PROBABILITY & STATISTICS – MATH 110
Cedar Crest College – Spring, 2009
Monday; 7:00 to 9:30 PM

Instructor –   Gary Moll
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Office Hours – The hour before class or by appointment.

Text – Elementary Statistics; Allan G. Bluman, 6th edition.   ***There will be a few differences between methods discussed in class and the method shown in the text. The classroom method will always be the preferred method.

Prerequisites – none

Course Description – We will discuss methods of summarizing and displaying statistical data: graphical and mathematical. Calculations will involve data summary, probability and hypothesis testing.

Course objectives – Both on the job responsibility and off the job reading and studying require a basic knowledge of statistics. The health care professional must understand the language of statistics to be able to use and communicate these concepts. This course is intended to introduce the beginning student to these items.

Upon completion of the course, the student will be able to;
1. Display statistical data in a variety of formats.
2. Calculate probabilities for a variety of situations.
3. Calculate measures of central tendency and dispersion.
4. Perform tests of statistical significance.
5. Understand the meaning and application of statistics as it applies to research articles in the health care field.

Instructional Method – Class time will be split between instructor demonstration and student practice. The student is encouraged to ask for assistance as soon as they feel the need. Do not wait until it is too late. Homework assignments will be given for student practice. PRACTICE IS ESSENTIAL TO SUCCESS IN THIS COURSE. The homework assignments will not be collected or graded. Your grade will be determined by eight tests plus a comprehensive final.

Attendance – Attendance is very important. However, roll will not be taken. You are responsible for all material given during class whether you are in attendance or not. If you are absent from a test, a valid doctor's excuse is necessary to retake the test. Any other excuses are frowned upon, but will be considered on a case-by-case basis. If no valid excuse is produced, you will receive a grade of zero for that test.

Grading –

A	93 – 100	C+	77 – 79	F	<60
A-	90 – 92	C	73 - 76		
B+	87 – 89	C-	70 - 72		
B	83 – 86	D+	67 - 69		
B-	80 - 82	D	60 – 66		

MATH 110
COURSE SCHEDULE AND SUGGESTED HOMEWORK PROBLEMS

1/19	Chapter 1.2 – 1.3	p. 26: 1 - 9; 12, 13,
	Chapter 1.4 –1.8	p. 26: 16 – 29
	Chapter 2.2	p.43: 7, 8, 11, 13
1/26	Chapter 2.3	p. 58: 5, 7, 15
	Chapter 2.4	p. 77: 3, 11, 15
		p. 87: 7, 11(plus stem & leaf)
2/2	**CHAPTER 1 & 2 TEST**	
	Chapter 3.2	p. 110: 1, 3, 5
	Chapter 3.3	p. 129: 2, 6, 7, 33, 35, 39, 41
2/9	Chapter 3.4	p. 144: 11, 13, 25, 28
	Chapter 3.5	p. 157: 3, 9, 11
2/16	**CHAPTER 3 TEST**	
	Chapter 4.2	p. 185: 11, 13, 14, 17, 25, 31, 33, 37
	Chapter 4.3	p. 193: 2, 3, 7, 9, 10, 13, 14, 15, 23, 25, 26
2/23	Chapter 4.4	p. 209: 1 – 4, 16, 17, 18, 31, 33, 35, 47, 49
	Chapter 4.5	p. 220: 1, 3, 6, 9, 11, 12, 19, 28 – 31, 37, 41
	Chapter 4.6	p. 226: 1, 11, 12, 13, 16
3/2	**CHAPTER 4 TEST**	
	Chapter 5.2	p. 244: 6 -18, 21, 25, 29, 30
	Chapter 5.3	p. 253: 1, 5, 11, 14, 15
	Chapter 5.4	p. 263: 1, 2, 3, 11, 14, 19, 23, 25
3/9	no class	
3/16	**CHAPTER 5 TEST**	
	Chapter 6.2, 6.3	p. 302: 6 – 39, 46, 47
	Chapter 6.4	p. 316: 3, 7, 9, 15, 19, 27

| 3/23 | Chapter 6.5 | p. 329: 1 – 4, 9, 11, 13, 23 |
| | Chapter 6.6 | p. 337: 7, 11 |

3/30	**CHAPTER 6 TEST**	
	Chapter 7.2	p. 358: 9, 11, 13, 19, 23, 25
	Chapter 7.3	p. 366: 4, 9, 13, 19
	Chapter 7.4	p. 374: 3, 5, 7, 13

4/6	**CHAPTER 7 TEST**	
	Chapter 8.2	p. 404: 12, 13
	Chapter 8.3	p. 414: 1, 5, 9, 11, 13

| 4/13 | no class | |

4/20	Chapter 8.4	p. 426: 3, 7, 15
	Chapter 8.5	p. 434: 5, 7, 15
	Chapter 11.2(if time!)	p. 593: 5, 7, 9

4/27	**CHAPTER 8 & 11 TEST**	
	Chapter 10.2, 10.3	p. 543: 13, 15 (a, b, e only for both)*
	Chapter 10.4	p. 551: 13, 15, 17*
	Chapter 10.5	p. 565: 8 – 13
		*Actual calculations omitted if time is short!

5/4	**CHAPTER 10 TEST**	
	Overview of additional tests	
	Review	

Dates for extra review session(s) and the final exam will be announced when the information is available.

P&S(evening)