

**College of Central Florida**  
**STA2023 Elementary Statistics (3 credits)**  
**Section 01 (MTWH 10:00AM- 11:50AM)**  
**Summer A 2023**

Instructor: Kirby Brown  
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**Office Hours**

<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
1:00PM-2:30PM		1:00PM-2:30PM		

**TEXTBOOK: Elementary Statistics (14<sup>th</sup> Edition)**

**Author: Mario F. Triola**  
**ISBN: 978-0-13-6803201**  
**0-13-6803202**

**Required Materials:**

(1) MyStatlab access code.

(2) Calculator: A scientific calculator is required for this course. I fully recommend the TI-83/84 graphing calculator

**DESCRIPTION:** A study of descriptive statistics, probability theory, random variables, hypothesis tests, confidence intervals, and comparisons of two sample means or proportions, among other topics. Refer to the course objectives in this syllabus.

**PREREQUISITE:** MAT 1033 with a grade of "C" or better, or suitable placement score.

**Class Attendance:** It is very important for students to attend all class meetings.

Students who intend to drop the class are responsible for completing the required paperwork prior to the deadline. Non-attendance does not constitute withdrawal from this course.

**MyStatLab:** Access homework problems, quizzes, and tests using the [MyStatLab](#) software. If you do the homework you will be well prepared for the quizzes and tests. The assignments have due dates posted in MyStatLab. Students will also be reminded of due dates during class.

**Homework:** Homework will be assigned for each section covered in class. Each student is expected to complete their assignments. If a student encounters difficulties with a problem(s), then the **student should refer his or her problem (s) to the instructor during class time or visit the instructor during office hours or get additional help at the Math Center.** The hours of the Math Center are listed as follows:

**Math Center Hours (Room 7-106)**

Monday	Tuesday	Wednesday	Thursday	Friday
8:00 am – 6:00 pm	8:00 am – 6:00 pm	8:00 am – 6:00 pm	8:00 am – 6:00 pm	8:00 am – 3:00 pm

**LATE WORK:** Late homework assignments will not be accepted. All *MyStatLab* assignments must be done by the due dates. All quizzes must be submitted by the due dates. No late quizzes will be accepted.

**EXAMS:** Students are required to take all in class exams. **NO MAKE-UP EXAMS WILL BE GIVEN UNDER ANY CIRCUMSTANCES. Every student is required to take the final exam. ANY STUDENT WHO MISSES THE FINAL EXAM WILL RECEIVE A GRADE OF ZERO ON THE FINAL EXAM**

The grading breakdown are weighted as follows:

Homework (online):	5%
Exams :	60%
Final :	35%

**\*FINAL EXEMPTION FACTOR: THERE WILL BE THREE IN CLASS EXAMS AND A FINAL EXAM. IF STUDENTS ARE SATISFIED WITH THE OVERALL AVERAGE OF THEIR THREE EXAMS, THEY CAN CHOOSE NOT TO TAKE THE FINAL EXAM AND WILL EARN THE EQUIVALENT LETTER GRADE THAT IS ALIGNED WITH THE OVERALL AVERAGE OF THE THREE EXAMS, OTHERWISE, THEIR AVERAGE WILL BE CALCULATED ON THE GRADING BREAK DOWN ABOVE.**

**NOTE: THE FINAL EXAM MAY RELACE THE LOWEST GRADE ON THE INCLASS EXAMS**  
**Grades:** Grades are calculated based on the following procedure:

A	Excellent	90% and above	4.0 quality points
B+	Very Good	87%-89%	3.75 quality points
B	Good	80%-86%	3.0 quality points
C+	High Average	77%-79%	2.75 quality points
C	Average	70%-76%	2.0 quality points
D	Poor	60%-69%	1.0 quality points
F	Failure	59% and below	No quality points

**Course Outline: STA2023**  
Weekly Schedule

Week	Topic	Comments
Week 1	Introduction	
Week 2	Chapter 1, Chapter 2 and Chapter 3 <b>EXAM 1</b>	<b>Exam 1 covers Chapters 1, 2 and 3</b>
Week 3	Chapter 4  Chapters 4 and 5	<b>HOLIDAY: Monday May 29 (Memorial Day) College Closed</b>
Week 4	Chapter 6  <b>EXAM 2</b>	<b>Exam 2 covers Chapters 4, 5, and 6</b>
Week 5	Chapters 6, 7, and 8  <b>EXAM 3</b>	<b>Exam 3 covers Chapters 6, 7, and 8</b>
Week 6	<b>Final Exam</b>	
		Final Exam: Monday June 26, 2023, 10:00AM-11:50AM

**FINAL EXAM: MONDAY June 26, 10:00AM-11:50AM, Room 7-111**

**Disclaimer:** The Instructor reserves the rights to make any changes to these policies and procedures as well as the course outline as deemed necessary.

## Summer 2023

### **.College Policies –Summer 2023**

**Academic Integrity** – Cheating and/or plagiarism will not be tolerated and may result in an “F” for the course as well as disciplinary action under the Code of Student Conduct. A student may be referred to an Academic Integrity Seminar. There will be a charge for this two-hour seminar, and attendance is required (see Student Handbook).

**Access Services for Students with Disabilities** – If you have a disability, serious medical condition or a learning disorder and want to request accommodations, it is your responsibility to register with the Office of Access Services and to provide verifiable documentation to Access Services as soon as possible. If eligible, Access Services will provide you with a notification of approved accommodations to give to your instructors at the beginning of the semester. For information see the Access Services webpage at <http://www.cf.edu/departments/sa/ss/access/>, contact [access@cf.edu](mailto:access@cf.edu) or call 352-854-2322, ext. 1580. Assistance for students is available at all CF locations, by appointment.

**Classroom Decorum** – Disruptive behavior will not be tolerated. Disruptive students will be asked to leave the classroom. Continuous disruptive behavior will result in withdrawal from the course and disciplinary action under the Code of Student Conduct (see Student Handbook).

**Also please go on canvas to see the withdrawal dates and other college policies**

**NOTE:IF THIS COURSE SHOULD SWITCH TO ZOOM FORMAT AT ANY TIME DURING THE SEMESTER, RANDOM DISCUSSION BASED ASSESSMENTS WILL BE CARRIED OUT THROUGHOUT THE SEMESTER PERTAINING TO EXAMS UNDER THE CONSTRAINT OF ACADEMIC INTEGRITY WHICH INCLUDES THE INSTRUCTOR ASKING STUDENTS FOR VERIFICATION OF SOLUTIONS TO EXAMS.**

**FAILURE TO SHOW AND EXPLAINED DETAILED SOLUTIONS ON EXAMS WILL RESULT IN NO CREDIT GIVEN. THIS COULD ALSO LEAD TO A FAILING GRADE FOR THE COURSE**

## Zoom Link for Office Hours: <https://cfpatriots.zoom.us/j/7502071571>

STA2023 Elementary Statistics

### Institutional Learning Outcomes and Course Objectives

#### Institutional Learning Outcomes

Learning Outcome	Quiz	Exam	Project	Classroom Activity
<b>Quantitative and Analytical Reasoning: The student will understand and apply mathematical and scientific principles and methods.</b>				
1. Perform accurate computations using order of operations with and without technology.	x	x		x
2. Identify and organize relevant information and complete the solution of an applied problem.	x	x		x
3. Interpret and communicate understanding of visual representations of data.	x	x		x
4. Demonstrate mathematical number sense and unit sense.	x	x		x

#### Statistics Course Specific Objectives

##### Probability

The student will, using counting principles including the addition and multiplication principles, determine the size of finite sample spaces and probabilities of events in those spaces.

The student will, using formulas for permutations and combinations, count outcomes and determine probability of events.

The student will, using the rules for determining theoretical probability, determine probabilities for complementary events, independent events, and conditional probabilities.

The student will, by using a two way frequency table, determine conditional probabilities.

The student will, given the probability of an event, determine the odds in favor and the odds against the occurrence of the event.

The student will, using the standard normal probability tables, determine the probability of the occurrence of an event.

The student will, using the equation to determine a binomial distribution, calculate the probabilities for discrete random variables.

The student will, by applying the rule of thumb and the rare event rule, determine if a given outcome is likely to occur.

### Statistics

The student will, using equations provided, construct a hypothesis test to test a claim about a proportion.

The student will, using equations provided, construct a hypothesis test to test a claim about a mean:  $\sigma$  known.

The student will, using equations provided, construct a hypothesis test to test a claim about a mean:  $\sigma$  unknown.

The student will, using equations provided, construct a confidence interval to estimate a population proportion.

The student will, using equations provided, construct a confidence interval to estimate a population mean:  $\sigma$  known.

The student will, using equations provided, construct a confidence interval to estimate a population mean:  $\sigma$  unknown.

The student will, using equations provided, determine the sample size required to estimate a population mean:  $\sigma$  unknown.

The student will, using equations provided, determine the sample size required to estimate a population proportion.

The student will, using technology, determine the linear regression equation for a given set of data pairs.

The student will, by analyzing the correlation coefficient and the correlation of determination, determine the strength and direction of the correlation and the variance of the correlation.

The student will, using equations provided, determine the mean, median, and mode for a given set of data.

The student will, by comparing a known mean and median, determine if the data is skewed or fairly symmetrical.

The student will, by analyzing the change in the confidence interval, predict the change in the confidence interval.

The student will, given a set of data and the equation, apply the sign test to test a null hypothesis.