STA 2023: Elementary Statistics

Welcome to Elementary Statistics!

A study of descriptive statistics, probability theory, random variables, hypothesis tests, confidence intervals, correlation, simple linear regression, and nonparametric statistics. Students will be required to show a proficiency in interpreting and relating a set of data or circumstances to a definition, equation or mathematical concept. This course fulfills the requirement for a college level mathematics course.

We will not use the textbook. Do not purchase the textbook (unless you need a hard copy of the textbook). You **must** purchase the MyMathlab Access code to enable you to complete your online assignments. You may purchase MyMathlab from the bookstore.

To enroll in the MyMathLab course, go to Modules and under the Getting Started module select Register for MyMathLab and follow the prompts.

The course ID is not required to register for MyMathLab since you must register through Canvas!

Syllabus Fall 2022 (Aug. 15th – Dec 8th)

I. Course Information

Course Title: Elementary Statistics
Course Number: STA2023 (CC23) Section 61
Instructor Name: Rau
Credit Hours: 3
Course Location: WPHS Building 8-13

Email: raud@cf.edu

I will make my best attempt to answer any email within 24 hours. Please be patient in this process.

Office Hours

Alpha Time per West Port Policies

Extended Emergency Closure

"For emergency campus closings (natural disasters, etc.) call 352-291-4499 or 800-831-9244 or check our website (Links to an external site.) (CF.edu)."

Textbook information

Text Title: Elementary Statistics
Author of Text: Triola
Edition:14th

ISBN No.: 8220123161095

Required Materials: MyMathLab access code for text (provided), Scientific Calculator

Cell phones

- You will not be using a cell phone in this class. Especially on Exams

Calculators

- Scientific Calculators only, no graphing calculators allowed.

  I personally recommend TI-30 X IIS, though most will suffice

II. Course Description

A study of descriptive statistics, probability theory, random variables, hypothesis tests, confidence intervals, correlation, simple linear regression, and nonparametric statistics. Students will be required to show a proficiency in interpreting and relating a set of data or circumstances to a definition, equation or mathematical concept. This course fulfills the requirement for a college level mathematics course.

III. Student Learning Outcomes/Course Objectives.

Learning Outcomes & How Measured

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, Exams

2. Identify and organize relevant information and complete the solution of an applied problem.

How Measured: Quiz, Exams

3. Interpret and communicate understanding of visual representations of data.

How Measured: Quiz, Exams

4. Demonstrate mathematical number sense and unit sense.
   How Measured: Quiz, Exams

IV. Assessment

Grading scale: Final grades will be based on the overall percentage of the course.

Grade	Percent
A	**100% - 90%**
B+	**89% - 87%**
B	**86% - 80%**
C+	**79% - 77%**
C	**76% - 70%**
D	**69% - 60%**
F	**59% - 0%**

Assignments	Weights
Exams:	70%
Quizzes:	20%
Homework:	10%
Discussions:	0%
Attendance:	0%

Grading Information:

Exams

- 70% of overall grade
- All exams must be in person.
- No Make-up exams!
- No Retaking exams!
- The 4th and Final Exam counts as a Exam grade, and may also replace your lowest exam score or missed exam.

Quizzes

- 20% of overall grade
- You will have 3 attempts per online quiz.
- There will be no extensions for not turning in a quiz on time.

Homework

- 10% of overall grade
- Homework is assigned for every section of class
- The student is expected to complete each assignment and if the student encounters difficulties with a problem(s), then the student should ask appropriate questions via email or see the instructor during office hours, or get assistance at the Math Center.
- It is advised that you complete the homework in a timely fashion. I encourage you to finish the homework early so that you have more time to study for the exams.

Attendance

- 0% of overall grade
- Attendance is established by doing assignments in MyMathLab.
    - For Financial aid you must be registered in the course in MyMathLab and have completed one assignment.
- Non-Attendance does not constitute as a withdrawal from the course. It is the student's responsibility to complete the withdrawal forms by the appropriate date.

- If the student is having trouble, it is the students responsibility to get help from the instructor, another student, or tutor. You may contact the instructor through email, or stop by during office hours.

Late work

- Late work will not be accepted.
- All MyMathLab assignments must be turned in by the due date.
- Failure to turn in an assignment on time will result in a score of zero.

Extra Credit

- **Every exam will feature a few extra credit questions after the required questions.**

Make-up policy:

- **No make-up work 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 or item is 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.

Course Schedule/Outline

Tentative Course Schedules:		
Dates	Sections	Topic
Week 1	Syllabus, Tent. Schedule	Orientation;
	1.1 – 2.2	Types of Data; Critical Thinking; Frequency Distribution
Week 2	2.3 – 3.4	Histograms; Graphics; Measures of Center; Measures of Variation
Week 3	4.1 – 4.2	Boxplots; Basic Probability
Week 4	Midterm	Chapters 1-3
Week 5	4.3 – 4.4	Addition Rule; Multiplication Rule
Week 6	6.1 – 6.2	Applications; Sampling Distributions
Week 7	6.4 – 6.6	Central Limit Theorem; Normal/Approx. to Binomial; Normality
Week 8	Midterm	Chapters 4, 6
Week 9	7.1 – 7.2	Estimating a Population Proportion; Sigma Known
Week 10	7.3	Sigma Not Known
Week 11	8.1	Basics of Hypothesis Testing
Week 12	8.2, 8.3	Estimating a Population Variance; Sigma Known; Sigma Unknown
Week 13	8.4	Proportion Claim Testing;
Week 14	Midterm	Chapters 7-8
Week 15	10.2, 10.3	Linear Correlation, Linear Regression Analysis
Week 16		Review for Final
Week 17	Final	Chapters 1-8, 10

STATEMENT: The instructor reserves the right to make any changes as needed. 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.

Student Responsibilities & Course Requirements

1. Students are expected to complete each assignment especially the homeworks.
2. Students will complete an online quiz for each chapter.
3. Students will complete 4 exams which will be **PROCTORED IN PERSON DURING CLASS TIME**.
    - The first 3 exams will have 25 questions and you will only have 90 minutes to complete.
4. The 4th(final) exam will be **PROCTORED IN PERSON DURING CLASS TIME**..
    - The 4thExam will have 30 questions and you will only have 120 minutes to complete.

    - The 4th exam will be administered the same as all other exams. **The 4th exam may replace your lowest exam score.**
5. Using MyMathLab, you should view each power point, videos, interactive videos, the textbook and other available materials under the course contents. These materials serve as the teaching portion of the course. You may also view instruction videos from other sources such as Kahn Academy. After viewing the material you should do the homework for the chapter and then the quiz.
6. Quiz problems will be similar to the homework problems. You will not have the help buttons available when taking a quiz. You will have three attempts at each quiz. The quiz must be completed before the questions are graded. If you use the second/third attempt you will need to do the entire quiz over, not just one particular problem. The problems will be similar but probably not exactly the same. Only the highest quiz score counts toward the grade. **Only quizzes completed prior to the due date will receive credit.**
7. **There will be no retakes or make-up exams.**

Testing

During the testing time there is to be absolutely no talking or disturbances of any kind. Use of notes, internet, etc. in order to gain an advantage in any way will result in a 0 for the exam and consideration of expulsion.

Online Tutoring Assistance

You can use the Smarthinking Online Tutoring tab on the left menu bar to access tutors.

The College of Central Florida tutors are at the top and the subject will have a CF in front of it. Please make sure you utilize our CF tutors.

Log on for SMARTHINKING

Initial username logon is **Your CF ID number and CF (e.g., 99999CF)**

Initial password is **lastname (lowercase)**

Then you will create your own account. The limit for Smarthinking is 5 hours per student. If you desire more time contact Josh Strigle at x-1317 or dlhelp@cf.edu.

Math Websites

Khanacademy (Links to an external site)

Quickmath (Links to an external site)

Purplemath (Links to an external site)