

Math 10: MPS Elementary Statistics, Spring 2016

3/21/16

Instructor	Office	Phone	E-mail	Office Hours*
Diane Mathios Counselor	S33N	864-5664	mathiosdiane@deanza.edu	M – TH 10:30 – 11:20

*If you wish to meet with me but are not available at the time listed, you may make an appointment.

This is a demanding, but rewarding class. It will take a minimum of 10 hours per week of study and group work. 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: The student will

- 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.
- Identify, evaluate, interpret and describe data distributions through the study of sampling distributions and probability theory.
- 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.

Textbook: Text: **Collaborative Statistics, 2nd Edition by Illowsky and Dean**

This text is available for free downloading at: http://cnx.org/contents/5e0744f9-9e79-4348-9237-ed012213a2d6@40.9:15/Collaborative_Statistics You may download the text for free onto your computer and print out the pages you want. (Note: If you plan on printing the entire book, please see Herminio to borrow a copy of the text.)

Materials: **TI84 or TI-83 PLUS** graphing calculator (see www.rentcalculators.org to rent a calculator for \$9 per month);
Math 10 Worksheet Packet: available for purchase at the bookstore
Ruler, small stapler.

Instructor Web site: <http://faculty.deanza.fhda.edu/mathiosdiane/>

Quizzes: Quizzes are closed book and with one page of handwritten notes (one side) allowed. Quizzes will test your understanding and completion of the homework problems. **Your lowest quiz grade will be dropped. No make-ups are given.**

Labs: Lab assignments make use of the calculator. You will **not** be able to complete most labs in class. **You will have 5 pts deducted if you are absent the day that the lab data is collected and worked on in class. Make sure you bring a copy of the lab to class on lab days (see calendar). No make-ups or late papers will be accepted. NO labs will be dropped.**

Homework: The purpose of homework is to help you learn the material in the course. **Do the practices first.** We will usually start them in class. They must be turned in with your HW. Then do the HW problems assigned. The answers are at the end of each chapter. You must show your work for all HW problems. Graphs must be done with a ruler. No credit will be given for answers only. **Each student may turn in a HW assignment one day late ONCE during the quarter. Other than this, no late HW will be accepted. Your lowest HW score will be dropped.**

Exams: 3 exams will be given. **No make-ups are given.** Exams are closed book. Students may bring to the exam one 8 ½" x 11" page (both sides) of **handwritten** notes, a calculator, and, if English is a second language, an English translation dictionary.

Final Exam: A two-hour comprehensive exam will be given. Students may bring 2 pages (both sides) of handwritten notes to the final. **Finals must be taken at scheduled time during finals week.**

Attendance: You are expected to attend all classes and be punctual. Tardies of 10 minutes or more count as half an absence; missing more than 40 minutes of class (beginning or end) counts as an ABSENCE. If you accumulate the equivalent of **5 absences**, whatever the reason, you may be dropped from the course. However, **it is your responsibility to drop the course**, if necessary.

Projects: There are 2 projects. Projects are done in groups and make use of data collected by the group. **No make-ups or late papers will be accepted.**

Labs, homework and projects are due by the start of class (within first 5 minutes) on the due date. They may be turned in earlier, but THEY WILL NOT BE ACCEPTED LATE.

Grades:	Exams (3@ 100)	300 pts.	A:	90 -100%
	Quizzes (6@ 20)	100 pts. (lowest 1 dropped)	B:	78 - 89%
	Labs (4@ 25)	100 pts.	C:	66 - 77%
	Final Exam	100 pts.	D:	55 - 65%
	Projects (2@ 50)	100 pts.	F:	0 – 54%
	Homework (11@ 10)	100 pts. (lowest 1 dropped)		

At the end of the quarter, if the final exam is the lowest exam, it will count as 1 exam. Therefore, the final exam and all other exams will count. If one of the 3 midterm exams is the lowest, then that midterm score will be **replaced** by the final score. Therefore, the final exam will count twice. In summary, you will have a total of 400 exam points.

Practices & Homework

Chapter	Practices	HW Section #	Homework problems
Ch 1:	Practice 1.11	1.12	1,3,5,7,9,11,13,16,17,28
Ch 2:	Practice 2.11	2.13	1, 3, 5,7,9,13,15,21,23
Ch 12:		12.13	1, 3, 5, 9, 13, 15
Ch 3:	Practice 1, 2	3.11	1, 3, 5, 7,8,9 – 13 odd, 15a-f,19, 21, 23
Ch 4:	Practices 1, 2	4.15	1 – 11 odd, 13(use Binomial) For #7- 13odd,don't forget to do parts a,b,c. See instruction before #7.
Ch 5:			Read 5.1 Continuous Random Variables (no written HW)
Ch 6:	Practice 6.7	6.8	1 – 7 odd, 8
Ch 7:	Prac 7.6 skip ΣX	7.7	1a – f, 3, 5, 9, 13abcghij, 16
Ch 8:	Practices 1 – 3	8.9	1, 5, 9, 13, 15, 17, 21
Ch 9:	Practices 1 – 3	9.16	1all, 2bcegi, 5 – 13 odd, 19, 25 (use solution sheet except for 1, 2)
Ch 10:	Practices 1 – 2	10.9	1 – 9 odd, 11, 15, 17, 19, 23, 25 (use solution sheet except for 1 – 9) plus Types of Studies HW (packet p. 4)
Ch 11:	Practices 1 – 2	11.11	3, 5, 7, 9, 13, 15
Ch 13:	Practice 13.7	13.8	1, 2, 7 plus handout (will not be collected, but material will be on Final Exam)

Topics to Skip

Ch 3: Venn diagrams	Ch 4: Poisson, Geometric, Hypergeometric Distributions
Ch 5: Uniform, Exponential Distributions	Ch 7: Central Limit Theorem for Sums
Ch 11: Test of One Variance	Ch 13: Test of Two Variances

Miscellaneous:

- **Bring your text and your calculator to class every day. Bring the Math 10 Worksheet Packet to class every day.**
- **Take-home papers that are to be turned in for grading must be STAPLED (no doggy-ears or paper clips) before class.** All papers turned in must be NEAT.
- **Cell phones & pagers must be turned off or to vibrate mode**
- Students are encouraged to form study groups.
- **Graphs should be constructed with a ruler OR done by computer.**
- Your grade is based on points and not a “curve.”
- We expect you to answer word problems and questions with complete English sentences

Spring 2016 -- MPS					as of 3/21/2016
	Monday	Tuesday	Wednesday	Thursday	Friday
Apr	Ch. 1 Instruction begins Read Ch. 1 4	Ch.1 5	Ch.1 Begin Calculator Start Proj.1: 14.1.1 6	Ch.1 1.14 Ch. 1 Lab 2 7	Ch 2 Read Ch. 2 8
Apr	Ch. 2 HW Ch. 1 - DUE 11	Ch. 2 12	Ch 2 Proj 1 data check 13	Ch 2/12 Lab Due: Ch. 1 14	Ch . 12 Read Ch. 12 15
Apr	Ch . 12 Quiz: Ch. 1&2 HW Ch. 2 - DUE 18	Ch . 12 19	Ch. 12 20	Review 21	Exam 1 Ch. 1,2,12 HW Ch. 12 - DUE 22
Apr	Ch. 3 Read Ch. 3 25	Ch. 3 26	Ch. 3 Proj. 1 typed & stapled packet due 27	Ch. 3 28	3.13 Ch. 3 Lab 29
May	Ch. 4 Read Ch. 4 2	Ch. 4 Quiz: Ch. 3 HW Ch. 3 - DUE 3	Ch. 4 4	Ch 5/Ch 6 Read Ch 6 Lab Due: Ch. 3 5	Ch 6 Quiz: Ch 4 HW Ch. 4 Due 6
May	Ch 6 9	Ch 7 Read Ch 7 10	Ch 7 HW Ch. 6 - DUE Quiz: Ch. 6 11	Ch 7 12	Ch 7 7.10 Ch. 7 Lab 2 13
May	Review 16	Exam 2 Ch. 3, 4, 6, 7 HW Ch. 6 - DUE 17	Ch 8 Read Ch 8 18	Ch. 8 19	Ch. 8 20
May	Ch 8/9 23	Ch 9 Read Ch 9 Lab due: Ch 7 24	Ch 9 Start Proj.2: 14.4.3 25	Ch. 9 Quiz: Ch 8 HW Ch. 8 - DUE 26	Ch. 9 27
May	Memorial Day No Class 30	Ch. 9 Proj 2 Article & typed proposal due 31	Ch. 10 Read Ch 10 1	Ch. 10 2	Ch. 10 Quiz: Ch.9 HW Ch. 9 - DUE 3
June					
Jun	Ch. 10 Project 2 Data Check 6	Review 7	Exam 3 Ch. 8,9,10 HW Ch. 10 DUE 8	Ch 11 Read Ch 11 9	Ch 11 11.14 Ch. 11 Lab 2 plus handout 10
Jun	Ch. 11 Project 2 typed & stapled packet due 13	Ch. 11 14	Ch 13 Lab Due: Ch. 11 15	Ch. 13 HW Ch. 11 DUE no day of grace 16	Review for final 17
Jun	Finals no class 20	Final Exam 9:15 - 11:15 21	Finals no class 22	Finals no class 23	Finals no class 24