San José State University Economics Department

Econ 2C Statistics Online Lab Summer 2020

Course and Contact Information

Instructor: Gregory Hanle

Email: Gregory.hanle@sjsu.edu

Office Hours: To Be Announced

Class Days/Time: (Online)

Classroom: (Online)

Course Format

Online Course Requirements:

This course adopts an online course delivery format. Therefore, students are required to have internet connectivity, access to a computer, and the use of several websites, including the course canvas page and mystatlab.com (which requires students pay a fee to use).

Course materials such as syllabus, handouts, notes, assignment instructions, etc. can be found on <u>Canvas Leaning Management System course login website</u> at http://sjsu.instructure.com. You are responsible for regularly checking with the messaging system through the course canvas page to learn of any updates.

Course Description

This course is designed to complement and add to a three-unit, traditional statistics class. All economics students require a solid foundation in statistics. The class will not meet physically and all assignments and announcements will be through Canvas. Please pay close attention to announcements and deadlines.

Course Learning Outcomes (CLO)

- CLO 1.) Explain core methods in statistics and identify correct procedures.
- CLO 2.) Access data & use computer software to carry out statistical tests.
- CLO 3.) Interpret statistical tests estimated with computer software.
- CLO 4.) format data to be read by regression software, and develop, estimate and interpret an original statistical test to shed light on a problem of social importance.

CLOs will be assessed with weekly online lab assignments and homework.

Textbook (Optional)

Statistics for Business and Economics. James T. McClave, P. George Benson, Terry Sincich Pearson, 13th edition, 2018. ISBN-13: 978-0-13-450659-3

(Note: an electronic version of this book will be available on MyStatLab, which we will use for this course.) (Note #2: any good introductory statistics book should have the same information required for this course.)

Other technology requirements / equipment / material

Canvas: In this class, you will be turning in your writing assignments through the Canvas learning management system (in DOC or PDF format). You will also have access to class handouts, with answers, and practice questions for exams here. To begin, you need to know how to access Canvas.

Login URL: https://sjsu.instructure.com

Username: SJSU 9-digit ID

Password: your SJSU One Account Credentials

After logging in, select "SU 20: Econ-2C Sec 80 – Stats Lab" under "Courses".

Mystatlab: You will also have access to the electronic version of our text and have homework assignments to do almost every week through the MyStatLab website. Go to www.pearson.com/mylab to log in or create an account. The course ID for our class is: hanle04069

Note: there is a fee for using the MyStatLab website (you have a grace period to pay this fee once you sign up).

Course Requirements and Assignments

SJSU classes are designed such that in order to be successful, it is expected that students will spend a minimum of forty-five hours for each unit of credit (normally three hours per unit per week), including preparing for class, participating in course activities, completing assignments, and so on. More details about student workload can be found in University Policy S12-3 at http://www.sjsu.edu/senate/docs/S12-3.pdf.

This is a pass/no pass course. You must achieve a cumulative score of 70% at the end of the semester. Your score is based solely on online assignments on the course's Canvas website and on saplinglearning.com. The assignments are due by 11:59pm on the Sunday of the week assigned—students will also be able to see the due dates in Canvas. (For a complete list of due dates, please see the last two pages of the syllabus.) However, all of the assignments will be available at the beginning of the second week so students can complete them ahead of time. Late assignments will not be accepted. However, I will drop your two lowest assignment grades at the end of the semester.

The assignments will follow a similar pattern and include two parts. The first half of our assignments will consist of assignments on the mystatlab.com site. Students will also have assignments that they are assigned Canvas. The canvas assignments will consist of short reports which require the use of the statcrunch software available through mystatlab.com.

University Policies

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs' Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester's Catalog Policies section at http://info.sjsu.edu/static/catalog/policies.html. Add/drop deadlines can be found on the current academic calendar web page at http://www.sjsu.edu/provost/Academic_Calendars/. The Late Drop Policy is available at http://www.sjsu.edu/aars/policies/latedrops/policy/. Students should be aware of the current deadlines and penalties for dropping classes. Information about the latest changes and news is available at the Advising Hub at http://www.sjsu.edu/advising/.

Consent for Recording of Class and Public Sharing of Instructor Material

University Policy S12-7, http://www.sjsu.edu/senate/docs/S12-7.pdf, requires students to obtain instructor's permission to record the course. "Common courtesy and professional behavior dictate that you notify someone when you are recording him/her. You must obtain the instructor's permission to make audio or video recordings in this class. Such permission allows the recordings to be used for your private, study purposes only. The recordings are the intellectual property of the instructor; you have not been given any rights to reproduce or distribute the material." "Course material developed by the instructor is the intellectual property of the instructor and cannot be shared publicly without his/her approval. You may not publicly share or upload instructor generated material for this course such as exam questions, lecture notes, or homework solutions without instructor consent."

Academic Integrity

Your commitment as a student to learning is evidenced by your enrollment at San Jose State University. The University's Academic Integrity policy, located at http://www.sjsu.edu/senate/S07-2.htm, requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The Student Conduct and Ethical Development website is available at http://www.sa.sjsu.edu/judicial_affairs/index.html. Instances of academic dishonesty will not be tolerated. Cheating on exams or plagiarism (presenting the work of another as your own, or the use of another person's ideas without giving proper credit) will result in a failing grade and sanctions by the University. For this class, all assignments are to be completed by the individual student unless otherwise specified. If you would like to include your assignment or any material you have submitted, or plan to submit for another class, please note that SJSU's Academic Policy S07-2 requires approval of instructors.

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 at http://www.sjsu.edu/president/docs/directives/PD 1997-03.pdf requires that students with disabilities

requesting accommodations must register with the Accessible Education Center (AEC) at http://www.sjsu.edu/aec to establish a record of their disability

Microeconomics Online Lab, Econ 2C, Summer 2020 Course Schedule

This schedule is subject to change. If changes are needed, I will make announcements in class and through Canvas.

Week	Date	Topics, Readings, (Chapters Listed are from recommended course text)
1	July 10	Chapter 1: Introduction to Statistics
		• Goals of Using Statistics
		Basic Terms Biss of Terms
	July 10	Different Types of Data Chapter 2: Different Types of Data and Sample Statistics
	July 10	Chapter 2: Different Types of Data and Sample Statistics • Qualitative vs Quantitative Data
		Measurements of Central Tendency (mean, mode, median)
		Measurements of Dispersion (range, IQR, standard deviation)
2	July 17	Chapter 3: Probability Theory
		Events, Sample Spaces
		Unions and Intersections
		Additive and Multiplicative Rules
	July 17	Conditional Probabilities Chapter 4: Different Types of Bandom Veriables
	July 17	Chapter 4: Different Types of Random Variables • Discrete vs Continuous
		Binomial Distribution
		Normal Distribution
3	July 24	Chapter 5: Sampling Distributions
	,	Nature of Sampling Distributions
		Central Limit Theorem
		Sampling Distribution Statistics
3	July 24	Chapter 6: Confidence Intervals
		Identifying and Estimating Population Parameters Confidence Intervals for Population Moons
		 Confidence Intervals for Population Means Confidence Intervals for Population Proportion
4	July 31	Chapter 7: Hypothesis Testing
		• Steps for Hypothesis Testing
		Null and Alternate Hypotheses, Rejection Region
		Significance of Sample Test Statistic, P-values
	T 1 21	Tests for Population Means and Proportions
4	July 31	Chapter 8: Inferences with Two Samples
		 Differences between Populations Confidence Intervals and Hypothesis Testing for Differences Between Means
		 Confidence Intervals and Hypothesis Testing for Differences Between Proportions
5	Aug 6	Chapters 6, 7, and 8: Inferences about Variance
	1	Confidence Intervals for Population Variance
		Hypothesis Testing for Population Variance
		Differences Between Population Variances
5	Aug 6	Chapter 10: Categorical Data and Multinomial Experiments
		Nature of Multinomial Data
		One-Way Tables The Way Control of the Control
	Δνα 6	Two-Way Contingency Tables Chapter 11: Pagraggion Applysis
5	Aug 6	Chapter 11: Regression Analysis
		Nature of Simple Linear Regression Method of Least Squares
		 Method of Least Squares