

Math 13– Introduction to Statistics
Peralta Class Code 40905
Fall 2017
Berkeley City College-Room 52

On-campus Office Hours: TBA

Office: Room 355

Class web site Location: online at <http://pearsonmylabandmastering.com>

Course ID for Pearson My Lab and Mastering Enrollment: **abadia90016**

Instructor: Claudia Abadia

Contact Info: cabadia@peralta.edu

Course Prerequisite: Math 203 or Math 211D or Math 206 (or equivalent) or by placement exam

COURSE CONTENT:

This course is designed to introduce the student to the study of statistics and probability. Topics include descriptive statistics (organization of data, histograms, and measures of central tendency and spread), linear correlation and regression, design of experiments, introductory probability, random variables, the normal distribution and Student's t-distribution, and statistical inference, including confidence intervals and tests of significance. Use of a graphing calculator or computer for statistical analysis is required. CSU, UC (credit limits may apply to UC-see counselor)

REQUIRED MATERIALS

To take this course, you *must* purchase a "MyMathLab Student Access Kit" from either the campus bookstore, third party online vendors like Amazon, or the Web site where you will take this class - <http://pearsonmylabandmastering.com>

In addition to a MyMathLab access code, you will need a valid email address and a Course ID number (from me) to enroll online. The course ID number is **abadia90016**

Please register as a student at the Pearson My Lab and Mastering Web site. *You may purchase an access code online during the registration process (with a valid credit card).*

Students who do not enroll in Pearson My Lab and Mastering by the end of the second week of instruction will be withdrawn from the course.

Once enrolled, please click and run the Browser Check from the Announcements section. This will verify/install all the browser plug-ins you'll need to run the site. Afterwards, return to the Announcements section and read on how to enter answers into MyMathLab. An electronic version of the textbook, used to present the material, is contained *within* the online course. Students can also print pages of the textbook directly from the site. Therefore, students are *not* required to purchase a separate hard copy of the textbook.

The text used to present the course material is:

Elementary Statistics 12/E

Author(s): Triola, Mario

Textbook ISBN-13: 9780321836960

Chapters 1—10 will be covered.

GRADING POLICY

A: 90 – 100%; B: 80 – 89%; C: 70 – 79%; D: 60 – 69%; F: 0 – 59%

Your course grade is based on in-class exams, online homework assignments, and in class quizzes. The percentage breakdown for each component is as follows:

| | |
|------------------------|-----|
| Exams | 60% |
| Quizzes | 5% |
| Online Homework | 15% |
| Final Exam | 20% |

ATTENDANCE

Students will be dropped for missing more than 2 weeks of class without official, documented excuses. Note, the attendance clock will begin on the first day of class, not when the student finally adds the class. State law and BCC's Code require that students be allowed to make up missed work/quizzes/tests due to absences for religious holidays, athletic or other school--related events. You must notify me at least one week in advance if you have to miss class for these cases. You are responsible for making up any missed work within one week of the absence.

CLASSROOM EXPECTATIONS

Students are expected to:

- Attend class on a regular basis
- Be on time to class.
- Come prepared to class with all necessary materials.
- Recognize that it is the student's responsibility to withdraw from the class, not the instructor's responsibility.
- Not to copy off of each other on Homework, Class Assignments, or Tests
- Not bring cell phones, laptops or electronic devices to class

EXAMS

There are four midterm exams and one final exam for this class.

Midterm exams will cover the sections you are assigned in homework. Please note there are no makeup exams.

You are allowed to use a graphing scientific calculator and formula card during each exam. You are *not* allowed to refer to any other materials such as your own notes or the textbook.

The final exam will be a comprehensive exam, covering all topics presented in the course. Together, the exams, including the final exam, are worth 60% of your course grade. You must take ALL exams. You are not allowed to retake an exam for a higher grade.

If you are a student with a disability that requires accommodations please be sure to follow up with DSPS. DSPS is located in Room 261; their phone number is (510)981-2804

HOMEWORK

Homework assignments are available from the *Homework* section of the site. You are only responsible for completing the ASSIGNED sections. These assignments are worth 15% of your course grade. The sample exercise sets under the assigned sections are *not* required. They are just for extra exercise and are not part of your grade.

PLEASE NOTE, you *will* be allowed to keep working on Homework assignments after their due dates so please complete all of them to maximize your course grade. Be aware there is a 15% penalty for late submissions of homework assignments.

Please also note that *some* assignments have the same due date. Please stay on top of the course schedule by referring often to the MML Announcements section of the course site.

Useful Tips:

- Please remember to click the SAVE button on your homework assignments before you close the assignment so that you record your work.
- You have 3 opportunities to enter and check your answers to each homework problem.

Afterwards, the program will tell you what the correct answer is and mark down your HW score. However, you may click the SIMILAR PROBLEM button to begin a similar problem again. If you get the right answer this time, you will receive credit for it! So, you have the opportunity to get 100% on each homework assignment.

You may print homework assignments, work on them offline, then go back and enter your answers at a later time

- The Show Me an Example button on each homework problem is an excellent tool to use if you need help in working out the problems.

LEARNING RESOURCE CENTER

The LRC is located on the first floor. I will announce hours of operation for Fall 2017 when I receive them.

Please use the LRC to work on assignments, receive help from tutors, and refer to hard copies of the textbook.

DISABILITY SUPPORT SERVICES

Any student with a documented disability is welcome to contact DSS as early in the semester as possible so that we may arrange reasonable accommodations. As part of this process, please be in touch with Disability Support Services office. DSPS is located in Room 261; their phone number is (510)981-2804

ACADEMIC HONESTY:

Students are expected to adhere to the Code of Conduct as described in the DVC College Catalog. Be aware that cheating includes using unauthorized notes on an exam, looking at someone else's exam or quiz, or programming notes into your graphing calculators. Students who are caught cheating will receive a zero on the exam or quiz. Multiple infractions of cheating will result in a failing grade for the course.

Anyone with further questions or problems should contact me as soon as possible. Also, note that using cell phones is not permitted during class, including texting. You should alert me before class of the need to receive an emergency phone call or the need to leave class early. Laptop usage is not permitted during class. Students who are disruptive during class or disrespectful of their fellow classmates will be asked to leave for the day.

Please note: students are responsible for dropping a course before the posted drop deadline. A student who wishes to withdraw but does not do so before the deadline will receive an "F" in the course

STUDENT EMAIL

To access your student email account, go to:

<https://www.outlook.com/cc.peralta.edu>

1. Use your PASSPORT User ID and @cc.peralta.edu (Example: abdc1234@cc.peralta.edu or 12345678@cc.peralta.edu).
2. Your email password is the same as your PASSPORT password on first login.
 - To retrieve your PASSPORT password please [click here](#).
 - For instruction on how to retrieve your PASSPORT password, please [click here](#).

How to Redirect your Peralta Student Email to a Personal Email Account

If you would like to redirect your Peralta student email to a personal email account, you may do so, but remember that Peralta always sends emails only to your Peralta email account.

1. Log to your email account

2. From the Options drop-down menu (top-right corner), click the link for See All Options...

3. Click 'Forward your e-mail' from the Shortcuts and other things you can do Menu (Top-right panel).

4. Enter the email address where you would like your emails to be sent in the 'Forward my email to' box at the bottom of the screen and click 'Start Forwarding'

COURSE CONTENT

A. Descriptive statistics

1. Discrete and continuous data and its organization
2. Histograms and charts
3. Measures of central tendency (mean, median, mode)
4. Measures of dispersion (range, variance, standard deviation)
5. Measures of location (quartiles and percentiles)
6. Linear regression models and coefficients of correlation and determination

B. Design of experiments

1. Sampling techniques; Observational Studies and Controlled Experiments
2. Sampling vs. non-sampling errors

C. Basic probability

1. Sample spaces and definition of probability
2. Addition rule
3. Complement rule
4. Multiplication rule
5. Conditional probability laws

D. Sampling

1. Probability histograms and the normal curve
2. Binomial distribution
3. Poisson distribution
4. Distributions involving the sample means and sample proportions
5. The Central Limit Theorem
6. Determining Normality

E. Estimation and inference

1. Confidence intervals and hypothesis testing using the normal distribution
2. Confidence intervals and hypothesis testing using student's t-distribution
3. Tests of independence and goodness of fit using the chi-square distribution

F. Technology: Graphing calculators and/or appropriate computer software will be integrated into the course throughout the semester.

STUDENT LEARNING OUTCOMES

Upon completion of this course, students will be able to:

- Representation: Represent relevant information in various mathematical or algorithmic forms. (conversion of words to mathematical symbols and graphs)
- Calculation: Calculate accurately and comprehensively.
- Interpretation: Interpret information presented in mathematical or algorithmic forms. (for example, interpretations of equations, graphs, diagrams, tables)
- Application/Analysis: Draw appropriate conclusions based on the quantitative analysis of data, while recognizing the limits of this analysis. (problem solving)
- Communication: Explain quantitative evidence and analysis. (conversion of mathematical symbols and graphs to words)

Important Dates

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| • August 26 th | Last Day to Add w/o permission number |
| • September 1 st | Last Day to Add with a permission number |
| • September 3 rd | Last Day to Drop Without a "W". |
| • September 4 th | Labor Day-Holiday Observance |
| • September 8 th | Last Day to File for PASS/NO PASS |
| • October 20 th | Last Day to File Petition for the AA/AS |
| • October 26 th | Professional Development Day |
| • November 15 th | Last Day to Withdraw and Receive a "W". |
| • November 23 rd -27 th | Thanksgiving-Holiday Observance |
| • December 10 th -26 th | Final Examinations |