

Math 160 Online (March 30th – May 23rd) V3

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



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

Contact Info

Office: H117

Email: via our course on Canvas

Cell: (619)373-4432 (emergencies only)

The best way to contact me is to send a message through Canvas. For emergencies feel free to text my private cell number (any day between 7:00 am and 8:00 pm). Here's an example of an *emergency*; I've posted a due date for a module on Canvas, and it's not open.

Office Hours

MW 2:50 – 3:50 pm; T Th 4:50 – 6:20 pm

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 the class without taking the face-to-face final exam as scheduled in class (off-campus options are available if you live out-of-town; see the next page).

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

We will use StatCrunch (approximately \$15) to complete the online labs in Canvas. You may purchase an access code for StatCrunch in the College Bookstore or purchase StatCrunch directly from the company (to learn how, see the directions on the last page). 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.

Face-to-Face Final Exam

The final exam is mandatory and must be completed during one of the time slots listed below (California time). If you are not able to meet all of the following final-exam requirements, please do not sign up for this class.

You will take the final exam online with me monitoring your work remotely. **You must complete the final exam on a computer with a functioning video camera and mic (not a cell phone).** The mic and video camera must be on and functioning throughout the entire final exam. Within the first few weeks of class, I will provide more information about how I will monitor your work remotely.

During the final exam you must **display one of the following picture IDs**: Grossmont-Cuyamaca College ID; state issued driver's license or identification card; or US military ID. During the first few weeks of class, I will provide more information about how you will display your ID.

By **Friday, April 3rd, at 11:59 pm**, please send a message to me through Canvas. Write **Final Exam** in the subject line and indicate which option you chose in the body of the message.

Option A: Take the final exam on **Thursday, May 21st, from 3:00 pm to 5:15 pm**

Option B: Take the final exam on **Friday, May 22nd, from 9:00 am to 11:15 am**

Option C: Take the final exam on **Saturday, May 23rd, from 3:00 pm to 5:15 pm**

* You'll find more information about the final exam in the *Grades* section on the next page.

Grades

Grade Breakdown

Categories	Percent
Interactive Reading & Quizzes	30%
Module Checkpoints	15%
Unit Checkpoints	15%
Labs	15%
Final Exam	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%).

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 26 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).

Final Exam

As previously stated, the face-to-face final exam is mandatory (see the options on page 2). The final exam is comprehensive and closed notes, but I will provide a set of formulas for you to use during the final. Again, working through and reviewing the *Unit Checkpoints* is a great way to prepare for the final exam.

Final Exam and Overall Grade

You must earn at least 60% on the face-to-face final exam and a minimum overall grade of 70% to pass this class with a grade of C or better.

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).



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 April 5th. 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 April 10th. The last day to withdraw from the class is May 10th. Your final overall grade will be available by June 4th.

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)

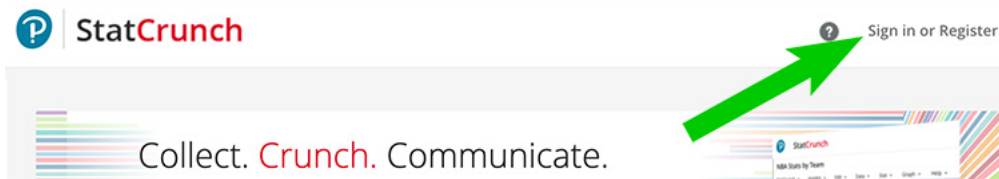
Math 160 prepares you to:

- 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.

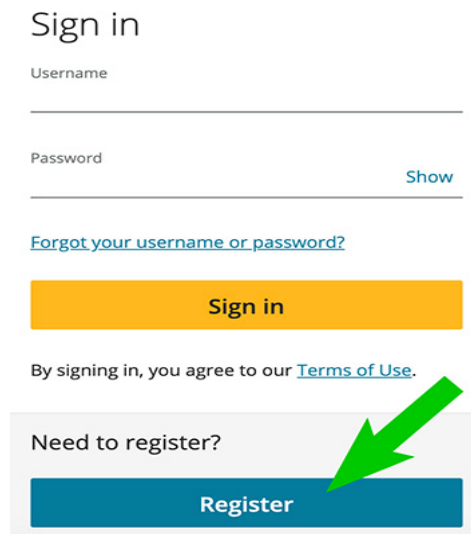
Purchase StatCrunch

You may purchase an access code to StatCrunch through the College Bookstore. Or you can purchase StatCrunch directly at www.statcrunch.com and follow these steps.

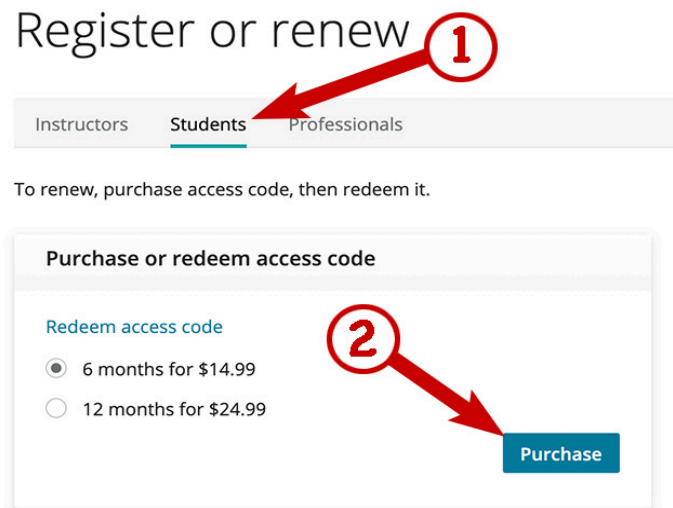
Step 1: Click on *Sign in or Register* in the upper right corner.



Step 2: Scroll down and click *Register*.

A screenshot of the StatCrunch sign-in form. It has a "Sign in" heading, a "Username" input field, a "Password" input field with a "Show" link, and a "Forgot your username or password?" link. Below that is a yellow "Sign in" button. Underneath is a "By signing in, you agree to our Terms of Use." statement. At the bottom, there is a "Need to register?" section with a blue "Register" button. A green arrow points from the bottom right towards the "Register" button.

Step 3: Select the *Students* tab and then click *Purchase*.

A screenshot of the StatCrunch "Register or renew" page. At the top, there are three tabs: "Instructors", "Students", and "Professionals". A red arrow with a circled "1" points to the "Students" tab. Below the tabs is the text "To renew, purchase access code, then redeem it." Underneath is a section titled "Purchase or redeem access code" with a "Redeem access code" link. There are two radio button options: "6 months for \$14.99" (which is selected) and "12 months for \$24.99". A red arrow with a circled "2" points from the "6 months" option down to a blue "Purchase" button.

Step 4: Follow the StatCrunch prompts to complete your purchase.

After you set up your StatCrunch account, you will be able to access the software from any computer with Internet access.

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