

Math 160 Online (September 14th – December 5th)

Fall 2020 - Elementary Statistics online with **Terrie Nichols** at Cuyamaca College



Learning math the old way is the problem – not the solution.

Contact Info

Best ways to contact me:

- 1) Message me in Canvas
- 2) Short text to my personal cell number
(619)373-4432
(any day 7 am to 8 pm)

Warning: I do not regularly read my college email.

Zoom Office Hours

Mon/Wed 2:00 – 3:00 pm
Tues 3:00 – 6:00 pm

The link is on the **Syllabus & Office Hours** page in Module 1 of our Canvas course.

Attendance

In this class we function as a team – teaching and learning together in small groups that are reorganized from one module to the next. As a result, you will negatively impact your group-mates' grades if you fail to fully participate in each group discussion in a timely manner. Less than full participation in this course is extremely disruptive to the online learning model, so I reserve the right to drop you if: 1) you do not earn 100% on the Orientation Quiz by 11:59 pm on the first day of class (you'll have as many attempts as you need); 2) you fail to make any progress for four or more consecutive days (including weekends); 3) you do not fully participate in three or more group discussions; or 4) you fail to attempt three or more Unit Checkpoints. However, if you quit participating in this class, you should not assume that I would drop you. Should you choose to drop, ultimately it is your responsibility to officially withdraw. Also, you cannot pass without successfully completing the Math 160 final project.

Welcome to Math 160 Online

I believe we all have the capacity to do college-level statistics and that we can tap into that capacity as a family of teachers and learners who are responsible for each other's success in this class. As your teacher and a fellow learner, I am grateful for the opportunity to work with you to demystify math and to be part of your journey toward achieving your educational goals. Together, through our good hard work and sustained effort, we can all be successful and reap the rewards of education's promise.

Course Description

In this course, we will look at the properties behind the basic concepts of probability and statistics and focus on applications of statistical knowledge. We will learn about how statistics and probability work together. The subject of statistics involves the study of methods for collecting, summarizing, and interpreting data. After finishing this course, you should be comfortable evaluating the appropriate use of data and be able to extract information from articles and display that information effectively. You will also be able to understand the basics of how to draw statistical conclusions. This course will begin with descriptive statistics and the foundation of statistics, move onto probability and random distributions, the latter of which enables statisticians to work with several aspects of random events and their applications. Finally, we will examine a number of ways to investigate the relationships between various characteristics of data.



"We can't rely on our looks forever. Maybe we should work on passing math, so we can get our degrees."

Textbook

You do not need to purchase a textbook for this course. In lieu of a textbook, we will use the online learning materials available on Canvas.

Statistics Software Package (StatCrunch)

We will use StatCrunch (approximately \$15) to complete the online labs in Canvas. You purchased a StatCrunch access code when you paid for this course. To redeem the access code, please see the directions in Module 1 of our Math 160 course on Canvas. You will need StatCrunch during the first week of class.

Graphing Calculator

A TI-84 Graphing Calculator is required for this class. If you cannot purchase a TI-84, please contact the Cuyamaca College Learning Resource Center (library) to learn whether you may check one out for the semester.

Final Project vs Final Exam

In lieu of a traditional final exam, students will complete a final project. The final project is mandatory and must be submitted no later than by 5:00 pm on Saturday December 5th. I recommend that you plan on submitting your final project by 5:00 pm on Friday, December 4th. Then, if you have any technical difficulties, you will have one full day to resolve those issues.

During the last three to four weeks of the class, I will assign the final project in several parts. After the due date for each part of the final project, every student will provide a peer review to two randomly selected classmates. After each peer review due date, students may make corrections based on their peers' recommendations. So when writing a peer review of a classmate's final project, it's very important to provide high-quality instructive feedback to your peers. Consequently, a portion of your final project grade will be based on the peer reviews you provide to your classmates. I will provide a rubric for the final project before we begin working on part 1.

I will be available in Zoom on **Friday, December 4th, from 10:00 am to 12:00 noon**, to answer any last minute questions you may have about the final project requirements. However, I cannot help you with the final project as it counts as your final exam. In other words, I will use the final project (not a final exam) to assess your concept and skill mastery in this course. Note – if this date and time does not work for you, you may be able to schedule an office hour with me.

Finally, to review for the final project and to provide you with an opportunity to improve your overall grade, I will open a final review when we begin our work on the final projects. The review is optional.

Grades

Grade Breakdown

Categories	Percent
Interactive Reading & Quizzes	25%
Module Checkpoints	15%
Unit Checkpoints	15%
Labs	20%
Final Project	25%

Grade Scale

A plus-minus system is used to assign final grades. However a grade of C-, D+, or D- will not be assigned. So a C grade is 70% to 80% (not including 80%), and a D grade is 60% to 70% (not including 70%).

Final Project and Overall Grade

You must earn at least a D on the final project and a minimum overall grade of 70% to pass this class with a grade of C or better. See the previous page for more info about the final project.

Academic Honesty

We are expected to adhere to the College's Academic Honesty/ Dishonesty Policy found in the College Catalog. Any student caught cheating or facilitating the act of cheating will earn a zero on the assessment in question. Any student who earns a zero for cheating three or more times will fail the class (even if the student has managed to maintain an overall passing grade).

Interactive Reading & Quizzes

Your Math 160 homework will be completed through the *interactive reading* assignments in each Module on Canvas. Some of the *interactive reading* assignments in each Module are group discussions and therefore are part of my attendance policy (see page 1). I will not grade all group discussions. Instead, I will randomly select between 15 and 20 discussions to grade. I will not accept late work, and you are not allowed to make up these assignments. However, I will drop your three lowest scores from this category (dropping low scores does not affect the attendance policy).

Module Checkpoints

At the end of each Module in Canvas, you will have a *Module Checkpoint*. Think of these checkpoints as *take-home* quizzes that you complete online. To accommodate any technical difficulties, you are allowed three attempts on each Module Checkpoint. Expect approximately 20 to 30 *Module Checkpoints*. Again – no late work, and no make-ups, but I will drop your two lowest scores from this category.

Unit Checkpoints

Modules are organized into units on Canvas. At the end of each unit, you will have a *Unit Checkpoint* on Canvas. Think of these checkpoints as *take-home* exams that you complete online. Expect about 9 to 12 *Unit Checkpoints*. The *Unit Checkpoints* are part of my attendance policy (see page 1). The *Unit Checkpoints* are great practice for the final exam. Again – no late work, and no make-ups, but I will drop your single lowest score from this category (again - dropping low scores does not affect the attendance policy).

StatCrunch Labs

The StatCrunch labs will be completed in various Modules on Canvas. The labs are group discussions and therefore are part of my attendance policy (see page 1). No late work and no make-ups, but I will drop your two lowest scores from this category (again - dropping low scores does not affect the attendance policy).



A sharp-dressed man is fine; a sharp-dressed man with a degree & options is even better.

Important Dates (subject to change)

For this short-term online class, the schedule adjustment period ends on Friday, September 18th. This is the last day to: add the class, withdraw from the class without a W appearing on your transcript, or apply for a refund. The last day to apply for Pass/No Pass grade (as opposed to a letter grade) is October 8th. The last day to withdraw from the class is Sunday, November 13th. Your final overall grade will be available on December 11th at 5:00 pm.

Accommodations

Accommodations are available to students with disabilities. If you suspect that you have a learning disability or any other type of disability, please contact the DSPS office (see below). DSPS students who need an academic accommodation or who may need evacuation assistance during a campus emergency should notify me within the first two weeks of instruction.

DSPS

<https://www.cuyamaca.edu/services/dsps/default.aspx>
Location A-113; Phone 619-660-4239

Math 160 Catalog Description

(4 hours – 4 units) The use of probability techniques, hypothesis testing, and predictive techniques to facilitate decision-making. Topics include descriptive statistics; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi-square and t-tests; and application of technology for statistical analysis including the interpretation of the relevance of the statistical findings. Applications using data from disciplines including business, social sciences, psychology, life science, health science, and education.

Math 160 Student Learning Outcomes (SLO)

Math 160 prepares you to:

- 1) Use analytical, numerical, and graphical methods to solve statistics problems.
- 2) Solve multi-disciplinary application problems and interpret the results in context.
- 3) Perform statistical analysis using technology such as SPSS or other equivalent statistical software.