CLASS SYLLABUS Fall 2008

Course: Math 227       Elementary Statistics
Section 0280   TTH 8:35-10:40am, Room: BUNG-6

Instructor: Armond Bakijanian
Office Hours:  MW 3:30-4:20pm; TTh 2:20-4:20pm
Office:          BUNG-D
Email:          bakijaa@lamission.edu


Calculator: Scientific calculator such as Texas Instrument TI-30X IIS

Prerequisite: Math 125 or appropriate skill level demonstrated through the MATH assessment process.

Important Dates: September 26   Last day to drop without a “W”
                 November 21  Last day to drop with a “W”

Course Description: Course includes the following topics: graphical techniques; probability and probability distributions; sampling; estimation; correlations; regression; hypotheses testing; categorical data. Emphasis is on data analysis and interpretation, using sample data to extrapolate population characteristics.

Learning Outcomes

• Classify branches of statistics, identify sources of data, and evaluate sampling methodologies.
• Construct pie charts, bar graphs and histograms, calculate central measures; calculate the five numbers summary, calculate standard deviation.
• Calculate probabilities, define random variables, calculate the mean and standard deviation of binomial variables, calculate probabilities using the standard normal distribution tables.
• Apply the Central limit Theorem to calculate means and proportions, calculate probabilities for the sampling distributions of the mean and proportion.
• Use graphs to determine the shape of parent distributions and estimate the central measures of populations.
• Calculate confidence intervals, calculate sample size for means and sample proportions.
• Define and test hypotheses for the mean and proportion, apply the z- and t-tests in hypotheses testing, calculate p-values.
• Compare two proportions or two means and draw appropriate conclusions, construct confidence intervals for two sample means and two sample proportions.
• Calculate the correlation coefficient, determine the regression line.
Homework

Homework will be assigned collected and a subset will be graded. These are due at the beginning of class on the day specified. No late homework will be accepted. Since the exams will closely resemble homework exercises, success in this course strongly depends on diligently completing all assignments in a timely fashion.

Exams

There will be four classroom tests. The lowest score will be dropped. There will be no make-up examinations. Any missed exam will receive a grade of 0. The final exam is accumulative and is not optional but required. Everyone must take the final exam to pass. No exceptions!

Grading:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Homework/Lab</td>
<td>15%</td>
</tr>
<tr>
<td>Tests</td>
<td>60%</td>
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<tr>
<td>Final</td>
<td>25%</td>
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Grading Scale:

Letter grades will be determined by your overall percentage in the course:

- A = 88%-100%
- B = 78%-87%
- C = 65%-77%
- D = 55%-64%
- F = 0%-54%

Attendance:

Students are expected to attend all class meetings. Unexcused absences may result in excluding students from class. Students themselves are responsible for dropping a class they no longer attend; failure to do so may result in a grade of F.

Class comportment:

All students are expected to arrive on time. Late arrivals are disruptive to both the lecturer and students. Students must turn off cell phones while in class. Students are encouraged to ask questions and make comments on the lecture material. This should be done in a courteous manner by raising one’s hand and being recognized. Side conversations between students that disrupt the flow of the lecture will not be tolerated. It is the student’s responsibility to manage his or her academic workload. Should a student decide to stop attending class it is their responsibility to drop the class. All students appearing on the grade roster will receive a grade regardless of whether they are attending classes or not. Any cheating which includes any unauthorized cooperation on any graded assignment will be dealt with as severely as the College policy allows.