# **STAT-7 Elementary Statistics**

Reedley College Summer 2020 STAT-7-55249-2020SU

Dr. Sarah Maokosy

**BA Instructor** 

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Meeting Times: ONLINE Office: By Appointment Only

PREREQUISITES: Mathematics 103. ADVISORIES: Eligibility for English 1A.

# **Course Description and Objectives**

This course is an introduction to statistical methods and techniques with applications in the fields of business, behavioral and social science, as well as in science, technology, engineering, and mathematics. 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. (A, CSU-GE, UC, I) (C-ID MATH 110)

#### **Course Outline:**

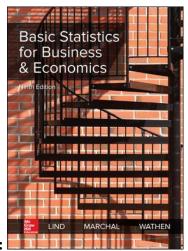
- 1. Statistics
- 2. Frequency Tables, Frequency Distributions, and Graphic Presentation
- 3. Describing Data: Numerical Measures
- 4. Describing Data: Displaying and Exploring Data
- 5. A Survey of Probability Concepts
- 6. Discrete Probability Distributions
- 7. Continuous Probability Distributions
- 8. Sampling Methods and the Central Limit Theorem
- 9. Estimation and Confidence Intervals
- 10. One-Sample Tests of Hypothesis
- 11. Two-Sample Tests of Hypothesis
- 12. Analysis of Variance
- 13. Correlation and Linear Regression
- 14. Multiple Regression Analysis
- 15. Nonparametric Methods: Nominal Level Hypothesis Tests

# **Learning Methods & Course Activities:**

Lectures based on textbook materials

# **Course Readings**

# Required



Text

Basic Statistics for Business & Economics, 9/e, Lind, et al

## **Course Activities & Evaluations:**

		Earned Percentage of Possible Points -	Grade:
Participation	15%	90 - 100%	A
Assignments	15%	80 - 89%	В
Quizzes	50%	70 - 79%	C
Final	20%	60 - 69%	D
		< 60%	F

# **Course Policies**

## Late Work

All work must be turned in by the assigned due date or it will be penalized 10% each day it is late.

For example, the assignment is due on Sunday, but you turn it in on Tuesday. You would have earned 100% if you turned it in on Sunday. Instead you only earned 80% because of the 20% deduction for turning it in two days late.

# **Accommodations for Students with Disabilities**

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 (ADA) or Section 504 of the Rehabilitation Act, please contact me AND the DSPS office - ext 3332 as soon as possible. Please see the Reedley College catalog for clarification of issues and additional guidelines.

Internet and E-mail access

- Access to broadband Internet is required. If you do not have an Internet connection, you may use the resources in the Reedley College Library or at other computer labs on campus.
- An email address is required for all students.

If you do not already have one, please either obtain an email address through the RC Library – or any one of the many free email services out there (Gmail, Yahoo, etc.).

- Make sure your e-mail address is updated in the Canvas system. I use Canvas to send out information for the course including opportunities for extra credit and reminders about large assignments.
- Please note: I teach multiple courses (and multiple sections of some courses) so I have some rather strict rules about email. They are as follows:
  - 1. \*Use the subject line correctly. If your e-mail does not have the required information in the subject line, your email will not be read. Each e-mail you send to me must include the following subject line:

Course number, your first and last name, and the subject

For example, if I was a student in BA 39 (Finite Math), the subject line on my email would be as follows: BA 39 Sarah Maokosy Question about homework

- 2. Use the spell and grammar checker.
  - a. Your e-mail messages represent you. Be accurate and be professional.
- 3. Use proper grammar.
  - a. Make a habit of constantly improving the way you communicate.
- 4. Do not type in all capital letters. This is the same as yelling.

Please remember that you are in training for your professional career. One of the best places to start practicing is in this class.

#### **Canvas**

# ALL assignments are to be turned in via Canvas.

Assignments e-mailed to the Instructor or submitted on paper will NOT be accepted.

The website is: http://scccd.instructure.com

• The standard Canvas login is:

Username: Your 7-digit student ID number.

Password: If you have not previously changed your password, it is:

*First name initial* (upper case) + *last name initial* (lowercase) + *date of birth* (mmddyy)

**Example**: John Smith born on July 9th of 1988 Password =Js070988 **If you do not know your password and need assistance**: (559) 499-6070

# **Cancelled class notification**

If class is cancelled, students will be notified via a Canvas announcement. These announcements will also be e-mailed to your SCCCD e-mail address.

# **Attendance and Participation**

- Your attendance and participation are important. Online- participation in discussion boards and completion of assignments and quizzes count for your attendance in the course.
- Students missing more than 6 assignments may be dropped from the course for non-attendance.
- Unless you regularly prepare for and attend class you cannot participate fully in the course. Your success in this course depends on your active participation. In fact, your participation and homework are worth a portion of your grade. There will be no opportunity to make up missed participation points.

# **Drop Policy:**

• If you decide to drop the course, please do not simply stop attending. In order to officially drop a class, you must fill out a program change card, available in the Admissions and Records Office. Drop dates are listed in your Reedley College Class Schedule. If you simply stop attending, you will be assigned a letter grade.

## **Student Conduct:**

- As stated in your schedule of courses, students are expected to conduct themselves in a responsible manner whenever they are on campus or representing the college in any activity. Board Policy 5410 states the specific rules and regulations and a copy of the policy is available in the college library, the admissions office, Dean of Students & Dean of Instruction offices as well as the student activities office.
- Conduct standards are designed to perpetuate the college's educational purposes, allowing students to enjoy the right of freedom to learn. To that end, students who fail to meet the conduct standards, or who interfere with the rights of freedom to learn of others will be removed from class.

#### **Ethics in the classroom:**

• You will notice that we will often discuss ethical issues, as such you should understand that cheating and plagiarism is not acceptable in this class (or any other). All assignments will be checked using Turnitin.com, and plagiarism will earn an automatic 0 for the assignment. More than one incident of plagiarism per student will be cause for being dropped from the course.

# **Faculty Profile**

Dr. Sarah Maokosy



Business Instructor/Club Advisor/E-Ship Center Co-Coordinator- Reedley College,
Nasdaq Coach/Trainer- California Community Colleges,
Lecturer- CSU Fresno,
Business Instructor- West Hills College Lemoore,
Professional Writer- CareerPro Global Inc.

I am a compassionate individual. I am an energetic, kind, and bubbly person. I am passionate about helping others while sharing my knowledge and experience. I am a problem solver and often take the initiative to find a solution. "How can I help?"

As a disabled veteran, I struggled with the military to civilian transition which often times left me feeling empty. At first review, you may feel I have held various unrelated occupational roles during my career, but I will connect the dots for you so that they all make sense. The underlying theme all of my various professions have in common is SERVICE. No matter what my position or title is, I am always looking for ways to help others. "Please let me know how I can help."

My varied titles and positions have not only provided me with a vast amount of experiences and knowledge, but they have also further opened my mind and heart. I am a visionary, servant, and transformational leader, social entrepreneur and intrapreneur. From fighting a war in Iraq to fighting a war for employment, I pulled myself out of some tough times and continued to put forth my best effort. I fought my way through a war and fought my way through employment. I navigated the military to civilian transition and focused on my education to finally become Dr. Sarah Maokosy.

A unique fact about me is that I have five kids (boys) and five degrees (DM, MBA, BS, AS, and AA). I was basically pregnant for the last 10 years! Seriously though, I earned a degree for each one of my kids. They were able to experience the curriculum with me. Often times they were actively kicking me and making me feel uncomfortable during class. My boys are my life!

My parents have always told me to value the education I receive in the U.S. My parents grew up poor and barely survived the Cambodian genocide. I am fortunate to be born in America. If it weren't for humanitarians, my family and I wouldn't be here today. Throughout my childhood I was actively involved and spent a lot of my time in leadership and volunteer activities. I have always wanted to give back to my country for giving my family another chance at life, which is why I joined the US Army. I am thankful for my life and am very patriotic. I love our country-God Bless the USA!

No matter what happens in life, continue to push forward. Channel that negative energy into positive energy. Remember: Nothing is impossible. Make your dream a reality!!!

# **Class Schedule**

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Date	Topic	Class	Assignments Due
Week 1 6/22-6/28	<ul> <li>Ch. 1-4:</li> <li>Introductions</li> <li>Syllabus Review</li> <li>Course Overview</li> <li>Ch. 1- What is Statistics?</li> <li>Ch. 2- Describing Data: Frequency Tables, Frequency Distributions, and Graphic Presentation</li> <li>Ch. 3- Describing Data: Numerical Measures</li> <li>Ch. 4- Describing Data: Displaying and Exploring Data</li> </ul>	Preparation  Student Profile Completion  Syllabus  Ch. 1  Ch. 2  Ch. 3  Ch. 4	<ul> <li>Introductions- 6/22         (10 points)</li> <li>Ch. 1 Discussion- 6/23         (10 points)</li> <li>Ch. 1 Assignment- 6/23         (10 points)</li> <li>Ch. 2 Discussion- 6/24         (10 points)</li> <li>Ch. 2 Assignment- 6/24         (10 points)</li> <li>Ch. 3 Discussion- 6/25         (10 points)</li> <li>Ch. 3 Assignment- 6/25         (10 points)</li> <li>Ch. 4 Discussion- 6/26         (10 points)</li> <li>Ch. 4 Assignment- 6/26         (10 points)</li> <li>Ch. 1-4 Team Project 6/28         (100 points)</li> <li>Week 1 Extra Credit 6/28         (25 points)</li> </ul>
Week 2 6/29-7/5	<ul> <li>Ch. 5 &amp; 6:</li> <li>Ch. 5- A Survey of Probability Statistics</li> <li>Ch. 6- Discrete Probability Statistics</li> </ul>	• Ch. 5 • Ch. 6	<ul> <li>Ch. 5 Discussion- 6/30         <ul> <li>(10 points)</li> </ul> </li> <li>Ch. 5 Assignment- 6/30             <ul> <li>(10 points)</li> </ul> </li> <li>Ch. 6 Discussion- 7/2                    <ul> <li>(10 points)</li> </ul> </li> <li>Ch. 6 Assignment- 7/2</li></ul>
Week 3 7/6-7/12	<ul> <li>Ch. 7-8:</li> <li>Ch. 7- Continuous     Probability Distributions</li> <li>Ch. 8- Sampling Methods     and Central Limit     Theorem</li> </ul>	• Ch. 7 • Ch. 8	<ul> <li>Ch. 7 Discussion- 7/7         (10 points)</li> <li>Ch. 7 Assignment- 7/7         (10 points)</li> <li>Ch. 8 Discussion- 7/9         (10 points)</li> <li>Ch. 8 Assignment- 7/9         (10 points)</li> <li>Ch. 7-9 Team Project 7/12         (100 points)</li> <li>Week 3 Extra Credit 7/12         (25 points)</li> </ul>

Week 4 7/13-7/19	<ul> <li>Ch. 9 &amp; 10:</li> <li>Ch. 9- Managing Data and Using Graphics</li> <li>Ch. 10- Organizing and Preparing Reports and Proposals</li> </ul>	• Ch. 9 • Ch. 10	<ul> <li>Ch. 9 Discussion- 7/14         <ul> <li>(10 points)</li> </ul> </li> <li>Ch. 9 Assignment- 7/14             <ul> <li>(10 points)</li> </ul> </li> <li>Ch. 10 Discussion- 7/16                  <ul> <li>(10 points)</li> </ul> </li> <li>Ch. 10 Assignment- 7/16                         <ul> <li>(10 points)</li> </ul> </li> <li>Ch. 9 &amp; 10 Team Project 7/19                              <ul> <li>(100 points)</li> </ul> </li> <li>Week 4 Extra Credit 7/19</li></ul>
Week 5 7/20-7/26	Ch. 11 & 12:  Ch. 11- Two Sample Tests of Hypothesis  Ch. 12- Analysis of Variance	• Ch. 11 • Ch. 12	<ul> <li>Ch. 11 Discussion- 7/21         <ul> <li>(10 points)</li> </ul> </li> <li>Ch. 11 Assignment- 7/21             <ul> <li>(10 points)</li> </ul> </li> <li>Ch. 12 Discussion- 7/24</li></ul>
Week 6 7/27-7/31	Final Review Ch. 13 & 15:  Ch. 13- Correlation and Linear Regression  Ch. 15- Nonparametric Methods: Nominal Level Hypothesis	• Ch. 13 • Ch. 15	<ul> <li>Ch. 13 Discussion- 7/28         <ul> <li>(10 points)</li> </ul> </li> <li>Ch. 13 Assignment- 7/28         <ul> <li>(10 points)</li> </ul> </li> <li>Ch. 15 Discussion- 7/30             <ul> <li>(10 points)</li> </ul> </li> <li>Ch. 15 Assignment- 7/30             <ul> <li>(10 points)</li> </ul> </li> <li>Ch. 13 &amp; 15 Team Project 7/31             <ul> <li>(100 points)</li> </ul> </li> <li>Week 5 Extra Credit 7/31             <ul> <li>(25 points)</li> </ul> </li> </ul>

# THIS SYLLABUS AND THE COURSE ACTIVITIES SCHEDULE ARE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE INSTRUCTOR.