Math 109 – Course Outline, Summer 2006

Textbook: Statistics (3rd edition) by Freedman, Pisani and Purves

Instructor: Professor Dr. Ron Sahoo
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Scheduled Time: 11:20 - 12:50 pm (MTWRF)
Class Room: NS 333
Office Hour: 2:00 pm - 3:00 pm (MTWR) and by appointment
Prerequisite: MATH 102

Course Objective: The objective of this course is to give an understanding of some basic statistical topics such as design of experiments, descriptive statistics, probability, sampling, and statistical inferences. In this course, we will cover approximately 400 pages of materials, so it is obvious that all of it can not be done in-depth. For this reason, you will be expected to read the textbook and attend lectures regularly.

Grades: Grades will be based on a final examination and three tests. A missed test or final will be counted as a zero. There is no make-up for any test unless there is a valid (and documented) medical reason. All make-up tests will be given on August 4th, 2006 (after the final examination). In order to pass the course, you must pass the final. The final will be held on 4th August, 2006 at 11:20 am in NS 333.

<table>
<thead>
<tr>
<th>Source</th>
<th>Points</th>
<th>Grade Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Tests</td>
<td>750</td>
<td>901 - 1000 = A</td>
</tr>
<tr>
<td>Final</td>
<td>250</td>
<td>801 - 900 = B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>701 - 800 = C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>601 - 700 = D</td>
</tr>
<tr>
<td>Total</td>
<td>1000</td>
<td>000 - 600 = F</td>
</tr>
</tbody>
</table>

Day of          Text sections to be covered tentatively          Important dates
-------------------------------------------------------------------------
05 July 06       Controlled Experiments                         Test 1 (July 14, 2006)
06 July 06       Observational Studies                           
07 July 06       Histogram                                      
10 July 06       Histogram                                      
11 July 06       Average and RMS                                
12 July 06       Standard Deviation                            
13 July 06       Normal Approximation for Data                   
14 July 06       No lecture                                     
17 July 06       Normal Approximation for Data                   
18 July 06       Measurement Error                              
19 July 06       Correlation                                   
20 July 06       Regression                                     
21 July 06       No lecture                                     
24 July 06       Law of Averages                                
25 July 06       Expected Value                                
26 July 06       Standard Error                                 
27 July 06       Sample Survey                                  
28 July 06       No lecture                                     
31 July 06       Chance Error in Sampling                        
01 Aug 06        Accuracy of Percentages                         
02 Aug 06        Accuracy of Averages                           
03 Aug 06        Test of Significance                           
04 Aug 06        No lecture                                     

The instructor reserves the right to make changes in the syllabus when necessary to meet learning objectives, to compensate for missed classes, or for similar reasons.