COURSE: MATH – 125 (AAHH) Introductory Statistics

DESCRIPTION: Basic descriptive statistics including frequency distributions, mode, mean and standard deviation. Permutations, combinations, probability rules and Bayes’ Theorem. Binomial and normal distributions. Basic inferential statistics including sampling theory, confidence intervals for means and proportions, test of hypotheses. Chi square distribution. Introduction to correlation and regression. Includes at least one hour per week using computers in statistical application. Writing assignments, as appropriate to the discipline, are part of the course.

PREREQUISITE: Grade of “C” or better in Mathematics 112, or placement test, or consent of Department Chairperson.

INSTRUCTOR: Dr. Astrid Babayan
Office: Room 702 E
Telephone: (312) 553 – 3197
Email: ababayan@ccc.edu
WWW: http://faculty.ccc.edu/ababayan/


CLASS SCHEDULE: Saturdays 9:00 a.m. – 12:45 p.m.

OFFICE HOURS: Mondays and Wednesdays 9:00 a.m. – 10:00 a.m. and 12:25 p.m. – 12:55 p.m.
Tuesdays and Thursdays 10:55 a.m. – 12:55 p.m.
Saturdays 12:45 p.m. – 1:45 p.m.

TOPICS TO BE COVERED

<table>
<thead>
<tr>
<th>Chapter</th>
<th>The Nature of Probability and Statistics</th>
<th>1.1 – 1.6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 2</td>
<td>Frequency Distributions and Graphs</td>
<td>2.1 – 2.4</td>
</tr>
<tr>
<td>Chapter 3</td>
<td>Data Description</td>
<td>3.1 – 3.5</td>
</tr>
<tr>
<td>Chapter 4</td>
<td>Probability and Counting Rules</td>
<td>4.1 – 4.6</td>
</tr>
<tr>
<td>Chapter 5</td>
<td>Discrete Probability Distributions</td>
<td>5.1 – 5.5</td>
</tr>
<tr>
<td>Chapter 6</td>
<td>The Normal Distribution</td>
<td>6.1 – 6.6</td>
</tr>
<tr>
<td>Chapter 7</td>
<td>Confidence Intervals and Sample Size</td>
<td>7.1 – 7.5</td>
</tr>
<tr>
<td>Chapter 8</td>
<td>Hypothesis Testing</td>
<td>8.1 – 8.7</td>
</tr>
<tr>
<td>Chapter 9</td>
<td>Testing the Difference between Two Means, Two Variances, and Two Proportions</td>
<td>9.1 – 9.6</td>
</tr>
<tr>
<td>Chapter 10</td>
<td>Correlation and Regression</td>
<td>10.1 – 10.6</td>
</tr>
</tbody>
</table>
HOMEWORK

Usually homework will be assigned every class period and it will be due at next class period. Homework will be collected at the beginning of a class and then we can review the assigned problems if you feel they need further examination. Turning homework in is mandatory!!! Late homework will be penalized by reducing 20% from the nominal grade. Homework will be checked, graded, and returned to you.

EXAMINATIONS

During this semester, there will be 5 examinations (including Final exam), each one worth a maximum of 100 points. All exams will be cumulative which means they will contain material covered in all previous classes. If you miss an exam you will be given a score of zero and there will be no opportunity to make up a missed exam. They will be given approximately in every 3th week.

ATTENDANCE

It is a requirement of the Harold Washington College that attendance is taken every class session. It is your responsibility to be in every session of class and to be on time.

GRADING POLICY AND SCALE

Your final grade in this course will be determined by the points that you have earned on the homework assignments, and exams. The average score of homework will count for 10% of your final grade, the 5 exams will count for 90% (18% each) of your final grade.

Final grade in this course will be determined by the following grading scale:

- 91% – 100% A
- 81% – 90% B
- 71% – 80% C
- 61% – 70% D
- < 61% F

CALENDAR

Exam 1: ________________

Exam 2: ________________

Exam 3: ________________

Exam 4: ________________

Exam 5: ________________