Text: Elementary Statistics: Picturing the World, 6th Edition by Larson & Farber	
Class meets: T-F, 8/13-12/14, 10:00-10:50; CCI 200	
Prerequisite: Math 103 or Equivalent	**Basic Skills Advisories**: Eligibility for English 126.

Description

Math 11 is an introduction to statistical methods and techniques for business, behavioral, and social science majors. Topics include descriptive measures of central tendency and variability, probability, binomial and normal distributions, random variables, sampling, estimating, hypothesis testing (parametric and nonparametric), correlation and regression.

Expectations / Responsibilities

Instructor

- Motivate and inspire student success.
- Provide a climate in which the student takes responsibility for learning.
- Provide instruction and model the quality of work to be successful in Math 11.
- Clearly communicate progress being made in a timely fashion.

Student

- Be the kind of student you would want your child to be.
- Follow the class rule – **Be Nice**.
- Be in each class ***on time*** with ***full participation*** from ***start to finish***.
- Check **Canvas** and **study daily**.
- Learn the assigned material and ***seek additional assistance*** when necessary.
- All written work must be ***neat, complete, concise and accurate*** to receive full credit.
- Promptly ***communicate*** any class related issues and ***follow up in person***.
- If you miss any class time it may be counted as an absence.
- Please see me at the end of class if you are tardy.

You may be dropped if:

- You violate the class rule.
- You are inactive on MyLab for three consecutive days.
- You do not attempt a test by its due date,
- You do not have PAID access to MyLab by Noon on Thursday, August 16, 2018.
- You miss a class before Friday, August 31, 2018.
- You miss consecutive classes before Friday, October 12, 2018.
- You miss a test before Friday, October 12, 2018.
- Your homework average is below 90% on Friday, October 12, 2018.
- Your test average is below 60% on Friday, October 12, 2018.

Important Dates

August 13, 2018	MON	FIRST DAY OF SEMESTER
August 31, 2018	MON	FIRST DROP DEADLINE – Last day to ADD/DROP a class
October 12, 2018	MON	LAST DROP DEADLINE - Last day to DROP.
December 14, 2018	FRI	LAST DAY OF SEMESTER

***Dates are subject to change.**

Grading	A 90-100%	B 80-89%	C 70-79%	D 60-69%

Media and Homework **15%**	***Media*** consists of power point notes and video lectures. It would be best if you were to print and review the power points and then add notes when needed while viewing the video lectures. Also, summarize your notes into useful reference material that can be efficiently utilized when completing assignments, quizzes and tests.
	A majority of the ***Homework*** are assignments to be completed on MyLab. Each chapter assignment will have a prerequisite of 100% completion of the Media assignment. There will be additional assignments of written responses to prompts.
Quiz **15%**	A chapter quiz may be attempted once a score of at least 70% has been obtained on chapter homework.
Test **70%**	Each test has a time limit and may be attempted once a score of at least 70% has been obtained on the chapter quiz. Test 1 is on chapter 2 and is worth 40 points. Test 2 is on chapters 3-5 and is worth 120 points. Test 3 is on chapters 6-8 and is worth 120 points.

***Grades may be accessed in MyLab**.

FALL 18	MON	TUE	WED	THU	FRI
8 – 9	Math 103 CCI 200	Math 103 CCI 200	Math 103 CCI 200	Math 103 CCI 200	Math 103 CCI 200
9 – 10	SCFT	Office Hour	Office Hour	Office Hour	Office Hour
10 – 11	**Virtual Office Hour**	Math 11 CCI 200	Math 11 CCI 200	Math 11 CCI 200	Math 11 CCI 200
11 – 12	SCFT	SCFT	SCFT	SCFT	SCFT
12 – 1	Lunch	Lunch	Lunch	Lunch	Lunch
1 – 2	Math 6 CCI 206	Math 6 CCI 206	Math 6 CCI 206	Math 6 CCI 206	Math 6 CCI 206

Finals Week Schedule				
MON 12/10	**TUE 12/11**	**WED 12/12**	**THU 12/13**	**FRI 12/14**
Math 103 CCI 200 8:00-10:00	Math 11 CCI 200 10:00-12:00	Math 6 CCI 206 1:00-3:00	Office Hour 9:00-10:00	Office Hour (CANVAS) 8:00-9:00

ACADEMIC DISHONESTY

Cheating is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner, such as having improper access to answers, in an attempt to gain an unearned academic advantage. Cheating may include, but is not limited to, copying from another's work, supplying one's work to another, giving or receiving copies of examinations without an instructor's permission, using or displaying notes or devices inappropriate to the conditions of the examination, allowing someone other than the officially enrolled student to represent the student, or failing to disclose research results completely.

Plagiarism is a specific form of cheating: the use of another's words or ideas without identifying them as such or giving credit to the source. Plagiarism may include, but is not limited to, failing to provide complete citations and references for all work that draws on the ideas, words, or work of others, failing to identify the contributors to work done in collaboration, submitting duplicate work to be evaluated in different courses without the knowledge and consent of the instructors involved, or failing to observe computer security systems and software copyrights. Incidents of cheating and plagiarism may result in any of a variety of sanctions and penalties, which may range from a failing grade on the particular examination, paper, project, or assignment in question to a failing grade in the course, at the discretion of the instructor and depending on the severity and frequency of the incidents.

***NOTE**: If you have a verified need for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act or section 504 of the Rehabilitation act please contact me as soon as possible.*

Please refer to SCCCD policies for guidance on all matters relating to this course.

Objectives

In the process of completing the course, the student will:

A. Summarize and describe given data sets
B. Apply the methods of descriptive statistics to determine the measures of central tendency and variability to a variety of problems.
C. Apply basic principles of probability to determine probabilities of a variety of events.
D. Analyze discrete and continuous probability distributions.
E. Explore the basics of sampling theory.
F. Estimate population parameters through studying confidence intervals.
G. Examine hypothesis testing for small and large samples and multiple populations.
H. Determine if a relationship exists between quantitative variables.

Course Outline

A. Introduction to Statistics
   1. Statistical data
   2. Frequency distributions
   3. Graphs
B. Population Parameters and Sample Statistics
   1. Measures of central tendency.
      a. Mean
      b. Median
      c. Mode
   2. Measures of Variability
      a. Standard deviation
      b. Quartiles
      c. Range
C. Probability
   1. Rules of probability, random variables, and expected value.
   2. Discrete and continuous probability distributions.
      a. Binomial Distribution
      b. Hypergeometric Distribution
      c. Poisson Distribution
D. Sampling Theory
   1. Simple random sample
   2. Central Limit Theorem
E. Estimating Population Parameters
   1. Estimating from a small or large sample.
   2. Sample size.
F. Hypothesis Testing (Parametric/Nonparametric)
   1. One population, one and two sided tests.
      z-test for means and proportions.
      t-test for means (independent and dependent samples)
   2. Two populations, sampling distributions
   3. Chi-squared (Goodness of Fit and Contingency Tables)
   4. Analysis of Variance (ANOVA)
G. Correlation and Simple Linear Regression
   1. Correlation coefficient
   2. Regression coefficient
   3. Test of hypothesis about the value of correlation/regression coefficient.