MATH 217 - Integrated Statistics 1 (Statway) - De Anza College - Winter 2016

Instructor: Doli Bambhania

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Hours: Monday-Thursday 8-8:30am and 9-9:30pm online: or by appointment

Course Materials:

• <u>Statway Modules 1 – 12, plus online access code:</u> This includes all print materials for both Math 217 and Math 57, plus an access code for the online materials. Once you create your Pathways account (see below), you will be able to purchase this online for \$125.49. It's also available at De Anza bookstore for \$149.99, if you prefer to purchase it in-person or if using a financial aid voucher.

- Statway Supplementary Algebra Packet: Available for purchase at the bookstore
- TI83/TI84 graphing calculator
- Creating your Carnegie Pathways account: Please do this immediately
 - Log in to pathways.carnegiehub.org and create a new account
 - Request to be enrolled in the course with code 'SZ65-V12Q'
 - O Your enrollment will be "pending" until approved by me. I will do this as soon as I can.
 - After you're approved to enroll, you have a 4-week grace period to pay. Use the access code provided with your print materials.
 Enter the access code in the place provided and press the "redeem code" button. Your access code will be valid for two years.

Course Description:

This course is the first of a two-course sequence in the study of statistical methods integrated with algebraic tools to prepare students to analyze processes encountered in society and the workplace. This course covers an introduction to algebra and descriptive statistics in an integrated approach. Topics include data collection, organizing and interpreting data graphically, qualitative and quantitative data sets, measures of central tendency and measures of dispersion, bivariate data and scatter plots, linear functions and their graphs, nonlinear functions and their graphs, and applying technology to calculate various types of regressions. Students are expected to implement technology to perform calculations to organize data in order to make statistical conclusions. This sequence of courses is intended for students intending to transfer to the CSU or UC systems and who are NOT planning on majoring in a business, science, technology, engineering, or mathematics related discipline.

Prerequisite:

Satisfactory completion of Math 210 or a satisfactory score on the math placement test.

Attendance & Classroom Policies:

Attendance is of utmost importance for success in this class. You are expected to attend every class meeting. Students are allowed a maximum of 4 absences. Arriving late or leaving early is calculated as ½ an absence.

Grading:

• In-class Work: Participation and Binder Checks (35 pts)

Each class will have activities and exercises that are worked on in groups. Credit will be given for active participation in these activities. Additionally, bring your binders on exam days, as they will be checked for completeness.

• Entrance Cards (10 best at 2 pts each)

These will be regular unannounced exercises at the beginning of the class or upon returning from the break. They will be based on recently covered material. You must be present to participate.

Take-it-Home (80 pts)

These exercises are assigned for homework. They are due at the beginning of the next class. Take-it-home exercises will not be accepted late (even in case of an absence) unless they are accompanied by a late coupon. You will be given 4 late coupons at the beginning of the quarter to use when needed.

Checkpoints on Pathways.carnegiehub.org (35 pts)

Checkpoints are computer exercises that are delivered via pathways.carnegiehub.org. Prior to the checkpoints, there are summaries and ungraded quizzes to check your understanding. Each day you should consider spending at least two hours on the pathways site. This will not only reinforce what happened in class but also prepare you for future class activities. Your completion of the exercises there will prepare you to do well on the Checkpoints. The due dates for the checkpoints are listed within that portal.

Quizzes (5 best at 10 pts each)

There are 6 scheduled quizzes at the end of most modules. The lowest quiz score will be dropped. There are no make-up quizzes.

Exams (3 at 50 pts each)

3 in-class 1-hour exams will be given. **No make-ups will be allowed.** Your lowest exam score will be replaced by proportional final exam score if the final exam score is higher.

• Labs (50 pts)

Lab classes will be held in the math computer lab: S44. You will use Minitab and other statistical software in analyzing data and learning statistical models. Computer labs can be done in groups and be turned in by the due date. **There is no credit for late labs**.

Final Exam (100 pts)

The final exams will be held in 2 parts: on Monday, Nov 30 and Mon, Dec 7. The first exam (20 points) is a standardized multiple-choice exam

required by the Carnegie Foundation who created Statway. The second exam (80 points) will cover everything that we've studied during the quarter.

Grading Weights & Policy:

Grading will be based on the following criteria. Grades are not negotiable.

**************************************	Grading Criteria In-class Work: Entrance Cards: Take it Homes: Checkpoints: Quizzes: Exams: Labs: Final Exam:	35 pts 20 pts 80 pts 35 pts 50 pts 150 pts 50 pts 100 pts 520 pts	
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Drop/Withdrawal Policy:

It is your responsibility to officially drop or withdraw from the course if you choose not to complete it.

Last day to Drop the course: Monday, January 18

Last day to Withdraw from the course: Friday, February 26

Classroom Conduct:

Human beings are not great at multitasking. Math requires singular focus. We will expect your full attention during lecture and class activities. Disruptive classroom behavior may include, but is not limited to, the following: talking when it does not relate to the discussion topic, sleeping, reading other material (e.g. newspapers, textbooks from other classes, stuff on your electronic device), eating or drinking, monopolizing discussion time, refusing to participate in classroom activities, texting, and engaging in any other activity not related to the classroom activity. Students who engage in disruptive classroom behavior will be warned by the instructor. If the disruptive behavior continues, students may be asked to leave the class, and eventually dropped from the course. You are expected to silence and put away your electronic devices. If your device causes disruption in any way, we reserve the right to confiscate it!

Academic Integrity:

Students are expected to be honest and ethical at all times in the pursuit of academic goals. Please see http://www.deanza.edu/studenthandbook/academic-integrity.html. Any instances of cheating or plagiarism will result in disciplinary action, which may include recommendation for dismissal. You are encouraged to work together on homework but simply copying down answers from another student's homework is not only wrong, but will be of no help to you on the quizzes and exams! Cheating on a quiz or an exam will result in getting a 0 on it, an F in the course or dismissal from the class. Also, each incident of cheating will be reported to the Dean of the Physical Science, Mathematics and Engineering Division for further action.

Disability-Related Accommodation:

If you feel that you may need an accommodation based on the impact of a disability, you should contact me privately to discuss your specific needs. Also, please contact Disability Support Services (864-8753) or Educational Diagnostic Center (864-8839) for information or questions about eligibility, services and accommodations for physical (DSS), psychological (DSS) or learning (EDC) disabilities.

Extra Help:

Do not wait to get extra help. Contact the instructor as soon as you start to feel stuck. Your classmates are also a great resource! The Math Science Tutorial Center is located in S43 and you may be able to get help there.

Student Learning Outcomes (SLOs):

- 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. Analyze and describe data distributions through the study of probability theory.
- 3. Evaluate real-world situations and apply linear, quadratic and exponential function models appropriately.

Winter 2016 Math 217 (Statway) Tentative Calendar

	Monday	Tuesday	Wednesday (lab)	Thursday
	1.0.0	1.1.2	1.1.3	1.2.2
	1.1.1	1.1.3	1.2.1	1.2.3
Jan	4	5	6	
	1.3.1	2.1.1	Intro to Minitab Lab	Module 1 Quiz
			2.1.2	2.2.1
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Jan	11	12		14
	MLK Jr. Day	2.3.1	Descriptive Stats Lab	Linear
	Holiday	2.4.1	2.4.1	Supplement
т	No class	10	Empirical Rule	(packet)
Jan	Module 2 Ovis	12.1.1	20 Exam 1	3.1.1
	Module 2 Quiz Linear		on Modules 1, 2,	3.1.2
		(12.1.2) Review	Linear Models	3.1.2
Jan	Supplement 25	26		28
Jan	3.1.3	3.2.2	Regression Lab	3.3.1
	3.2.1	3.2.3	Regression Lab	5.5.1
	3.2.1	5.2.5		
Feb	1	2	3	4
100	3.3.2	Module 3 Quiz	12.3.1	4.2.1 (packet)
	Module 3 Wrapup	4.1.2	4.3.2	4.2.2 (packet)
	4.1.1	4.2.2		ų /
Feb	8	9	10	11
	Presidents Day	4.3.1 (packet)	Module 4 Wrap-up	Exam 2
	Holiday	4.3.2 (packet)	Review	on Modules 3, 4
	No class			5.1.1
Feb	15	16		18
	5.1.2	Independence	2-way tables Lab	6.1.2
	5.1.3	Module 5 wrap-up	Module 5 Quiz	6.1.3
		6.1.1	(Quiz after lab)	
Feb	22	23	24	25
	6.2.1	6.2.3	Simulation Lab	Module 6 Wrapup
	6.2.2			Module 6 Quiz
Mar	29	1	2	3
Iviai	Review	Exam 3	12.2.2	Quadratic
	ræview	on Modules 5, 6	12.3.2	Models
	1	12.2.2	12.5.2	(packet)
Mar	7	8	9	10
	Standardized	Quadratic	Comparing	Quadratic Quiz
	Final	Models	linear, quadratic and	Final Exam Review
		(packet)	exponential models	
Mar	14	15	_	17
	Finals Week	Final	Finals Week	Finals Week
	No class	Exam	No class	No class
		1:45 - 3:45		
Mar	21	22	23	24