

QM213 Statistics for Business & Economics I Spring 2012 Syllabus

Classes: MWF 09:00:03-09:49:57 (\$B) & 10:00:03-10:49:57 (\$A) in Dewey Computer Lab

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Textbook: Kabay, M. E. (2010). *Statistics in Business, Finance, Computer Science and Information Assurance: A Layered Introduction with Excel*, v0.3. Printed for students and provided free;

PDF version in color available online from Nuoodle and from

<http://www.mekabay.com/courses/academic/norwich/qm213/index.htm>

Week	Day	Date	Text Parts	TOPICS	Quiz on Week
				<i>OPEN-BOOK NUOODLE QUIZZES close on Friday at 23:55 one week AFTER the homework is assigned.</i>	
1	M	16-Jan	1	Introduction: About applied statistics; Why a layered introduction?; The importance of homework; Why use Excel? Long-term goals. SQ3R.	
	W	18-Jan	1.2.2-2.1	Learning Excel -- Web resources, basics; Counting and measuring; quantitative & qualitative variables	
	F	20-Jan	2.1.1.1-5	Tables & table layouts & more about qualitative variables; quantitative data: discrete, continuous, ratio, ranks	
2	M	23-Jan	2.1.2-4	Accuracy, precision, being precise; significant figures & determining suitable precision	1
	W	25-Jan			
	F	27-Jan			
3	M	30-Jan	2.1.5	Sources of real statistical data	
	W	1-Feb	2.2-2.2.2.3	Representing data; raw data; sorted lists in Word & Excel; simple sorts in Excel; Advanced sorting in Excel; mistakes in sorting; making backup files	
	F	3-Feb	HOMEWORK IN LAB		2
4	M	6-Feb	2.2.3-2.2.3.2	Enhancing the presentation of tables in Word; Excel table tools	
	W	8-Feb	2.2.4	Horizontal bar charts; pie charts	
	F	10-Feb	HOMEWORK IN LAB		3
5	M	13-Feb	2.2.6-7	Frequency distributions; creating frequency distributions with Excel	
	W	15-Feb	2.2.8	Designing and using histograms; disparate magnitudes; truncating ordinate; non-random sections	
	F	17-Feb	HOMEWORK IN LAB		4
6	M	20-Feb	2.2.9-11	Cumulative frequency distributions; ogives; classes in distribution	
	W	22-Feb	2.2.12-13	Frequency distribution curves; area under the curve	
	F	24-Feb	HOMEWORK IN LAB		5
7	M	27-Feb	2.3-2.3.1	Summarizing groups of data; location -- mean, median, mode	
	W	29-Feb	2.3.2	Dispersion: range, variance, standard deviation	
	F	2-Mar	HOMEWORK IN LAB		6
8	M	5-Mar	2.3.3-2.3.5	Relations among variables: cross tabulations, scatterplots, correlation, determination	
	W	7-Mar	2.3.6	Regression	
	F	9-Mar	HOMEWORK IN LAB		7

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				<i>OPEN-BOOK NUOODLE QUIZZES close on Friday at 23:55 one week AFTER the homework is assigned.</i>			
	M	12-Mar	SPRING BREAK				
	W	14-Mar					
	F	16-Mar					
9	M	19-Mar	2.4-2.4.6	Populations & samples; parameters; random sampling; probability as expectation; Central Limit Theorem; Normal distribution in Excel			
	W	21-Mar	2.5-2.5.1.4	Statistical inference: mean; degrees of freedom; interval estimates; t-distribution			
	F	23-Mar	HOMEWORK IN LAB			8	
10	M	26-Mar	2.5.2-3	Inference: Proportions and variances; F-distribution			
	W	28-Mar	2.6-2.6.1.4	Hypothesis testing: variances & the F-test; levels of statistical significance & type I error; testing a sample variance against a parametric value			
	F	30-Mar	HOMEWORK IN LAB			9	
11	M	2-Apr	2.6.2	Equality of means: ANOVA for 2 samples; t-test with unequal sample sizes			
	W	4-Apr	2.6.3-2.6.3.1	Goodness of fit using chi-square			
	F	6-Apr	HOMEWORK IN LAB			10	
12	M	9-Apr	2.6.3.2	Tests of independence using chi-square			
	W	11-Apr	2.6.4-2.6.4.1	Equality of means: one-way ANOVA for multiple samples			
	F	13-Apr	HOMEWORK IN LAB			11	
13	M	16-Apr	2.6.4.2	Multiple comparisons following ANOVA			
	W	18-Apr	2.6.5-2.6.5.1	Relations between two variables: testing for correlation			
	F	20-Apr	HOMEWORK IN LAB			12	
14	M	23-Apr	2.6.5.2	Linear regression			
	W	25-Apr	2.6.5.2	Linear regression cont'd			
	F	27-Apr	COMPLETE HOMEWORK ASSIGNMENTS & REVIEW			13	
15	M	30-Apr					
	W	2-May					
	F	4-May	COMPLETE HOMEWORK ASSIGNMENTS & REVIEW				