THE COLLEGE OF STATEN ISLAND
DEPARTMENT OF MATHEMATICS
COURSE OUTLINE

MATH 113 – INTRODUCTION TO PROBABILITY AND STATISTICS with COMPUTER APPLICATIONS

Updated: Spring 2012

REQUIRED MATERIALS:

Textbook: *Elementary Statistics*: Technology Update, Eleventh Edition, by Mario F. Triola
MyStatLab – Access code for this course management system is packaged with the new textbook from the CSI bookstore or sold separately at http://www.coursecompass.com. Also includes the StatCrunch statistical software used in the computer labs.

Lesson	Section	Required Reading (pages)	Homework
1	1-1,1-2 :Introduction; Statistical Thinking	2-9	p9:1,7,11,15,21,23
2	Computer Lab #1	See handout	
3/4	1-3,1-4 :Types of Data; Critical Thinking	11-23	p16:1,5,9,13,19,21,23,31 p23:1,5,7,11,15,17,21,23,27,29
5	2-2,2-3 :Frequency Distributions and Histograms	44-56	p58:3,5,9,11,13,15,17,19
6	2-4,2-5 :Statistical Graphics; Bad Graphs	59-75	p68:5,7,9,11,13,15,17,21,23,25,27 p73:1,5,9
7	3-2: Measures of Center	82-92	p94:3,5,7,15,19, 21,29,31,33,37
8	Computer Lab #2	See handout	
9	3-2,3-3:Measures of Center/ Measures of Variation	82-109	p110:5,7,9,11,13,15,21,23,29,31,33,35
10	3-3: Measures of Variation	99-109	
11	3-4:Measures of Relative Standing (z-scores, percentiles, quartiles) and Boxplots	114-124	p126:5,9,11,13,15,19,21,23,27,29,35
12	**Review for Exam**		
13	**Exam #1**		
14/15	4-1,4-2: Basic Concepts of Probability	136-147	p148:3,5,11,13,15,17,21,27,29,31,33
16	Computer Lab #3	See handout	
17	4-3: Addition Rule	152-156	p156:1,5,7,9,15,17,21,27,29,33
18	4-4: Multiplication Rule: Basics	159-167	p168:5,7,11,13,15,17,25,27,29,31
19	4-7: Counting (Permutations and Combinations)	184-189	p189:3,5,7,9,13,21,25,27,29,31,33
20	5-1,5-2: Random Variables	202-213	p214:5,7,9,11,15,17,19,21,31
21	Computer Lab #4	See handout	
22	5-3: Binomial Probability Distributions	218-224	p225:3,5,9,13,15,17,21,25,29,35,37
23	5-4: Mean, Variance, and Standard Deviation for the Binomial Distribution	229-231	p232:5,7,9,11,13,15,17,19
24	**Review for Exam**		
25	**Exam #2**		
26/27 /28	6-2,6-3:The Standard Normal Distribution and Applications of the Normal Distribution	248-270	p261:3,5,7,9,13,17, 21,23,25,27,31 p271:3,5,7,9,11,13,15,21,23,25
29	Computer Lab #5	See handout	
30	6-6: Normal as Approximation to Binomial	299-305	p306:5,7,9,11,13,15,17,21,23,25,29,31
31/32	7-1,7-2: Confidence Intervals/Estimating a	326-337	p340:3,5,7,9,11,17,19,21,29,31,35,37

	Population Proportion		
33	7-3: Estimating a Population Mean: σ Known	345-351	p352:1,5,7,9,13,17,21,23,25,27,31,33
34	Computer Lab #6	See handout	
35	7-4: Estimating a Population Mean: σ Not Known	355-361	p365:5,7,9,11,13,15,17,19,23,25,29
36	**Review for Exam**		
37	**Exam #3**		
38/39	8-1,8-2: Basics of Hypothesis Testing	390-406	p409:5,7,9,15,17,19,21,23,25,29,31,33
40	Computer Lab #7	See handout	
41	8-3: Testing a Claim about a Proportion	412-419	p420:1,5,7,9,15,17,19,23,27
42	8-4: Testing a Claim about a Mean: σ Known	425-428	p429:3,5,7,9,11,13,15,17,19,21
43	8-5: Testing a Claim about a Mean: σ Not Known	432-437	p439:5,7,9,11,13,15,17,19,21,25,27,29
44	9-1,9-2: Inferences About Two Proportions	460-467	p468:1,5,9,11,15,17,19,21,23,25,27,29
45	9-3:Inferences about Two Means	473-481	p482:1,3,5,7,9,11,13,17,19,21,23,25,27
46	Computer Lab #8	See handout	
47/48	11-1,11-2: Goodness of Fit	584-593	p594:5,7,9,11,15,17,19,21,23
49	11-3: Contingency Tables	598-602	p606:5,7,9,11,15,17,19,21,23
50	10-1,10-2: Correlation	516-529	p530:3,5,7,9,11,13,15,17,19,23,27,35
51/52	10-2,10-3: Correlation and Regression	518-546	p547:5,7,9,11,13,15,17,19,21,23,29
53	Computer Lab #9	See handout	
54	10-4: Variation, Coefficient of Determination	551-553	p557:5,9,11,13,15
55/56	Review for Final Exam		