sampling Distributions and the	Chapter 14,
	Central Limit Theorem	Handout 4
Topic 7	Confidence Intervals and Sample	Chapter 15,
	Size Determination	Handout 5
Topic 8	Hypothesis Tests	Chapter 16,
		Handout 6
Topic 9	Simple Linear Regression	Chapters 19-22,
		Handout 7
Topic 10	Multiple Regression	Chapters 23-25,
		Handout 8
Topic 11	Inferences based on Two Samples	Chapter 17,
		Handout 6

TENTATIVE SCHEDULE OF TOPICS - SUMMER 2015 COR1-GB.1305.42 - STATISTICS AND DATA ANALYSIS

TENTATIVE CALENDAR - SUMMER 2015 COR1-GB.1305.42 - STATISTICS AND DATA ANALYSIS

DATE	TOPIC COVERED	ASSIGNMENT
07/08/15	1,2	
07/15/15	2,3	
07/17/15	3,4	SUBMIT HMWK 1
07/20/15	4,5	
07/22/15	5,6	SUBMIT HMWK 2
07/24/15	6,7	
07/27/15	7, MIDTERM (TOPICS 1 - 6)	
07/29/15	8	SUBMIT HMWK 3
07/31/15	9	
08/03/15	9	SUBMIT HMWK 4
08/05/15	9,10	
08/07/15	10	SUBMIT HMWK 5
08/10/15	10,11	
08/12/15	FINAL EXAM (FOCUSED ON TOPICS 7-	SUBMIT PROJECT
	11)	