## Cuyamaca College

# Math 96 - Prep for Elementary Statistics <br> Section 9162 - Spring 2016 

Instructor: Dan Curtis
Class Times: MW 1:00-3:20 pm
MW 3:30-4:50 pm
Office Hours: Monday 11:00 am - 1:00 pm
Tuesday $\quad 1: 45-2: 30 \mathrm{pm}$
Wednesday 10:45-1:00 pm
Website: www.cuyamaca.edu/people/daniel-curtis
Prerequisites: None.

## Text and Materials:

- Textbook: Math 96 Workbook Packet
- Calculator: A scientific (or graphing) calculator is required, for example, the TI30X IIS.
- Computer Software: The following computer software is required for this course. All listed software is available on the computers in the H-building open lab for your use. If your schedule allows you to work on some of your homework at the College, you don't need to purchase these items.
o MS Word
o Adobe Reader
o TinkerPlots 2
- Other Materials: Please bring these items to class with you each day.
o A 3-ring notebook (no spiral notebooks) just for this class.
o Loose-leaf notebook paper.
o 3-hole punched quarter-inch graph paper (optional)
0 A straight edge (ruler)
o Colored pens or pencils (optional)
o Headphones for use in the lab (optional)

Course Description: An accelerated one-semester course to transfer level Elementary Statistics (Math 160) covering core concepts from arithmetic, pre-algebra, elementary and intermediate algebra, and descriptive statistics that are needed to understand the basics of college-level statistics. Concepts are taught through the context of descriptive data analysis. The core arithmetic and algebra skills needed to understand the concepts, formulas, and graphs used in transferlevel statistics are investigated in a "just-in-time" approach rather than the standard sequence found in the traditional algebra path. This course is NOT intended for math, science, computer science, business, or engineering majors.

Important Dates:
Last day to add classes/Last day to drop
Friday, Feb 5
and qualify for a refund and to drop without
receiving a "W"
Last day to file a petition for credit/no credit
Friday, Feb 26
Last day to drop with a 'W' Friday, Apr 22
Final Exam
Wed., May 25
(Cumulative)
1:00-3:00pm
It is the student's responsibility to take care of any administrative procedures involved in dropping should he/she stop attending class.

Attendance: Good attendance is a must for success in this class. College policy states that a student may be dropped from the course for excessive absences or tardies. My Policy: Four absences during the first four weeks or six absences during the entire semester and you may be dropped - arriving significantly late or leaving significantly early counts as half an absence.

Disability Support Services: Academic accommodations are available for students with disabilities. Please identify yourself to your instructor and to DSPS staff so that the appropriate accommodations can be ensured. DSPS is at A-300, LRC (660-4239)

Academic Honesty: Academic dishonesty of any type by a student provides grounds for disciplinary action by the instructor or college. If you cheat, there will be consequences: I may give you a zero on the assignment or a zero in the course, or other additional consequences, regardless of whether you were the giver or receiver of the cheating.

Misconduct: Disruptive or threatening behavior or any conduct that interferes with my ability to teach or another student's ability to learn will not be tolerated. Such actions could result in a warning, removal from the class, or referral to the Dean for disciplinary action. Please turn off your cell phones during class.

STEM Achievement Center: To support your efforts to succeed in this class, I refer you to the STEM Achievement Center (H-Building). The STEM Achievement Center is a resource center that provides individual assistance in mathematics and science. Instructors and student tutors are available to answer homework questions, give confidence, and support math students. Students also have access to graphing calculators, textbooks, instructional videos, and computer tutorial programs. Computers are also available for student use. The STEM Achievement Center is open Monday through Thursday 9:00 am - 6:00 pm, and Friday from 9:00 am to 2:00 pm.

Schedule: The course will consist of four units, each lasting approximately four weeks.
During each unit, expect daily homework and group work and one to three quizzes. Each unit will culminate in an exam covering the material learned during that unit, as well as a paper based on the data presented. Due dates for all assignments will be posted on the Math 96 website.

Unit 1: (Weeks 1-4) Categorical Variables vs. Categorical Variables
Unit 2: (Weeks 5-8) Categorical Variables vs. Quantitative Variables
Unit 3: (Weeks 9-12) Quantitative Variables vs. Quantitative Variables
Unit 4: (Weeks 13-16) Study Design and Statistical Analysis
Final Exam: Wednesday, May 29, from 1:00-3:00 pm
Grading: This course is graded Pass/No Pass only. No letter grade will be given. You must earn at least 70\% to earn a passing grade.

Papers \& Exams (Papers 20\%; Exams 20\%): At the end of each unit you'll write a paper incorporating the concepts and skills covered in the unit. Additionally, you may have a midterm at the end of each unit. I'll post the date of the midterm and the due date of the paper in advance in the "Upcoming Due Dates" section of Math 96 homepage. No makeups for exams, but if you contact me before the day of an exam, I may be able to make arrangements for an alternate time for you to take the exam.

Final Exam (20\%): The comprehensive final exam is scheduled for Thursday, Dec 13 from 1:00-3:00 pm.

Groupwork, Homework, and Computer Labs (20\%): Homework will be assigned and collected regularly. Occasionally, I will collect your in-class groupwork and spotgrade it. Computer labs will be collected at the end of lab time each class. No makeups, but I'll drop your two lowest scores. It is important that you attend every class. You will be responsible for any assignments during classes you miss.

Quizzes (20\%): With each unit, you will have one to three quizzes (approximately one quiz every two to three weeks). The quizzes will be taken during labtime, and I'll post the date in advance in the "Upcoming Due Dates" section of the Math 96 homepage. No makeups, but I'll drop your lowest quiz score.

## Student Learning Outcomes

Upon successful completion of this course, students will be able to:

1) Formulate questions that can be addressed with data, then organize, display, and analyze relevant data to address these questions and communicate results.
2) Apply the basic principles of study design to develop and analyze the validity of simple experiments and sampling plans related to a given situation and goal.
3) Apply numerical and algebraic reasoning and computational skills to support statistical analysis.
4) Construct, use, and interpret mathematical models, specifically linear functions and exponential functions to represent and communicate relationships in quantitative data.
