

Elementary Statistics - Math 52/Fall 2009

NOTE: THE PACE OF THIS COURSE IS EXTREMELY FAST!!!

MW 8:00-9:20 (Section 3279) MC 9, MW 12:45-2:05 (Scholars Section 2645) LS 103, TTH 12:45-2:05 (Section 2647) LS 103

Prerequisite: Completion of Intermediate Algebra (Math 20), or equivalent, with a grade of C or better

Instructor: Dr. McGraw **Office:** Math Complex 60 **Phone:** 310-434-3518

Office Hours: (you do not need an appointment to visit during office hours, just stop by with your questions). TWTH 11:00-12:00

Stats Lab in math lab in the math lab quiet room (open to all stats students): M 11:-12:00

E-mail: mcgraw_colleen@smc.edu Please feel free to email me, however, I will not read or even open emails that are not clearly from a student (I suggest putting your name and section number in the subject heading). I do try to answer emails that are pertinent to the course, emails that ask questions answered on the syllabus will receive a low priority.

Web Page Address: See faculty homepages at the www.smc.edu site or type in http://homepage.smc.edu/mcgraw_colleen/

Required Text and Tools:

1. Mario F. Triola, Elementary Statistics, 10th edition, Addison Wesley, 2006. The library does have a copy of the book on reserve.
2. TI 83 (or TI-83 Plus or the new TI 84 Plus) Calculator is required (The TI 83 has specific statistical functions not found on other graphing calculators). You are expected to bring the calculator to each class. We will go over the how to use the calculator in class, however, as the course is quite fast paced our time is limited, you will need to use the calculator on your own in order to be successful in this course. If you choose not to use a version of the TI-83 please be warned that it may take you longer to complete assignments and exams and I will not be able to show you how to use your calculator. I will be assuming that you are using a version of the TI-83. You will not be allowed to use cell phones as a calculator during any exam. There are a few handouts on how to use the calculator on the web page under calculator notes, you may want to print these out and review them on your own.
3. Formula Card: You will be allowed to use a copy of formula card for each exam, I will provide you with a clean copy of the formula card for each exam which you will return to me after each exam.

Tutoring and additional help: Tutors are available through the math lab which is located behind the math department in SV 34. There is drop-in tutoring and appointments available. I am also available during my office and math lab hours, if you are unable to make those times we can arrange another time. You may also email or call for help, however, I will not respond to any anonymous messages of any kind. It is in your best interests to ask for help as soon as needed.

Content: Emphasis is on understanding statistical methods. The major topics include descriptive statistics, measure of location and dispersion, sampling and sampling distribution, correlation and regression, confidence interval, hypothesis testing, test of independence, and analysis of variance.

Objectives: Statistically describe sets of data , Apply basic laws of probability, Formulate a probability distribution, Formulate and test hypotheses testing of one, two, and more than two populations, Formulate

and analyze point and interval estimates for parameters, Find the correlation between two variables and the linear regression equation describing the relation between the two variables.

Regular Attendance: Regular attendance is a requirement to remain enrolled. I expect you to attend the entire class, not to arrive late or leave early, you will not get full attendance credit if you are not in class for the entire period. Students are responsible for all announcements made in class regardless of their presence. Students are responsible for official withdraws from the class through admission office, if you stop attending it is still your responsibility to withdraw yourself from the class. If you do not withdraw yourself you may receive either an F or a W in the course, neither is a guaranteed.

Classroom Behavior and Participation: You are expected to arrive to class on time and be prepared. This means having your chapter outlines, your calculator, formula sheets and any other course handouts. Talking on a cell phone or checking messages is inappropriate at all times during class time. If your cell phone rings during class, your grade will be negatively affected. I expect you to show respect to your fellow classmates by not talking in class unless, of course, you have a question. If you choose to text during class you risk being asked to leave for the remainder of the class.

Homework: Assignments include textbook problems, listed on the last page. In addition to completing homework problems, students are responsible for reading the text. I will not collect the homework listed on the last page. The pace of the course is quite rapid, so it is in your best interests to be caught up with the schedule of assignments. You should plan on completing each assignment before the next section of material is covered. To be successful in the course, I strongly suggest keeping up with the homework and seeking help as soon as you need help.

SCHOOLARS Section ONLY: Quizzes: The Scholars section will also have regular quizzes, you will be notified of a quiz one class before the quiz. There will most likely be 6-10 quizzes. There will be no make up quizzes, I will drop the lowest quiz grade. Do not ask for a make up for any reason.

Unit tests: Four unit tests are scheduled for the class (the dates are include on the class schedule). **Note:** no exams scores are dropped. There will be *no make-up exams* under any circumstances, so please do not ask for a make-up exam. If for **ANY** reason you miss an exam, your final exam grade will replace the missed exam. The final exam will only replace one missed exams score, any other missed exam will receive a zero grade. Your final exam may also replace your lowest exam score provided you did not miss an exam. I strongly suggest that you plan appropriately and try not to miss any exams. If you miss a test you will still be responsible for that information on the cumulative final exam. A test grade of zero given because of violating the code of academic conduct will not be dropped.

NOTE:

1. I will provide a clean copy of the formula card for each exam.
2. Bring you own calculator to each exam (no sharing during exams)
3. All scratch paper will be provided, all work must be shown on the exam and all scratch paper will be turned in with the exam.
4. There will be assigned seating or a seating chart for all exams. You may be asked to move your seat at any time.
5. Any breach during an exam will be reported. Going into your bag, using a non-approved calculator, any talking, looking at another person's exam, passing a note, writing on your desketc... cheating of any kind, will not be tolerated and will be immediately reported to the campus authorities

Final Exam: A cumulative final exam will be given during finals week, during the scheduled time slot. Everyone must take the final exam, no one is excused from the final exam.

Method of Evaluation for the NON-SCHOLARS Sections:

Grading System	Method of Evaluation:
90% -100% A	
80% - 89% B	Unit Exams 75%
70% - 79% C	Final Exam 25%
60% - 69% D	
Below 60% F	

Use the formula: $\text{Your Grade} = .75(\text{TestAve}) + .25(\text{FinalExamGrade})$ to determine your grade.

Method of Evaluation for the SCHOLARS Sections:

Grading System	Method of Evaluation:
90% -100% A	Quizzes 10%
80% - 89% B	Unit Exams 65%
70% - 79% C	Final Exam 25%
60% - 69% D	
Below 60% F	

Use the formula: $\text{Your Grade} = .10(\text{quizave}) + .65(\text{TestAve}) + .25(\text{FinalExamGrade})$ to determine your grade.

Do not ask me what you need on the final exam to get a certain grade. Grades will not be curved, and Final Grades will not be posted, you will have to call the number given by admissions. Students are bound by the **Code of Academic Conduct and Reporting Policy** that addresses issues of academic dishonesty. If you are caught cheating on an exam, you will receive a grade of ZERO for that exam and the incident will be reported and become part of your permanent record.

There is and will be **no negotiating for grades** at the end of the term, that means your grade will be calculated as indicated above. There will be no extra credit, or any “deals” made regardless of how well you may think you can perform on the final exam. Do not even think of contacting me at the end of the term with such inquiries. I view emails, calls, office visits with such requests as harassment and will deal with them accordingly. **There is will be no extra credit, do not email me with your personal stories about how your life will be ruined if I do not give you a certain grade. You will receive the grade you earn.**

Entry Level Skills: Skills you need to have known prior to enrollment in this course

1. Solve linear and non-linear equations.
2. Simplify advanced numerical expressions (order of operations).
3. Plot and interpret points on Cartesian coordinate system.
4. Plot linear equations using slope-intercept method.
5. Translate verbally stated problems into appropriate mathematical forms.
6. Solve absolute value equations and inequalities in a single variable.
7. Evaluate an exponential function.
8. Evaluate simple expressions involving sigma notation.
9. Solve literal equations for designated variables.
10. Evaluate complex numerical expressions.
11. Given the description of a line, write the equation of the line.
12. Express the solution to an inequality using interval notation.

Exit Level Skills: Skills to be learned during this course

1. Statistically describe mathematically sets of data.
2. Apply basic laws of probability.
3. Formulate a probability distribution.
4. Formulate and test null hypothesis of one, two or more populations.
5. Make point and interval estimates of parameters.

6. Identify correlation between two variables and linear relation between them.
7. Use statistical functions on a calculator.
8. Critically evaluate statistical claims.

Lecture Schedule & Homework Assignments (SUBJECT TO CHANGE) Follow either the MW or TTH schedule depending on the section in which you are enrolled.

Schedule	Text	Suggested Homework
8/31 M	Ch. 1	Sec 1-2: # 1-27 odd; Sec 1-3: # 1-27 odd; Sec 1-4: #1-33 odd
9/1 T	Ch. 1	Sec 1-2: # 1-27 odd; Sec 1-3: # 1-27 odd; Sec 1-4: #1-33 odd
9/2 W	2.1-2.3	Sec 2-2: # 1-25 odd(Scholars Sec. also include 27); Sec 2-3: 1-19 odd
9/3 Th	2.1-2.3	Sec 2-2: # 1-25 odd(Scholars Sec. also include 27); Sec 2-3: 1-19 odd
9/7 M	No Class	Labor Day
9/8 T	2.4,3.2	Sec 2-4: # 1,5,9,13,15,17,25, Sec 3-2: 1-31 odd (Scholars Sec also include 33, 34, 35)
9/9 W	2.4,3.2	Sec 2-4: # 1,5,9,13,15,17,25, Sec 3-2: 1-31 odd (Scholars Sec also include 33, 34, 35)
9/10 Th	3.3	Sec 3-3: # 1-33 odd, 37
9/14 M	3.3	Sec 3-3: # 1-33 odd, 37
9/15 T	3.4-3.5	Sec 3-4: 1-29 odd, Sec 3-5: 1-15 odd
9/16 W	3.4-3.5	Sec 3-4: 1-29 odd, Sec 3-5: 1-15 odd
9/17 Th	4.2	Sec 4-2: #1-35 odd
9/21 M	4.2	Sec 4-2: #1-35 odd
9/22 T	Test #1	
9/23 W	Test #1	
9/24 Th	5.2-5.3	Sec 5-2: # 1-25 odd (Scholars also include 27); Sec 5-3: # 1-35 odd
9/28 M	5.2-5.3	Sec 5-2: # 1-25 odd (Scholars also include 27); Sec 5-3: # 1-35 odd
9/29 T	5.4	Sec 5-4: # 1-21 odd
9/30 W	5.4	Sec 5-4: # 1-21 odd
10/1 Th	6.2-6.3	Sec 6-2: #1-43 odd; Sec 6-3 pages: #1-29 odd
10/5 M	6.2-6.3	Sec 6-2: #1-43 odd; Sec 6-3 pages: #1-29 odd
10/6 T	6.4-6.5	Sec 6-4: # 1, 3, 5, 9 Sec 6-5: # 1-21 odd

10/7 W	6.4-6.5	Sec 6-4: # 1, 3, 5, 9 Sec 6-5: # 1-21 odd
10/8 Th	6.5	Sec 6-5: # 1-21 odd (Scholars also include 23)
10/12 M	6.5	Sec 6-5: # 1-21 odd (Scholars also include 23)
10/13 T	7.2	Sec 7-2: # 1-47odd (Scholars also include 49, 51)
10/14 W	7.2	Sec 7-2: # 1-47odd (Scholars also include 49, 51)
10/15 TH	7.3-7.4	Sec 7-3: # 1-37 odd (Scholars also include 39)
10/19 M	7.3-7.4	Sec 7-3: # 1-37 odd (Scholars also include 39)
10/20 T	<u>Test # 2</u>	
10/21 W	<u>Test # 2</u>	
10/22 Th	7.4-7.5	Sec 7-4: # 1-29odd (Scholars also include 27), Sec 7-5: # 1-25 odd (Scholars also include 31,33)
10/26 M	7.4-7.5	Sec 7-4: # 1-29odd (Scholars also include 31,33) Sec 7-5: # 1-25 odd (Scholars also include 27)
10/27T	8.2-8.3	Sec 8-2: 1-43 odd Scholars Sec also include 45, 47); Sec 8-3: # 1-31 odd (Scholars Sec. also include 33)
10/28 W	8.2-8.3	Sec 8-2: 1-43 odd Scholars Sec also include 45, 47) ; Sec 8-3: # 1-31 odd (Scholars Sec. also include 33); Sec 8-4: 1-19odd
10/29 Th	8.3-8.4	Sec 8-3: # 1-31 odd (Scholars Sec. also include 33); Sec 8-4: 1-19odd (Scholars Sec. also include 21)
11/2 M	8.3-8.4	Sec 8-3: # 1-31 odd (Scholars Sec. also include 33); , Sec 8-4: 1-19odd (Scholars Sec. also include 21)
11/3 T	8.5-8.6	Sec 8-5: # 1-35odd (Scholars Sec also include 37) , Sec 8-6: 1-19odd, 21 , (Scholars Sec also include 23)
11/4 W	8.5-8.6	Sec 8-5: # 1-35odd (Scholars Sec also include 37) , Sec 8-6: 1-19odd, 21, (Scholars Sec also include 23)
11/5 Th	9.2	Sec 9-2: 1-31odd, (Scholars Sec. also include 33, 35, 37)
11/9 M	9.2	Sec 9-2: 1-31odd, (Scholars Sec. also include 33, 35, 37)
11/10 T	9.3-9.4	Sec 9-3: # 1-31odd Sec 9-4: # 1-27odd, (Scholars Sec. also include 33,35,37)
11/11 W	9.3-9.4	Sec 9-3: # 1-31odd ; Sec 9-4: # 1-27odd, (Scholars Sec. also include 33,35,37)
11/12 Th	9.5	Sec 9-5: 1-19odd , (Scholars Sec. also include 23)

11/16 M	<u>Test # 3</u>	
11/17 T	<u>Test # 3</u>	
11/18 W	9.5	Sec 9-5: 1-19odd , (Scholars Sec. also include 23)
11/19 Th	10.2-10.3	Sec 10-2: 1-35odd, (Scholars Sec. also include 37, 39) Sec 10-3: 1-31 odd (Scholars Sec. also include 33,35)
11/23 M	10.2-10.3	Sec 10-2: 1-35odd, (Scholars Sec. also include 37, 39) Sec 10-3: 1-31 odd, (Scholars Sec. also include 33,35)
11/24 T	10.3-10.4	Sec 10-4: 1-21odd , (Scholars Sec. also include 25)
11/25 W	10.3-10.4	Sec 10-4: 1-21odd , (Scholars Sec. also include 25)
11/26 TH	<u>No Class</u>	<u>Thanksgiving Holiday</u>
11/30 M	10.4	Sec 10-4: 1-21odd , (Scholars Sec. also include 25)
12/1 T	10.4	Sec 10-4: 1-21odd , (Scholars Sec. also include 25)
12/2 W	11.3,12.2	Sec 11.3: 1-21 odd, (Scholars Sec. also include 23),, Sec. 12.2: #1-15 odd,
12/3 Th	11.3,12.2	Sec 11.3: 1-21 odd, (Scholars Sec. also include 23), Sec. 12.2: #1-15 odd
12/7 M	Review	
12/8 T	<u>Test #4</u>	.
12/9 W	<u>Test #4</u>	
12/10 Th	Review	
12/14 M	Review	
12/ 15 T	Final	Final Exam for 12:45-2:05 TTH Section from 12:00-3:00
12/16 W	Final	Final Exam for 8:00-9:20 MW Section from 8:00-11:00
12/ 16 W	Final	Final Exam for 12:45-2:05 MW Section from 12:00-3:00
		NOTE: You are expected to take your final exam with your section. Do not miss your final and expect to be able to take it with another section without prior permission. If you miss your final you risk getting a ZERO on your final exam.