

Course: Math 10 Section: 02 & 07 Instructor: Frank P. Soler Term: Winter 2018
Office: S76f. Office hours: MTWTh 9:30 – 10:20 AM or by appointment e-mail: solerfrank@deanza.edu
Website: <http://faculty.deanza.edu/solerfrank/>

Pre-requisite: C or better in Math 114 or equivalent; or placement above Math 114 in Math Placement Test.
Advisory: English Writing and Reading 211 or equivalent.

Textbook and other materials

Book: “Statistics: Understanding Uncertainty”, by Soler et.al; 4th Edition, ARC Publishers: 2016.
Calculator: The TI 83/83+ or 84/84+ graphic calculator are recommended but not required.
Software: The Math Lab software used in this course is in residence in the Math Computer Lab (rooms S42/44/48) and in some computers in the Math/Science Tutorial Center.

Attendance. In most cases, attendance is a necessity. I don’t take roll. If you will be absent during an extended time period, please contact me. It is important to keep an accurate set of class notes.

Quizzes. Unannounced. Usually given at the beginning of class. Missed quizzes are not made up. Note that some quizzes may be of the take-home variety. Lowest quiz is dropped. Quizzes may be cumulative and are based on lecture examples, assigned practice problems, and/or Mastery problems.

Homework. Assigned but not collected. Consider doing at least all the assigned problems on a daily basis (see schedule of *Practice Problems*) and the review problems at the end of each chapter (including the **Test Yourself**). The book has many problems with Answers/Solutions in the Appendix (600+ out of 1400+ problems). That is a lot of problems and a lot of work, but it is the only way of mastering the material.

Computer Lab. There will be five computer lab assignments (see the calendar for when labs are due). Lab time, on selected Fridays, will be devoted to these labs. On lab days we meet in room S44.

Exams. See the calendar for dates. Missed exams are not made up. The **Final Exam** is comprehensive and it is required. Any student not taking the **Final Exam** automatically receives a grade of F for the course. All quizzes and exams in this course are open book and open notes. During exams/quizzes the only electronic device allowed for student’s use is a calculator. To be clear, no iPad, iPhone, cell phone, computer, or any other electronic device is allowed and should be turned off. For the multiple choice part of the **Final Exam** the students must bring a half-scantron (brown or green) and a #2 pencil.

Grading. Based on total points accumulated as follows:

Two Midterm Exams (100 pts. each) = 200 pts.; **Quizzes** = 100 pts.; **Labs:** 100 pts.; **Final Exam** = 200 pts.

The lowest 100 point score between the two midterms and the quizzes will be dropped. The letter grade scale is:

A+ = 470; A = 435; A- = 425; B+ = 415; B = 380; B- = 365; C+ = 350; C = 300; D+ = 290; D = 250; F < 250.

Miscellaneous Comments. This is a demanding and intellectually challenging course. It is very different from any other “math” course you have taken. The quarter goes by quickly and we cover a lot of material every day/week. It’s important to keep up with the reading and class lectures. All due dates (for computer labs and/or take home quizzes) are final: NO exceptions. The first thing to read in the book is the **Foreword** (written for students): it sets the tone for the subject of statistics and how it differs from “regular” mathematics. It also gives hints on how to best study for this course. In my website (under the Math 10 button) students will find sample questions and exams. For tutorial assistance register in **S-4 (Math/Science Tutorial Center)** ASAP. Pay close attention to drop dates. **I do not drop students. In other words, a student’s name appearing on the final grade roster and who has not been involved in course activities, will automatically receive a final grade of F for the course.**

Practice Problems for *Statistics: Understanding Uncertainty*, 4th Edition, 2016

Students should work the indicated problems for class discussion and studying purposes (quizzes, exams). In addition, the students are responsible for working the review problems at the end of each chapter, including the problems in the *Test Yourself* section. Notice that in the Appendix (back of the book), there are answers/solutions to **ALL** of the *Test Yourself* problems for each of the twelve chapters.

| Page Number | Problems | Page Number | Problems | Page Number | Problems |
|----------------|------------------|----------------|----------------------|----------------|--------------------|
| 1-5 to 1-6 | 2, 3, 4 | 1-8 | 2, 3, 4 | 1-11 to 1-13 | 1, 2, 5, 7, 11, 12 |
| 1-15 | 2, 3, 5, 9, 11 | 1-22 to 1-24 | 1, 2, 3, 5, 6, 7, 10 | 1-29 to 1-32 | 1-5, 7 |
| 2-19 to 2-23 | 1, 3, 4, 6, 7, 9 | 2-30 to 2-32 | 1, 2, 3, 7, 10, 11 | 2-41 to 2-45 | 1-8, 12, 14 |
| 2-47 to 2-48 | 1, 2, 4, 5, 7 | 2-52 to 2-53 | 2-6, 9, 10 | | |
| 3.5 to 3.6 | 1, 4-6 | 3.9 to 3-10 | 1, 5-7 | 3-12 to 3-14 | 1, 3, 6-9, 12-14 |
| 3-18 to 3-19 | 1-12 | 3-25 to 3-28 | 1, 3, 4, 6, 9, 10 | 3-32 | 1-10, 12 |
| 4-6 to 4-7 | 2, 3, 4 | 4-11 to 4-13 | 1, 3, 4, 5, 9 | 4-16 | 1, 2, 5, 6 |
| 4-22 to 4-25 | 1-17, 23, 24 | 4-30 to 4-32 | 1, 2, 4, 6 | 4-41 to 4-44 | 2-4, 8-10 |
| 5-5 | 3, 5, 6 | 5-8 to 5-9 | 1-5, 7 | 5-12 to 5-13 | 1, 2, 4, 5 |
| 5-17 to 5-19 | 1, 2, 3 | 5-24 to 5-28 | 1-12, 15, 16, 19 | 5-31 to 5-32 | 1-6, 9, 10 |
| 5-40 to 5-41 | 1-9, 11-13 | | | | |
| 6-5 | 1-4 | 6-13 to 6-16 | 1-7, 9-12 | 6-17 to 6-18 | 1-4 |
| 7-2 to 7-3 | 1-5 | 7-9 to 7-12 | 1-7, 14 | 7-16 to 7-18 | 1-5, 7-9 |
| 8-11 to 8-14 | 1-10, 13, 16, 18 | 8-17 to 8-18 | 1-5 | 8-21 to 8-22 | 1-4, 6 |
| 8-29 to 8-30 | 1, 4, 5, 8 | | | | |
| 9-6 to 9-7 | 1-3, 5, 6 | 9-9 to 9-10 | 1, 2, 6, 7 | 9-11 | all |
| 9-16 | 1-3, 7 | | | | |
| 10-22 to 10-23 | 1, 2, 4, 5 | 10-3 to 10-4 | 1-4 | 10-11 to 10-14 | 1-6, 8, 10-13 |
| 11-9 to 11-11 | 1, 2, 5, 6 | 11-18 to 11-21 | 1, 2, 4, 6 | 11-28 to 11-30 | 2, 3, 4 |
| 12-4 | all | 12-8 to 12-9 | all | 12-12 | all |
| 12-16 | 1-4, 10 | 12-18 to 12-19 | 1, 2, 4, 5 | | |

Winter 2018 daily calendar for Math 10

Legend: month/day: chapter.section or activity

| <u>Monday</u> | <u>Tuesday</u> | <u>Wednesday</u> | <u>Thursday</u> | <u>Friday</u> |
|-------------------------|-----------------|---|---|----------------------------------|
| 1/8: 1.1 | 1/9: 1.2 | 1/10: 1.3 & 1.4 | 1/11: 1.5 | 1/12: 1.6 |
| 1/15: No classes | 1/16: 2.1 & 2.2 | 1/17: 2.3 | 1/18: 2.4 | <i>1/19: LAB* #1 due</i> |
| 1/22: 2.5 & 2.6 | 1/23: 3.1 & 3.2 | 1/24: 3.3 & 3.4 | 1/25: 3.5 | 1/26: 3.6 |
| 1/29: 4.1 & 4.2 | 1/30: 4.3 | 1/31: 4.4 | 2/1: 4.5 | <i>2/2: LAB #2 due</i> |
| 2/5: 4.6 | 2/6: 5.1 & 5.2 | 2/7: 5.3 | 2/8: Review | 2/10: Exam 1 on Chs. 1-4. |
| 2/12: 5.5 & 5.6 | 2/13: 5.8 | 2/14: Catch-up & 6.1 | 2/15: 6-2 | 2/16: No classes |
| 2/19: No classes | 2/20: 6.3 | 2/21: 7.1 & 7.2 | 2/22: 7.3 | <i>2/23: LAB #3 due</i> |
| 2/26: 8.1 | 2/27: 8.2 & 8.3 | 2/28: 8.3 & 8.4 | 3/1: 8.5 | <i>3/2: LAB #4 due</i> |
| 3/5: 9.1 & 9.2 | 3/6: 9.3 | 3/7: 9.4 | 3/8: Review | 3/9: Exam 2 on Chs. 5-9. |
| 3/12: 10.4 | 3/13: 10.1 | 3/14: 10.2 | 3/15: 11.1 | <i>3/16: Lab #5 due</i> |
| 3/19: 11.2 | 3/20: 11.3 | 3/21: 12.1 & 12.2 | 3/22: 12.3 & 12.4 | 3/23: Review |
| 3/26 | 3/27 | 3/28: Final Exam 7 to 9 AM, for the 8:30 AM class (section 02) | 3/29: Final Exam 9:15 to 11:15 AM, for the 10:30 AM class (section 07) | |

***= On LAB days we meet in room S44.**

Important dates:

Monday, January 15: no classes (Martin Luther King's birthday)

Saturday, January 20: last day to add quarter-long classes

Sunday, January 21: last day to drop for a full refund or credit; last day to drop a class with no record of grade

Friday, February 2: last day to request pass/no pass grade from the Registrar.

Friday, February 16: no classes (President's weekend)

Monday, February 19: no classes (President's weekend)

Friday, March 1: last day to file for a winter degree or certificate

Friday, March 2: last day to drop with a "W"

Monday through Friday, March 26-30: week of Final Exams.

Student Learning Outcome(s):

*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.