

Online Math 160 Elementary Statistics

Syllabus Summer 2020 Section 1774 B. Elliott

Dear Elementary Statistics Student-

Welcome to your online math class! I'm looking forward to getting to know each of you throughout the duration of your class. Please be sure the school is updated with your current information (current email address, current name, etc.). If the class materials are open and ready to go, please feel free to begin working in the class materials even before the 1st day of class.

I want to make one thing very clear up front. Due to the current public health orders from the state government, the entire course will be administered online. There will not be a face-to-face final exam during summer 2020.

****Students must be *very* self-motivated and self-disciplined to succeed in this class. Success in this class depends on your ability to read and *follow the written directions* in this syllabus, in the announcements posted in your online class materials (by me or by the publisher), and in the emails I send you. **You should NOT take this class if you do not have 3-4 hours a day, 6 days a week to dedicate to this class. Taking this class is like having a part-time job and needs to be treated as such.** This class requires a high level of reading comprehension ability.**

This class has a required online orientation which **MUST BE COMPLETED** by the end of the first week of class. The orientation is the first few modules inside Canvas. There is also an orientation video conference through Zoom on the first day. Failure to complete this module by Thursday, June 25 will result in you being dropped from the course.

While I can help you with any content related questions or class procedure related questions, technical questions (related to your computer) need to be sent to Canvas Technical Support. You can find the contact information for Canvas support inside your first module in Canvas. If you encounter technical difficulties which you cannot solve immediately (or within 24-hours if there are no assignments due that day), you need to plan to come to campus and use the computers in the STEM center. Although the bulk of your learning can take place individually through your online materials, please do not hesitate to post to the discussion board and ask me if you have questions. You are also encouraged to work or study with other students in the class; students generally do much better when they do not work alone. In addition to all of this help, you are encouraged to come in to the STEM center to get in-person help if you think your question might be difficult to ask online or to understand the solution online. (619 660-4306)

Best of luck in this class!

- Bryan Elliott

Course Information

MATHEMATICS 160 – ELEMENTARY STATISTICS

4 hours lecture, 4 units

Catalog Description

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.

Prerequisite

“C” grade or higher or “Pass” in MATH 096 or 103 or 110 or equivalent

Student Learning Outcomes

Upon successful completion of the course the student will be able 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.

***Any information given here may change at the discretion of the instructor at any time.

Instructor Information

Name:

Bryan Elliott

Contacting me:

- **General Discussion Boards:** Please post content/procedural questions here. This is where almost all questions should go so everyone hears the questions *and* the answers.
- **Office Hours:**
Online office hours available through Canvas
- **Canvas messaging should be used to communicate with me. Open up your college Canvas account, click on messaging button on left side**

Please use Canvas messaging to send me personal information (e.g. you're sick, you were in a car accident, you were locked out of a test and need access again)

Please use the class Discussion Boards to ask content (e.g. How do you solve..?) or procedural questions (e.g. What do I do if I miss a deadline?). Also, please let me know if/when you find typos, broken links, etc.

Expectations of Me:

In this class (especially in the Discussion Boards) I will not behave as the 'Sage on the Stage'. I am here to be a *learning facilitator* for you all. I will be more like the 'Guide on the Side'. We're all here to work together with each other and learn together from each other.

I may not reply to every Discussion Board posting since you and your classmates all have talents, opinions and experiences to bring to the class. I want you all to learn to work together and learn from each other. If I see that several of you are asking the same question, and no one else seems to know the answer, I may respond, give a hint or clarify.

I strive to make this course as interesting and interactive as I can.

Response Time:

I am generally online in the class materials off and on throughout the day/evening M-Sa.

On weekends I usually have other events throughout the day, but I try to check into the class materials if I can.

On Sundays I try to leave work "at the office".

I will do my best to check in to class every day of the week during the session.

Thus, responses from me should be in about 24-48 hours M-F or about 48-72 hours over the weekend while class is in session.

My Expectations of You in this Class

You will adhere to all of the requirements in the course.

You have read the orientation.

You have read the Syllabus and continue to refer to it on a regular basis (every day, or every other day at the least).

You will stay up-to-date on your Canvas modules and units.

You will participate in every group discussion board assignment and respond to your colleagues in a polite and professional manner.

You have talents, thoughts, and ideas that you will share with the class.

You will 'play nicely' with others in the class.

You will not expect this class to work in the same way that a lecture class works.

You will work on this class a minimum of 3-4 hours per day 6 days a week.

You will seek help as soon as you get stuck or have a question.

Any information given here may change at the discretion of the instructor at any time. This course adheres to the policies outlined in the Cuyamaca College catalogue. For further information, see [Academic Policies](#) stated in the catalogue.

General Expectations of Online Students

Online classes give students greater freedom of scheduling, but they can require more self-discipline and self-reliance than traditional on-site classes.

Please understand that it is impossible for me to be online 24/7. Anticipate waiting 24-48 hours for a response to your posting (longer over weekends and holidays). Please remember that I can't read minds, so if you have a question about the class it's your responsibility to seek assistance promptly. **Keep in mind that I do not evaluate excuses; I only evaluate coursework that is submitted on time.** Waiting until the last minute to seek assistance severely limits the kind of help I and others can provide. Waiting for my response does **not** excuse you from completing the assignments.

Online classes require that students have a basic computer skill level.

Students should be comfortable with using a computer, the web (at least 2 different browsers) and Discussion Boards. Instructors **do not** provide remedial "How-To-Use-A-Computer" or "How to Get your Computer Set Up to Work with Canvas" directions in addition to the intended course content. If you have computer/browser problems, you need to contact Canvas Technical Support immediately

In terms of time requirements, they can be quite extensive with a 4-unit online class.

Please do NOT take this class if you think it will be easier than a traditional, on-site class.

Math 160 is a three-unit intensive transfer-level mathematics class.

The class is very challenging when taken in a traditional setting, and can be much more demanding when taken online. You'll need to stay focused, take charge of your learning, and work extremely hard to do well.

Students who tend to do well in online courses are those who are:

Spending at least 2-3 hours each day 6 days per week working in the class

Experienced college students (i.e. this is not the first college class ever taken)

Self-motivated learners who do not need prompting in order to complete assignments

Committed to learning, and who always make a strong effort to do their absolute best

Actively involved in taking responsibility for their own education

Are able and willing to help other students in the class (via Discussion Boards group projects)

Ask for help from peers (via Discussion Boards group projects) as soon as they encounter difficulty that they are genuinely not able to resolve

Good managers of time and who are able to balance personal responsibilities with class requirements

Able to understand and follow **written** instructions

Good communicators who are able to express their thoughts and communicate their ideas as well as problems with other students in the class

Computer literate and able to learn new software and technology quickly if necessary.

Traditional student expectations apply as well (for example: no plagiarizing, respect for classmates and instructor, etc.). You may wish to review [Cuyamaca College's Catalog](#), specifically the section on "[Academic Policies and Procedures](#)." You will be expected to know and follow those policies and procedures at all times.

Important Dates

1st day of Instruction	Late Add Deadline	Deadline to drop class with no record & receive refund	Deadline to file for Pass/No Pass grading option	Deadline to drop with a "W" grade (withdraw)
6/22	6/25	6/25	6/25	7/17

Required Materials

1. A computer that can access and work inside Canvas

2. Graphing Calculator

I will be using and doing demonstrations on a [Texas Instruments](#) TI-84 graphing calculator.

However, the TI-83/84 (any version) also works almost exactly the same. Please purchase/borrow either a TI-83 (any version) or TI-84 (any version).

If you choose to use a different graphing calculator, you may not be able to get help with it.

Some of your lab assignments will **REQUIRE** the use of a TI-83/84 calculator.

2. A Statcrunch access code. This should have been purchased for you when you payed your fees. The code is either in an email or in a cardboard page with Pearson STATCRUNCH listed on this. You will be shown how to create your statcrunch account during your work in the first week of class. If for some reason the code did not make it's way in to your possession you can purchase a code directly from the Statcrunch website.

3. A notebook for note taking and working problems

You should treat this class as you would any other math class. Take notes in a notebook while watching lecture videos or while reading the eBook, work practice or homework problems in your notebook before submitting answers, etc. I don't usually check your math notebook. However, I may ask to see it (via fax or .pdf) if you begin to fall behind or start consistently scoring low on Quizzes or Tests.

THIS CLASS DOES NOT REQUIRE A HARDCOPY TEXTBOOK. Your required online class materials are all contained within our Canvas shell.

ACCOMMODATIONS: A student with a verified disability may be entitled to appropriate academic accommodations. Please contact the instructor and/or the Disabled Students Program and Services Office [DSP&S](#) for further information.

Participation Requirements

1. **The final exam will be delivered remotely through the Canvas website. Information will be provided to everyone approximately halfway through the course.**

Your learning, practicing, homework, and Quizzes can be done from off-campus if you choose. Regardless of what computer you use to do homework, learning, practicing, and Quizzes, you **should be working in this class a minimum of 16-20 hours per week**. If you earned a B or a C in Intermediate Algebra or if it's been a number of semesters since you took the prerequisite class, you need to plan to spend about **twice the minimum** amount of time. If your algebra skills are rusty/weak you will have to work extra to catch up and to keep up.

2. **Orientation** - All students must complete an online orientation. The mandatory orientation is the first three modules of the course and can be completed either on your home computer or in the MLC.

Please begin the orientation once you are registered in the course and have access to Canvas.

If you do not complete the orientation by Thursday, June 25, you will be dropped for non-attendance.

Instructor Drop Policy

These policies are in place due to their high correlation with student success.

Because students need to be working as soon as possible in the course, students may be dropped for not completing the mandatory online orientation by the given due date of the end of the first week of class.

Statistics is a subject which requires utilizing and synthesizing previously learned knowledge and concepts. Due to this, at the *instructor's discretion*, students *may* be dropped (up until the last day to drop the class) for non-attendance as described below:

- ❖ **Missing two different Unit Checkpoints**
- ❖ **Lack of posts in the group discussion boards**
- ❖ **Any other reason to be determined by your instructor**

Students are responsible for dropping themselves from this class . Do NOT rely on me to drop you if you no longer wish to be in the class.

Academic Integrity

Academic integrity will be expected from all. Any breach will be dealt with by a zero on the assignment (which can not be made up) or by failing the class. You may wish to review [Cuyamaca College's Catalog](#), specifically the section on "Academic Honesty/Dishonesty." You will be expected to know and follow those tenets as well.

Steps for working in the course

---Interactive Reading

Much of your Math 160 homework will be completed through the *interactive reading* assignments on Canvas. 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. This category will include things like reading about content, quizzes over the reading, and group discussions regarding the reading. Your instructor will provide graded feedback on at least one (but not all) of the group discussions for each module.

---Module Checkpoints

At the end of each Module in Canvas, you will have a *Module Checkpoint*. To accommodate any technical difficulties, you are allowed three attempts on each Module Checkpoint. 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. These 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.

---Labs & Other Activities

Additional assignments will include groupwork using Statcrunch and your TI83 submitted and completed through Canvas, and other activities. No late work and no make-ups, but I will drop your two lowest scores from this category. The labs will be set up as discussion boards inside of canvas. You will be assigned group mates randomly for each Module. Group interaction is required. There will be other group discussions set-up within each learning module. Your instructor will provide graded feedback on at least one (but not all) of the group discussions for each module.

This course is setup inside of Canvas to be an intuitive process. There will be more than one unit due each week. There are approximately 27 modules and 11 units for you to complete during the 6 weeks of the course. At the end of 1-3 modules you will have the opportunity to check what you have learned by completing a unit checkpoint (think of these as unit exams). Within each module you will have assignments, quizzes, group discussion boards. You cannot progress through the modules out of order.

Modules will always be due on Sunday evenings at 11:59pm.

Unit Checkpoints (not module checkpoints) will be available for a set time period, usually about one week

For more information regarding this process please start by logging into Canvas [Canvas Login page](#)

Evaluation:

Interactive Reading	25%
Labs & Other assignments	20%
Module Checkpoints	15%
Unit Checkpoints	15%
Final Exam(read below about the final exam)	25%

Grading Scale

The grades will be calculated as the percentage of the total points possible:

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

Official course grades will be posted inside our Canvas course [Link TO Canvas](#)

Final Exam

Due to the current public health restrictions the final exam will delivered remotely through Canvas.

Required Materials:

- ❖ VALID Picture ID(college Id, Drivers License, Passport)
- ❖ TI-83/84 Calculator

Final Exam Date:

The last day of class will be July 30. The final exam will be delivered remotely. You do not need to sign up for a time slot or make any plans to come on campus.

Making the Grade

In order to pass this class with a grade of C or higher, the student must:

- **Earn a D or better on the final exam**, and
- Have an overall grade in the class of at least 70%.

For example, if a student has an overall grade of 92% before taking the final exam, and earns an F on the final exam which drops the overall grade down to 84%, the highest grade the student could earn for the class would be a D.

Course Content

Here is a list of the Units we are scheduled to cover.

Introduction to Statistics, Summarizing Data Graphically and Numerically, Examining Relationships: Quantitative Data, Relationships in Categorical Data with Intro to Probability, Probability and Probability Distributions, Types of Statistical Studies and Producing Data, Linking Probability to Statistical Inference, Inference for One Proportion, Inference for Means, Chi-Squared Tests, and ANOVA

Tentative Schedule (Subject to change)

<i>Week</i>	<i>Due Date</i>	<i>Unit</i>	<i>Modules covered</i>	
1	6-25	1	1 – 3	Orientation
1	6-28	2	4-7	Descriptive Statistics(part 1)
2	7-5	3 & 11	8, 26-27	Categorical Data & paired data
3	7-12	4-5	9-10, 11-13	Intro to Probability and Experimental Design
4	7-19	6-7	14-16, 17-19	Intro to Inference & Inference for 1 proportion
5	7-26	8,9,10	20-23,24, 25	Inference for mean, ANOVA, & Chi-Squared tests,
6	7-30	REVIEW	FINAL REVIEW	Final Exam due July 30

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