

Cuyamaca College
ELEMENTARY STATISTICS (4 UNITS)
Spring 2019
MATH 160 – Section 4845 (Online, 8 weeks)

INSTRUCTOR: Helen Noble

OFFICE: H-135

EMAIL: helen.noble@gcccd.edu

OFFICE HOURS: By appointment only

Email is the best way to reach me: **please include M160-4845 in subject line**

REQUIRED MATERIALS:

- **Access code for the online course system MyStatLab.** You can buy the code online within Canvas. The system contains a full e-book version of *Elementary Statistics: Picturing the World, 6E* By Larsen & Farber (2015).

I will be using MyStatLab (MSL) & Canvas to deliver all content in this course. You will have access to a full e-book, lecture notes, homework, quizzes and tests and other course material through the use of MSL. To register on Mystatlab log onto Canvas, click on the Mystatlab home menu item, and follow the registration instructions.

Do NOT purchase a used access code. Mystatlab access codes can be used only once. To ensure you have a valid code please purchase it within canvas.

- If you wish to purchase a hardcopy version of the textbook you can do so at the campus bookstore. A new text at the campus bookstore includes a MyStatLab access code
- **Graphing Calculator:** For Math 160 either the TI-83 or TI-84 is required. All of your lab assignments will REQUIRE the use of a TI-83/84 calculator or statcrunch. The math department at Cuyamaca College highly recommends and supports the use of graphing calculators in our mathematics classes.
- Additional course materials can be found on Canvas: <https://gcccd.instructure.com/login/canvas>

Please check this site **daily** for important announcements.

For information on how to log in and get started with Canvas please go to:

<http://www.cuyamaca.edu/academics/canvas/canvas-help-for-students.aspx>

PREREQUISITE:

A minimum grade of “C” or better in Math 103, Math 110 or its equivalent.

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.

STUDENT LEARNING OUTCOMES:

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

- 1) Summarize data graphically and numerically.
- 2) Use descriptive statistics (measures of central tendency, variation, relative position, and levels/scales of measurement) to describe a population and compare populations when appropriate.
- 3) Identify the sample space of an experiment or random trial.
- 4) Find and interpret the expected value and standard deviation of a Random variable.
- 5) Recognize the sampling distribution as a distribution of a sample statistic, the mean of the sampling distribution as the population mean, and the standard error of the sampling distribution as the standard deviation for the population (the Central Limit Theorem).
- 6) Construct and interpret confidence intervals.
- 7) Use hypothesis tests and inference (including t-tests for one and two populations and Chi-square test) to determine if a result is statistically significant for discrete (binomial) and continuous (normal) distributions.
- 8) Perform statistical analysis using technology such as SPSS, EXCEL, Minitab, or StatCrunch.

INSTRUCTOR INFORMATION:

Email: helen.noble@gcccd.edu. Please use email to contact me with personal questions (for example: you missed a deadline and need late access to an assignment, you were locked out of a test and need access).

I will respond to emails within 24 hours between Monday and Friday, I will not respond as quickly at the weekend. If you email me after 10pm I will respond the next day.

Discussion boards: please post content and procedural questions here (for example: how to solve a problem, what to do if you miss a deadline). This way everyone hears these questions and answers.

I will not reply to every discussion board posting as you and your classmates will be able to work together and answer many of the questions. If I see that several students are asking the same question, and no one else seems to know the answer then I will respond.

Office hours: I will hold online and face-to-face office hours by appointment.

COURSE WORK:

Success in this class depends on you making the time to learn the material from the available resources posted on blackboard & MyStatLab. Some students may need additional help in order to understand the material. It is your responsibility to seek additional help by meeting with me or getting assistance from our free on campus tutoring centers. The limitations associated with technology can slow down the learning process. Because of this, you need to plan ahead so that you can effectively pace your own learning and meet assignment deadlines. **Understand that you will be your own teacher**, do not wait for the material to come to you. You must use the resources that I have made available on Canvas and MyStatLab to learn statistics.

Plan to spend 2-3 hours per day, six days a week working on this class.

If you have computer/browser problems contact Mystatlab technical support immediately! Links to MSL support are available on canvas.

A SUCCESSFUL ONLINE STUDENT

- Spends time navigating through the course web site finding all necessary tools.
- Participates on the discussion board at least twice a week.
- Attends on campus office hours, and tutoring centers.
- Seeks out help when needed and is in communication with the instructor on a weekly basis.
- Is self-motivated and self-directed.
- Avoids procrastination.
- Enjoys learning on their own.
- Knows how to establish a daily routine for working on course materials.

Generally, an online course requires more time and planning than a traditional lecture course. This online course will require around 18 hours per week of your time. Of course, it may take some students considerably more time to be successful in this class.

STUDENT CONDUCT:

No put downs or abusive remarks are allowed in e-mail or other postings. At all times a student's conduct and language is expected to be respectful of others. The instructor reserves the right to drop any student for inappropriate conduct.

IMPORTANT DATES

Last Day to Add	4/5
Last Day to Drop Classes Without "W" on Record	4/5
Last Day to Apply for a Refund	4/5
Last Day to Apply for P/NP	4/12
Last Day to Drop Class	5/10

Steps for completing the assignments

Important! Please read and follow the steps below.

Step 1 Read the Textbook & the Lecture Notes

Log onto Canvas and then onto MyStatLab – click on Chapter Contents - and then select the chapter. After reading the chapter, click on Chapter Quiz. Check your understanding of the material by answering the questions. Click on the video icon to see the solutions.

Click on Multimedia Library to select PowerPoint Lecture Slides or video lectures. After listening to (or reading) the lecture, click on Study Plan. Check your understanding of the material by answering these questions. Study Plan questions are not graded.

You will find the student **solutions manual** under Chapter Contents. This manual shows solutions to the odd exercise questions and the TryItYourself questions in the textbook.

Step 2 Work on the Lab Assignment

Lab assignments will be posted (and submitted) via Canvas. Click on the lab assignment menu item in Canvas to view and submit each assignment.

Use the TI-84 (or statcrunch) to do lab assignments. Try the lab assignments **before** working on the HW or quizzes. You will learn how to use the TI-84 for that chapter. Consult the TI-83/84 manual in Mystalab (under tools for success) for help completing the labs.

Step 3 Do the Homework

The homework questions are just like the exercise questions in the textbook. You can see the matching exercise question number by placing your mouse on the homework questions. Work on these questions after steps 1 & 2 above. You can rework the HW problems that are marked incorrect. You do not have to complete all HW questions in one sitting. I recommend doing a few homework problems each day.

[MystatLab – **Homework**]

Step 4 Take the Quiz

Take the assigned chapter quiz after working on the Homework. You have 60 minutes per quiz and 3 chances to take each quiz. Stay on the quiz screen while taking the quiz. Do not minimize the screen or exit the screen before completing it. Make sure to click on the ‘Submit’ button after answering all the questions. You can not leave and come back to resume the quiz. Answer them all at one sitting. Once you have completed a quiz, you can review your answers via the gradebook in Mystatlab. Once you have reviewed your first attempt, you can take the quiz a second time. The highest score will be recorded. [MystatLab – **Quizzes & Tests**]

Step 5 Take the Test

Take a test after completing two chapters. There are **four online tests** plus the in class final exam. The **final exam is comprehensive**. You have 75 minutes for each test with only one chance and 120 minutes for the final exam. Stay on the test screen while taking tests. Do not minimize the screen or exit the screen before completing it. Make sure to click on the ‘Submit’ button after answering all the questions. You can not leave and come back to resume tests. You need to answer them all at one sitting. [MystatLab – **Quizzes & Tests**]

Step 6 Discussion Board (on Canvas)

Post questions you have or answers to your classmates’ questions. Post a minimum of 2 comments or findings for each chapter’s discussion board. DB posting should **be in a form of question or answer to your peer’s question**. For example, ‘I agree’, ‘yes’, ‘no’ or ‘thank you’, will not be counted toward DB points.

To post to the discussion board: click on discussions in Canvas, select the appropriate forum and then create a thread or reply to another students post.

Read other students postings before writing yours.

Criteria	Unacceptable 0 points	Acceptable 1 point	Good 2 points	Excellent 3 points
Frequency	No participation	Participates 1-2 during the unit	Participates 3-4 times, but posting not distributed throughout the unit	Participates 4-5 times throughout the unit
Clarity & mechanics	Unorganized, content not on topic	Communicates in a friendly, courteous and helpful manner	Contributes valuable information in the form of questions and/or responses with minor clarity errors	Contributes to discussion with clear, concise questions/comments in an easy to read style.

Evaluation:

Homework ... up to 10 points per section

Lab ... 10 points each

Quiz ... up to 20 points each

Tests ... 50 points each

Final Exam ... 150 points

Discussion Board ... up to 3 points per DB chapter.

**** You MUST take the final exam to receive a passing grade.****

Final Exam

You must come to campus to take the final exam. The final exam will be held Friday May 24th. You can sign up to take the exam from 9am-11am or from 3pm-5pm. These are the only times available to take the final exam. Since most students taking this class live locally, most of you will take your pencil-and paper final at Cuyamaca College. You MUST verify your chosen exam time on lab 0 which is due April 4th. The format for the final will be part multiple choice and part show your work. You are allowed 1 sheet of **notes** (no examples). I will provide copies of the formula sheet that is posted on blackboard and all necessary tables. You must bring a valid picture ID and a TI-83 or TI-84 calculator.

The comprehensive exam will be proctored. If you are unable to take the final at the Cuyamaca campus you will need to find a local college, or business such as Sylvan Learning Center to provide this service (and pay for the service if there is a charge). I must approve your choice of a proctor. So, by **April 19th**, you would need provide me with a contact name, phone number, physical address, and email address of the proctoring service where you would like to take the final exam. This gives me time to investigate the proposed proctor and either approve or deny the request. Please send the information to me via email with "Math 160 Final Exam" in the subject line.

The service must be able to:

1. Receive the final exam as a pdf attachment in an email from me.
2. Print the final exam as formatted.
3. Arrange a time so that you can complete the final before 7:00pm Friday May 24th.
4. Monitor you while you are taking the final.
5. Scan and email the exam back to me by noon on Saturday May 25th.

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

Your final grade will be based on the percentage of the number of points you have acquired over the semester over the total number of points possible.

Grades will be assigned as follows:

92.5%-100%	A	77.5%-79.9%	C+
90%-92.4%	A-	70%-77.4%	C
87.5%-89.9%	B+	60%-69.9%	D
82.5%-87.4%	B	less than 60%	F
80%-82.4%	B-		

Accommodations:

Academic accommodations are available for students with disabilities. Please contact the instructor and/or Disabled Students Programs & Services (DSPS) for further information. www.cuyamaca.edu/dsps

Student Conduct: At all times a student's conduct and language is expected to be respectful of others.

Tentative Schedule (Subject to change)

Due dates	Assignments due
W. April 3	Submit HW 1.1- 1.3; Introduce yourself in DB #1
Th. April 4	Submit Lab #0
F. April 5	Submit Lab #1 & HW 2.1- 2.3
M. April 8	Submit Lab # 2
T. April 9	Submit HW 2.4&2.5
Th. April 11	Take Quiz Ch.2; DB #2 due
F. April 12	Submit HW 3.1
T. April 16	Submit HW 3.2& 3.3
W. April 17	Submit Lab # 3
Th. April 18	Submit HW 3.4
F. April 19	Take Quiz Ch.3; DB # 3 due
M. April 22	Test # 1(Ch.2 & Ch.3)
T. April 23	Submit HW 4.1
W. April 24	Submit Lab # 4 & HW 4.2
Th. April 25	Take Quiz Ch.4; DB # 4 due
S. April 27	Submit HW 5.1 & 5.2
M. April 29	Submit Lab # 5, HW 5.3 &5.4
T. April 30	Take Quiz Ch.5; DB # 5 due
Th. May 2	Test # 2(Ch.4 & Ch.5)
S. May 4	Submit HW 6.1
M. May 6	Submit Lab # 6 & HW 6.2-6.3
T. May 7	Take Quiz Ch.6; DB # 6 due
W. May 8	Submit HW 7.1-7.2
Th. May 9	Submit Lab # 7
F. May 10	HW 7.3-7.4
S. May 11	Take Quiz Ch.7; DB # 7 due
M. May 13	Test # 3(Ch. 6 & Ch.7)
T. May 14	Submit Lab # 8
W. May 15	Submit HW 9.1-9.2
F. May 17	Take Quiz Ch.9; DB # 8 due
M. May 20	Submit Lab # 9 & HW 10.1-10.2
T. May 21	Take Quiz Ch. 10;DB #9 due
W. May 22	Test # 4(Ch. 9 & Ch.10)
Th. May 23	Submit Final Review (Extra points, optional) ; DB #10
Friday May 24	Final Exam (Ch.2 – Ch. 10)

***** Important Notice*****

The homework, quizzes, and tests will be closed after the due date given in the tentative schedule above. However, if you want to work on the missed assignments, email me. I will open it for you. Keep in mind that you will get a point deduction per day after the due date.

You will not receive any points after the due date for postings in the Discussion Board.

Math Study Center - To support your efforts to succeed in this class, it is highly recommended that you utilize the free math tutoring services that are available in the STEM tutoring center (H102). You need only enroll to receive these free services – no units or grades are given.

Tutoring Service in Stem Center (hours subject to change)

Monday – Thursday 9:00 am – 6:00 pm

Friday 9 am -2pm

Please understand these hours are subject to budget restrictions and may change.