

**Math 119: Elementary Statistics**  
**Course Syllabus, Fall 2008**  
**San Diego Mesa College**

**CRN:** 04037

**Meeting Times:** Monday & Wednesday 9:35–11:00am

**Room:** K213

**Instructor:** Patrick Burrus

Email address: [pburrus@sdccd.edu](mailto:pburrus@sdccd.edu)

(Please put “Math 119” in the subject line of all emails.)

Office hours: Tuesday & Thursday 9:25–10:25am in room H208

(If we finish a few minutes early, questions at the end of class are welcome.)

**Website:** <http://homework.sdmesa.edu/pburrus/>

**Prerequisite:** Math 96 with a grade of C or better or equivalent or M50.

**Required Textbook:** The Basic Practice of Statistics by David S. Moore (4<sup>th</sup> Edition)  
(ISBN: 0-7167-7463-1)

Note: New editions of the book come with a registration code for StatsPortal. You can also purchase a code for StatsPortal separately.

There are many valuable resources available on the StatsPortal website, but you are *not required* to use it.

**Calculator:**

A TI-83 or TI-84 calculator is required. Calculators may not be shared during exams.

**Catalog Course Description:**

This course covers descriptive and inferential statistics. The descriptive portion analyzes data through graphs, measures of central tendency and spread. Other statistical practices utilize basic probability, binomial and normal distributions, estimation of population parameters, hypothesis testing, linear regression and correlation. Analytical reading and problem solving are required for success in this course. This course meets district G.E. requirements.

**Objectives:**

Upon successful completion of the course the student will be able to:

1. Organize qualitative and quantitative data into meaningful charts and graphs.
2. Analyze data by comparing and contrasting graphs.
3. Evaluate measures of location, central tendency and variation for grouped and individual samples.
4. Evaluate probabilities using a variety of computational methods including standard counting arguments.
5. Evaluate probabilities using a variety of distributions.
6. Apply the Central Limit Theorem to sampling distributions.
7. Construct confidence intervals for population parameters.

8. Use estimation techniques to determine point estimates, confidence interval and sample size.
9. Perform and analyze hypothesis tests of means, proportions, and variances using both one-and two-sample data sets.
10. Apply the appropriate Chi-Squared test for independence and `goodness of fit.
11. Evaluate correlation to determine the appropriateness of regression models.
12. Compute suitable regression models.

**Pace of Course:**

This course will move very rapidly. For every hour spent in class, you are expected to spend 2-3 hours outside of class reading the book, doing homework problems, and studying the material. If you fall behind, it will be very difficult to catch up. You are responsible for all material in assigned chapters and all material covered in lecture, even if you are absent.

**Grading Policies:**

There will be four quizzes, two exams, and a two-part final exam. The quizzes and exams will be closed book and closed notes, but I will supply some key formulas to you. All exam scores will count toward your grade in the course. You will be allowed to use your calculator on all exams and quizzes. There will be no extra-credit assignments.

2 exams (100 points each).....	200 points
4 quizzes (50 points each).....	200 points
worksheets/take-home problems .....	50 points
<u>Final exam (cumulative).....</u>	<u>150 points</u>
TOTAL POINTS POSSIBLE.....	600 points

Your course grade will be based on your end-of-semester point total and the following scale:

- A = 90 – 100%
- B = 80 – 89%
- C = 70 – 79%
- D = 60 – 69%
- F = below 60%

NOTE: Make-ups for missed exams will be granted only in cases of medical or job-related emergencies that are documented by the physician or employer.

**Final Exam:** Monday December 15 (Part I) and Wednesday December 17 (Part II).

**You must take both parts of the final exam at the scheduled time.**

**Homework:**

Homework problems from the textbook will be assigned for each section covered in class, but homework will not be collected or graded. The problems on the exams will closely resemble the homework problems. A few exam and/or quiz problems will be actual homework problems. As a result, there is a very strong correlation between completing the homework and passing the class. Make an effort to work all of the homework problems and get help when needed.

**Math and Science Center:**

Make use of the help provided by the Math and Science Center – Room K211. They are open Monday–Thursday 10:00am – 6:00pm. The help there is free and is done on a walk-in basis.. They can be reached by phone at (619) 388-2898.

**Attendance:**

Regular attendance is necessary for this class. You may be dropped if you miss two consecutive class meetings or have more than three total absences. Late arrival or early departure from class may be counted as an absence. In the event of an absence, you are responsible for all of the material covered in class that day and any schedule changes or class announcements. Also, please note the following:

- It is the student's responsibility to drop all classes in which he/she is no longer attending.
- It is the instructor's discretion to withdraw a student after the add/drop deadline (September 5) due to excessive absences.
- Students who remain enrolled in a class beyond the published withdrawal deadline, as stated in the class schedule, will receive an evaluative letter grade in this class.

**Academic Dishonesty and Classroom Conduct:**

All work that you complete for a grade in this course should be your own. Anyone caught cheating on a test will receive a "0" on that test. Cheating on the final exam will result in a course grade of "F." Further consequences of cheating are possible and are stated in the college catalog. Any conduct that disrupts the class or hinders the learning process will not be tolerated. You are expected to be courteous to each other and to the instructor. You will be asked to leave the class for one or two class meetings if you display behavior the instructor deems disruptive to the class environment. Please see the Mesa College Catalog for a full statement of the Student Code of Conduct. Please turn off cell phones during class.