Spring 2023

I. Course Information

Course Title: Elementary Statistics Course No. and Section: STA2023_01 Instructor Name: Melissa Quigley Credit Hours: 3 hours Course Location: Online Meeting Dates: Online-self paced Office Location: Virtual Office Hours: *Tentatively* Wednesday's from 7pm-8pm then by appointment. The easiest way to reach me is through email/canvas inbox.

Zoom Meeting ID: 923 4381 7210

Email: quigleym@cf.edu

Extended Emergency Closure

"For emergency campus closings (natural disasters, etc.) call 352-291-4499 or 800-831-9244 or check our <u>website</u> (CF.edu)."

II. Course Description

This course includes a study of descriptive statistics, probability theory, random and binomial variables, linear correlation and regression, normal distributions, confidence intervals and hypothesis tests.

Required Text Title: MyLab Statistics, Triola Edition: 14th edition ISBN No.: 9780136803102 Required Materials: <u>TI 30XS Multiview Scientific Calculator</u> or other scientific calculator Optional Materials: <u>Graphing Calculator</u>, hard copy of text

III. Student Learning Outcomes/Course Objectives

The following list offers students a consistent way to see how CF's global learning outcomes are assessed in each class. This is for information purposes only and does not change the grading system used in this class. Only those learning outcomes relevant to this course are included below.

Quantitative and Analytical Reasoning: The student will understand and apply mathematical and scientific principles and methods.

- 1. Perform accurate computations using order of operations with and without technology. How Measured: Quiz, Exam
- Identify and organize relevant information and complete the solution of an applied problem.

How Measured: Quiz, Exam

- 3. Interpret and communicate understanding of visual representations of data. How Measured: Quiz, Exam
- 4. Demonstrate mathematical number sense and unit sense. How Measured: Quiz, Exam

IV. Course Information & Assessment

Assignment Weights:

Assignment Weights			
Assessment	Points		
Homework—5 points	x 25	125	
Skills Checks—1 point	x 9	9	
Chapter Quizzes—15 points	x 9	135	
Exams—150 points	x 5	750	
Total Possible Points	1,019		

Extra Credit Opportunities: Test reviews (5 points each for 25 points total), skills review homework (1 point each for 9 points total), learning outcomes quizzes (5 points each for 20 points total).

Grading Scale:

Grade Scale		
Letter Grade	Points Required	
Α	900+ points	
B+	870-899.9 points	
В	800-869.9 points	

C+	770-799.9 points
С	700-769.9 points
D	600-699.9 points
F	< 600 points

The grading scale is based on 1,000 points.

a C or greater is required to pass

Layout of the Course:

The course is setup on a modular system and each MODULE will have the following components.

- OVERVIEW page. This explains what material is covered in that module including pages to read out of the textbook and homework assignments.
- SECTION page. Each section lesson includes a slide presentation along with several 3-10 minute embedded videos.
- HOMEWORK ASSIGNMENTS.
- CHAPTER QUIZ.

Assignments:

Homework Assignments—125 points (12.5% of the grade)

For each homework, the highest attempt counts. Each is worth 5 points. If you submit a partially completed paper, the grade will reflect the % completion.

Chapter Quizzes—135 points (13.5% of the grade)

For each quiz, the highest attempt counts. Each is worth 15 points. If you submit a partially completed paper, the grade will reflect the % completion.

Skills Checks—9 points

These quizzes check for understanding of prerequisite skills needed to be successful in each chapter. You must get an 70% on each quiz in order to open up all assignments for that chapter. If you are struggling to get passing scores, you need to consider setting aside some time for extra tutoring, utilize additional resources or consider taking a different math class to brush up on your skills before attempting this class again the following semester.

Proctored Tests (via CF testing centers or other certified testing center)—750 points (75% of the grade)

There will be five proctored exams. All Exams are CLOSED NOTE AND CLOSED BOOK. Use of a personal calculator, statcrunch, scratch paper and instructor provided formula sheet are allowed. Exam reviews (counted as extra credit) are posted with questions *very* similar to the exam questions. A conscientious effort on these reviews will leave you very well prepared for the exams. Each Exam is worth 150 points. There will be **NO MAKEUPS** and **NO RETAKES** of any proctored exam without <u>prior</u> certified personal or family illness. Any missed exam will count as a **ZERO**.

If there are circumstances that prevent you from making it to any one of our campus testing centers, you must reach out through email to discuss other options. Alternative testing is considered on a case-by-case basis and may come at an additional cost.

- Ocala: <u>schedule an appointment</u>
 - Monday—Wednesday: 8 a.m. to 8:00 p.m.
 - Thursday: 8:00 a.m. to 6:00 p.m.
 - Friday: 8 a.m. to 4:30 p.m.
- Citrus: <u>schedule an appointment</u>
 - Monday—Friday: 8 a.m. to 4:30 p.m.
- Levy: schedule an appointment
 - Monday—Friday: 8 a.m. to 4:30 p.m

******You must make an appointment to test at any CF testing Center. Make your appointment EARLY and keep in mind that they will not allow a test to begin within one or two hours of closing**

Extra Credit-54 points

- 1. Test reviews are posted on Pearson with questions *very* similar to the exam questions. A conscientious effort on these reviews will leave you very well prepared for the exams.
- 2. Learning outcomes quizzes are also on Pearson and are labeled as <u>order of operations</u>, <u>number sense</u>, <u>problem solving</u> and <u>visual representations</u>.
- 3. Skills review homework

Additional Policies & Information:

Late Work Policy:

Homework assignments and quizzes can be turned in late for a grade deduction. No make-up tests will be given unless there is an emergency or prior approval has been given by the instructor. In such an event, you must notify your professor before the exam due unless the emergency prohibits it and you will be asked to bring proof of the emergency. A make-up exam must be taken within one week of the original exam date unless the emergency prohibits it. While you do not need to disclose personal details, let your professor know as soon as possible if something is preventing you from participating online or completing work.

Canvas & Patriots Mail:

Canvas is the main mode of communication for this course. Any important and immediate information will be posted in the announcements or through the canvas inbox. You are expected to log-in at least one per day to check announcements and work on assignments. Typically, Canvas messages are sent to your Patriots mail, therefore you will want to check this daily as well.

Statcrunch:

Much of this course can be done using Statcrunch. It is like excel, but more stat friendly. Your StatLab access code comes with <u>free</u> access to Statcrunch. You can create box plots, scatterplots, confidence intervals, perform hypothesis testing, and so much more! Within each lesson presentation, videos showing Statcrunch steps will be included. These videos will take you through the process of using Statcrunch to answer questions from that chapter or section. This tool will be available during exams.

Supplemental Websites:

If you need more examples or a different way of approaching the problem try using YouTube or <u>Khan Academy</u> (not supported by Internet Explorer). Once on the website, search for the topic that you are having trouble with. YouTube will have countless videos of people all over the world answer questions and showing calculator steps. Khan Academy has videos as well, but within each unit, there are also practice problems that you can use to supplement your StatLab practice.

V. How to be Successful in This Course

The general rule for a three-credit class is that you spend approximately 9 credit hours PER WEEK interacting with the material and studying.

Example Weekly Schedule		
Day	Task	
Monday-Wednesday	Watch lectures, engage with PowerPoint and other module content	
Thursday & Friday	Work on Homework assignments.	
Saturday & Sunday	Work on Quizzes and reviews (if applicable that week)	

Course Schedule/Outline

Tentative Schedule			
Open	Start	Due	Module
1/9	1/9	1/9	Course Launch, Introductions, Syllabus and Orientation
	1/10	1/17*	Chapter 1: Introduction to Statistics
1/10	1/17*	1/23	Chapter 2: Exploring, Describing and Comparing Data
	1/23	1/30	Chapter 3.1 & 3.2: Measures of Center and Spread

1/30	2/6	Chapter 3.3: Measures of Relative Standing Test 1 Due 2/8 by 8:00 p.m.
2/6	2/13	Chapter 4.1-4.3: Probability and Counting; Probability Distributions and Binomial Distributions
2/13	2/20	Chapter 4.4 & 5.1: Counting and Random Variables
2/20	2/27	Chapter 5.2: Binomial Distributions Test 2 Due 3/1 by 8:00 p.m.
2/27	3/6	Chapter 6: Normal Distributions
3/6	3/13	Chapter 8.1: Introduction to Hypothesis Testing
3/13	3/20	Spring Break
3/20	3/27	Chapter 8.2: Hypothesis Testing for Sample Proportions
3/27	4/3	Chapter 8.3: Hypothesis Testing for Sample Means Test 3 Due 4/5 by 8:00 p.m.
4/3	4/10	Chapter 7.1: Confidence Intervals for Sample Proportions
4/10	4/17	Chapter 7.2: Confidence Intervals for Sample Means
4/17	4/24	Chapter 9.1 & 9.2: Two Sample Proportions & Two Means

4/24	5/1	Chapter 9.3: Two Sample Means (Paired) Test 4 Due *5/1 by 8:00 p.m.
5/2	5/4	Final Exam due by *5/4 at 6:00 p.m.* (note date and time is different)

Notes:

- A week is designed to begin on Monday and end on the following Monday (*due to holiday and school calendar, some dates are adjusted). Exams will be due on Wednesday's so you can take full advantage of the testing center hours. Please note, there will be overlap if you wait until the last minute to turn in assignments.
- Assignments will be due by 8:00 p.m. on the day of the deadline.
- Test Deadlines (No Extensions or Makeups: 2/8, 3/1, 4/5, 5/1 and 5/4
- You can always work ahead but try not to fall behind. Falling behind puts you at risk of missing exam dates and/or not being fully prepared.
- Due to unforeseen happenings, it may be necessary for the course assignment schedule to be altered. The instructor will always strive to be fair about any changes.

VIII. Additional statements for this course

FREE Tutoring:

- Ocala Campus—Mathematics Lab
 - Building 7, Room 106 (drop in only)
 - Monday—Thursday from 8:00 a.m. to 4:30 p.m.
 - Ocala Campus-Learning Support Center
 - Building 3, Room101 (appointment only)
 - o 352-854-2322 ext. 1246
 - Monday—Thursday from 7:30 a.m. to 6:00 p.m.
 - Friday & Saturday from 10 a.m. to 5:00 p.m.
- Smarthink Tutoring Online
 - Available through Canvas and as a "Question Help" option on Pearson HW assignments

Citrus and Levy have on-campus tutoring available as well

Do You Need Financial Aid?

Attendance Verification is submitted each semester, generally in the third week of the term. Federal Student Aid requires that attendance is based on academic attendance or attendance at an academically-related activity. For this class, your attendance is verified based on <u>Chapter 1</u> <u>Skills Check</u> on Pearson MyLab Statistics.

Early Support Program (ESP)

The College of Central Florida is committed to helping you succeed and achieve your academic, personal and career goals. One of the ways we can accomplish this goal with you is through an Early Support Program. Our philosophy, based on extensive research and practice, is that when students are connected early to resources and support systems on campus they are more likely to stay in classes, perform better in those classes, and complete their path more quickly. Therefore, you may be contacted by your First Year Success Specialist, program Advisor and/or other resources on our campus if there is a time during the semester I feel it would be beneficial to your continued success. I am always your first point of contact for any concerns that affect your success or with course content, so I encourage you to come to me to discuss those issues. Also, be assured that I will first communicate any concerns I have with you and will then connect you with the other areas on our campus to help develop a network of support for you.

Technology Requirements

This course uses Canvas to post course materials. Go to MyCF (mycf.cf.edu/ICS/), login, click on the Academics tab, and follow the link to Go to Canvas. If you are not familiar with Canvas, you may access a self-tutorial by hovering over the Courses tab in Canvas and clicking on the Getting Started in Canvas course. Additional Canvas tutorials can be found under the help menu in the upper-right corner of your Canvas page. If you have any questions or encounter any problems logging on to Canvas or within the system, contact the Distance Learning Help Desk Monday through Friday, 8 a.m.-4:30 p.m. (fall and spring hours), or Monday through Thursday, 8:00 a.m.-4:30 p.m. (summer hours), at <u>dlhelp@cf.edu</u> or at 352-854-2322, ext. 1317. You may also use the 24/7 Canvas help desk by clicking the Help link in the upper right corner of Canvas.

Library Resources

The CF Libraries are here to help with your research and information needs. Search the library catalog (library.cf.edu), or contact the Ocala campus library (<u>library@cf.edu</u>, 352-854-2322 x1345) or the Citrus campus library (<u>citruslb@cf.edu</u>, 352-249-1205) with questions. Learn more about research help, online and database searching, and citing your sources by visiting the CF Virtual Library (cf.libguides.com) or by visiting the Ocala library (Building 3) or Citrus library (Building C2, Room 202) for one-on-one help. <u>Course reserves</u>: Course textbooks and/or supplemental course material may be on reserve at the Library. Please call to inquire. If the item you are looking for is not on reserve, ask your instructor if they are able to place a copy on reserve.

Correspondence

Please allow 24 hours for a response Monday morning through Friday afternoon and up to 48 hours for a response Friday evening through Sunday evening. Scheduled holidays may extend the response time.