## Math 10: Elementary Statistics (MPS) - Winter 2015

| COURSEMath10.MP2 (33138) | $\begin{gathered} \text { DAY } \\ \mathrm{M}-\mathrm{Th} \end{gathered}$ | $\begin{gathered} \text { TIME } \\ 1: 30-3: 45 \mathrm{PM} \end{gathered}$ | $\underset{\text { E34 }}{\text { ROOM }}$ | INSTRUCTOR: Kathy Plum |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | OFFICE PHONE: 408-864-8255 |
|  |  |  |  | OFFICE ROOM: S76d |
| OFFICE HOURS: 10:30 AM - 11:20 PM M - Th |  |  |  | E-MAIL:plumkathryn@deanza.edu |
| Website: www.deanza.edu/faculty/plumkathryn |  |  |  |  |

Welcome to Elementary Statistics. This is a demanding, but rewarding class. If you cannot commit to a minimum of 15 hours per week of study, then you should take this class in a quarter when you have the time. This is also a collaborative class. You will be expected to work with your classmates both inside and outside of class (no exceptions).

Student Learning Outcomes (what you should be able to demonstrate by the end of the course):

1. Organize, analyze, and utilize appropriate methods to draw conclusions based on sample data by constructing and/or evaluating tables, graphs, and numerical measures of characteristics of data.
2. Identify, evaluate, interpret and describe data distributions through the study of sampling distributions.
3. Collect data, interpret, compose and defend conjectures, and communicate the results of random data using statistical analyses such as interval and point estimates, hypothesis tests, and regression analysis.

## READ THROUGH THE ENTIRE GREENSHEET SO THAT YOU ARE FAMILIAR WITH THE CLASS.

Prerequisite: Passing grade (C or better) in Intermediate Algebra or placement exam; Advisory: English Writing 100 and Reading 100 (or Language Arts 100), or English as a Second Language equivalent courses

## Book: Introductory Statistics from OpenStax

Note: This text is available for FREE downloading at: http://openstaxcollege.org/textbooks/introductory-statistics
Related Materials: TI-83 PLUS or TI-84 graphing calculator preferred (TI-86 or 89 are acceptable, but I will only teach the methodologies using the TI-83 and TI-84); small stapler; small pencil sharpener; small ruler.

Other useful information: In addition to my website, look through Roberta Bloom's website (http://www.deanza.edu/faculty/bloomroberta ) for a wealth of resources to help you with the material to be learned in this course.

Quizzes: Quizzes will be taken online through Catalyst.deanza.edu and are to be complete by 11:55 pm on the date given on the calendar. You will have 40 minutes to complete the quiz from the time you start the quiz. Quizzes will test your understanding and completion of the homework problems. You will need to do the homework thoroughly and completely to do well on the quizzes. Since your lowest 3 quiz scores will be dropped when calculating your class grade, there are no make-ups for missed quizzes.

Labs \& Projects: Labs \& projects make use of the calculator. All labs and Project 1 will be done as groups of 3 or 4 students (no exceptions). Project 2 will be done in pairs of students. You must be in class on the day a lab is started to get credit for the labs. If you miss class on the day of a lab, you will not be allowed to turn in the lab on your own. In most cases, you will not be able to complete the labs or projects in class, so it will be necessary for you to work with your group outside of class. No make-ups or late papers will be accepted. You may turn them in early.

Homework: The purpose of homework is to help you learn the material for this course. Graded homework comes in two parts for this course. A program called WebAssign (http://webassign.net ) will be used to do graded homework problems. The cost for using WebAssign is approximately $\$ 34$. Since your lowest 3 homework scores will be dropped when calculating your class grade, there are no make-ups for missed homework.

Class Activities: Group work will be done almost daily with completion of the worksheets recorded for grade. Your lowest 5 daily worksheets will be dropped at the end of the quarter, therefore no make-ups are allowed for missed worksheets. In addition, Chapter recaps will be done on the dates indicated on the calendar. You must be in class on the day the recap is to be done in order to get credit for your work. Since your lowest 3 recap scores will be dropped when calculating your class grade, no make-ups are allowed for missed recaps.

Entrance cards: 8 times during the quarter the class will begin with a short 'Entrance card' question about the previous days material. These are unannounced and you may use your notes to answer the question. The time limit for these will be less than 15 minutes, therefore it is important that you come to class on time. Your lowest 2 scores will be dropped.

Exams: 3 exams will be given. Each exam consists of 21 multiple choice questions. Bring a small brown scantron (\#2052 at bookstore). No make-ups are given. Exams are closed book. Students may bring to the exam one $81 / 2 " \times 11$ " page (both sides) of notes, a calculator, and, if English is a second language, an English translation dictionary.

Final Exam: A two-hour comprehensive exam will be given. The exam consists of 42 multiple choice questions. Bring a brown scantron (\#2052). Students may bring 2 pages (both sides) of notes to the final.

Attendance: Class attendance is essential to student success in math. You are expected to be present, prompt and prepared to ask questions about the assigned homework for all class meetings. Coming late to class is irresponsible, impolite and disruptive to your classmates and is not acceptable. However, even with the best of planning, 'life' gets in the way sometimes. It is better if you come in late, than to not show up. Students not in attendance when labs are started will not be allowed to make-up the lab. It is YOUR responsibility to drop the course should you decide to stop attending, DO NOT rely on me to do it for you.

Grade:

| Exams (4 @ 100) | 400 pts . ${ }^{* * *}$ |
| :--- | :---: |
| Quizzes (13 @ 10) | 100 pts. (drop 3 lowest) |
| Labs (7 @ 20) | 100 pts. (drop 2 lowest) |
| Projects | 65 pts. (both count) |
| Class Worksheets (? @ 2) | ?? pts (drop lowest 5) |
| WebAssign (13 @ 10) | 100 pts. (drop 3 lowest) |
| Ch. Recaps (13 @ 8) | 80 pts (drop 3 lowest) |
| Entrance card (8@ 5) | 30 pts. (drop 2 lowest) |

## Lowest percentage for:

This is schedule at a glance. Due dates in Catalyst and WebAssign will usually take precedence. Subject to change as needed.

\begin{tabular}{|c|c|c|c|c|c|}
\hline Week \& MONDAY \& TUESDAY \& WEDNESDAY \& THURSDAY \& FRIDAY \\
\hline \begin{tabular}{l}
Jan \\
Week \\
1
\end{tabular} \& Ch. 1 Key Terms Introductions Access Catalyst /WebAssign \& Ch. 1 Sampling \& \begin{tabular}{l}
Ch. 1 \\
Frequency Tables
\end{tabular} \& \begin{tabular}{l}
Ch. 1 \\
HW DUE: CH. 1 \\
Start Lab: Ch. 1 Chap 1 Recap
\end{tabular} \& \begin{tabular}{l}
QUIZ DUE: \\
CH. 1 \\
NO CLASS
\end{tabular} \\
\hline \begin{tabular}{l}
Jan \\
Week 2
\end{tabular} \& Ch. 2 Calculations You need a caluclator today. \& Ch. 2 Percentiles/Boxplots \& Ch. 2 Histograms

14 \& \begin{tabular}{l}
Ch. 2 <br>
HW DUE: CH. 2 <br>
LAB DUE: CH. 1 <br>
Start Project 1 Chap 2 Recap

 \& 

QUIZ DUE: <br>
CH. 2 <br>
NO CLASS
\end{tabular} <br>

\hline Jan Week 3 \& | MLK HOLIDAY |
| :--- |
| NO CLASS | \& | Ch. 3 |
| :--- |
| Sample space and Equations | \& Ch. 3 Trees and Contingency Tables \& | HW DUE: CH. 3 |
| :--- |
| Start Lab: Ch. 3 Chap 3 Recap | \& \[

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\begin{gathered}
\hline \text { QUIZ DUE: } \\
\text { CH. } 3 \\
\text { NO CLASS } \\
23 \\
\hline
\end{gathered}
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\] <br>

\hline | Jan |
| :--- |
| Week 4 | \& Project 1 Due Exam 1 Review \& | EXAM 1 |
| :--- |
| Ch. 1, 2, 3 |
| Ch. 4 Generic | \& Ch. 4 Binomial $\begin{aligned} & \\ & \\ & 28\end{aligned}$ \& | Lab due: Ch 3 |
| :--- |
| HW Due: CH. 4 |
| Project 1 DUE |
| Start Lab: Ch. 4 | \& 30 <br>


\hline Feb Week 5 \& Quiz Due: CH. 4 Group work on Chapter 4 Recap \& Ch. 5 Uniform $\begin{aligned} & \\ & \\ & \\ & \\ & \end{aligned}$ \& Ch. 5 Exponential \& | HW DUE: CH. 5 |
| :--- |
| LAB DUE: CH. 4 |
| Chapter 5 Recap |
| Ch. 6 | \& | QUIZ DUE: |
| :--- |
| CH. 5 |
| NO CLASS | <br>


\hline Feb Week 6 \& HW DUE: CH. 6 Group work on Chapter 6 Recap \& | Ch. 7 |
| :--- |
| QUIZ DUE: CH. 6 | \& | HW DUE: CH. 7 |
| :--- |
| Start Lab: Ch. 7 | \& QUIZ DUE: CH. 7 Chapter 7 Recap \& HOLIDAY <br>


\hline Feb Week 7 \& HOLIDAY \& Exam 2 Review $\begin{array}{r} \\ \\ 17\end{array}$ \& | EXAM 2 |
| :--- |
| Ch. 4, 5, 6, 7 |
| LAB DUE: CH. 7 |
| Ch. 8 Proportions | \& Ch. 8 Means $\begin{aligned} \\ \\ \\ 19\end{aligned}$ \& NO CLASS <br>

\hline \[
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\begin{gathered}
\text { Feb } \\
\text { Week } \\
8
\end{gathered}
$$

\] \& | HW DUE: CH. 8 |
| :--- |
| Start Lab: Ch. 8 | \& | QUIZ DUE: CH. 8 |
| :--- |
| Chap 8 Recap | \& Ch. 9


| Hypotheses/Error/Test |
| :---: |
| of Single Mean |
| Start Project 2 |

25 \& \begin{tabular}{l}
Ch. 9 Single Proportion <br>
HW DUE: CH. 9 <br>
Chap 9 Recap

 \& 

QUIZ DUE: <br>
CH. 9 <br>
NO CLASS
\end{tabular} <br>

\hline Mar Week 9 \& Ch. 10 Two Means LAB DUE: CH. 8 \& Ch. 10 Two Proportions \& | Ch. 10 Matched |
| :--- |
| Project 2 status check | \& | HW DUE: CH. 10 |
| :--- |
| Start Lab: Ch. 10 Chap 10 recap | \& \[

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\begin{aligned}
& \text { QUIZ DUE: } \\
& \text { CH. } 10 \\
& \text { NO CLASS } \\
& 6 \\
& \hline
\end{aligned}
$$
\] <br>

\hline | Mar |
| :--- |
| Week 10 | \& Exam 3 Review $\begin{array}{r} \\ \\ \\ 9\end{array}$ \& | EXAM 3 |
| :--- |
| Ch. 8, 9, 10 |
| Project 2 Due 3:15-3:45 GOF | \& | Ch. 11 TOI |
| :--- |
| LAB DUE: CH. 10 | \& HW DUE: CH. 11 Group work on Chapter 11 Recap \& | QUIZ DUE: |
| :--- |
| CH. 11 |
| NO CLASS | <br>


\hline Mar Week 11 \& | Ch. 12 |
| :--- |
| Start Lab: Ch. 12 | \& | HW DUE: CH. 12 |
| :--- |
| Chapter 12 reacp | \& Ch. 13 QUIZ DUE: CH. 12 \& HW DUE: CH. 13 Chapter 13 recap \& \[

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\begin{gathered}
\text { QUIZ DUE: } \\
\text { CH. 13 } \\
\text { NO CLASS } \\
20
\end{gathered}
$$
\] <br>

\hline Mar Week 12 \& | LAB DUE: Ch. 12 |
| :--- |
| Final Exam Review | \& NO CLASS $\begin{array}{rr} \\ & 24\end{array}$ \& NO CLASS $\begin{array}{r} \\ \\ 25\end{array}$ \& FINAL EXAM

1:45-3:45 PM \& NO CLASS <br>
\hline
\end{tabular}

