

Florida A&M University
STA 2023 Introduction to Probability and Statistics

Fall 2023

3 Credit Hours

Teaching Modality: Face-2-Face

Instructor: Dr. Daniel E. Osborne

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Office: 102 Jackson Davis Hall

Office Phone: (850) 412-7926

STA 2023.001 Class meetings: MWF 11:15AM – 12:05PM in University Commons Room 108

Recommended Textbook:

Understandable Statistics: Concepts and Methods-13e by Brase and Brase w/ WebAssign Access

Calculator:

A graphing calculator TI-84 or TI-83 is required. The TI-89, TI-92, TI-nspire are NOT allowed for this course, nor is any other calculator with built-in Computer Algebra System (CAS) capabilities. If you do not have a graphing calculator, then you can download and use for free a [Virtual TI-83 calculator](#).

Course Description:

This course is an introduction to the basic concepts and principles of statistics with elementary applications. Topics include data organization, data description, probability theory, random variables, normal distribution, the Central Limit Theorem, sampling distributions, confidence intervals, and hypothesis testing.

Prerequisites:

A grade of "C" or better in MAT 1033 or MAC 1###, 2###, or Score of 20/490 ACT/SAT or more

Learning Outcomes:

At the end of the course the student will be able to:

1. Recognize the terminology of statistics
2. Summarize data into tables, charts, and other means
3. Estimate different statistics
4. Apply the principles of probability and probability distributions to solve problems
5. Construct confidence intervals for the given conditions
6. Create and test hypotheses and support their acceptance or rejection
7. Locate, organize, and analyze information from tables, charts, and other means with emphasis on the use of information technology like graphing calculators and Excel.

Course Grading Policy will be based on following:

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| Tests | 60% |
| Homework: In-class work, WebAssign homework, Notebook Checks | 25% |
| Quiz: In-class quiz, WebAssign quiz | 15% |

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|--|---|----------|----------|----------|----------|----------------|
| Grading Scale: | The Final Course Grade will be a weighted average based on the percentages of the categories described in Grading Policy above and are assigned as follows: | | | | | |
| | Percentage % | 100...90 | 89...80 | 79...70 | 69...60 | 59...0 |
| | grade | A | B | C | D | F or WF |
| <p>**Please note that Final Course Grade WILL NOT be rounded up. If you wish to receive a particular grade in this course, then earn it! Take advantage of every opportunity presented to you as a student in this class. No coursework will be reopened at the end of the semester.</p> <p>WF Explanation: Students who are failing the course and stop attending the class prior to "Last day to withdraw date" will receive a grade of "WF." A "WF" is calculated in the GPA as an "F".</p> | | | | | | |

I Grade

The "I" grade is given at the instructor's discretion and then only to students who are PASSING* and who are prevented from completing the course by UNAVOIDABLE circumstances not of their own doing. Students who have missed more than one test are not eligible for an "I" grade.

*Passing means: Getting at least a C on each test, online work and class quizzes. It should also be accompanied with almost a perfect attendance. Check your printout for course & sections number. If you are not attending the section for which you are officially enrolled, the instructor of the section for which you are officially enrolled will assign you an "F" grade on the final grade roll and that will be your FINAL GRADE.

Last day to withdraw course: November 9, 2023

Attendance & Make-Up Policy

Strict Attendance Policy:

Attendance is mandatory! Attendance will be regularly taken during class. The University has adopted a policy that at four unexcused absences, a student can receive a Final Grade of F for this course. Following suit, students with **4 or more UNEXCUSED ABSENCES** may be assigned an **F or a WF grade for this course**.

Attendance is essential for most students in order to do well in a class. In general, students who miss too many classes and fails to successfully complete the coursework typically do poorly and ultimately fail the course. ***Students are responsible for all information and materials given in class whether or not they were present. Being absent from a class does not excuse you from any assignments or exams that may occur the following class.*** Excused absences are absence(s) in which the student is issued a valid official excuse letter from their **Dean's Office**. Only these excused absences will be accommodated in a way that does not arbitrarily penalize the student's course grade. **All missed course assignments** corresponding to an unexcused absences are subject to receive a penalty up to a zero for each missed assignment. Students with unexcused absences are not entitled to any make up work for missed **course assignments** corresponding to an unexcused absences.

Required Materials for this class: Due no later than **Friday, September 1, 2023**

- The student is expected to acquire the WebAssign
- The student is expected to come to class on time every day with a pencil and/or a pen and prepared to learn.

Required Technology

1. Computer
2. Reliable Internet connection (DSL, LAN, or cable connection desirable) to access Canvas and WebAssign

FAMU CANVAS Access

To access this course on FAMU CANVAS you will need access to the Internet and a supported Web browser (Internet Explorer, Firefox, Safari, and Google Chrome). To ensure that you are using a supported browser and have required plug-ins please run the [Check Browser](#) from your CANVAS course.

Technical Assistance

If you need technical assistance at any time during the course or to report a problem with CANVAS you can:

- Visit the [Office of Instructional Technology](#) page
- Contact the Office of Instructional Technology at 850-599-3460 or oit@famu.edu
- View [CANVAS Guides](#) to learn more about using [CANVAS](#)

Course Content: Homework, Quizzes, and Tests/Final Exam);

Homework and Quizzes:

It is the student's responsibility to have access code for WebAssign to start working on the online Reading Assignment, Homework and Quizzes on time. No request for extension of due date will be honored. Being absent from class does not exempt the student from any assignments that are to be completed on remotely via the WebAssign Platform.

The student is required to read every section covered. In order to provide incentive for students to complete these readings beforehand, random "pop" quizzes will be administered. These quizzes are designed to simply assess whether students have read the material and are NOT meant to test their conceptual understanding of the content. The instructor reserves the right to administer conventional "announced" quizzes as well. There are no make-up's for missed quizzes whether in class or online.

Tests and Final Exam:

There will be several Unit Test(s) given throughout this semester. **There will be no Final Exam.**

Test Day Seating Arrangement:

The Professor reserve the right to tell any student to change their seat on Test Days. If a student refuses to relocate to the new seat, he or she will not be permitted to take the Test until the student relocate to the new seat. If the student does not relocate to the new seat during the schedule class time on the Test Day, then the student will be given a zero for the current Test assignment.

Conflict Resoltion

Procedure for resolving faculty-student Conflict

- a) Student first attempts to resolve issue with instructor.
- b) Student submits written notification of problem to department chair.
- c) Chair forwards student letter to instructor.
- d) Instructor responds in writing to chair.
- e) Chair meets with instructor and/or student if necessary.
- f) Chair forwards response/recommendation to Dean's office.
- g) Dean decides what further course of action is available to the student.

College of Science & Technology Grievance Deadlines /Intent to Grieve Form

Students must submit Intent to Grieve Forms, online, within two weeks of grades being made available for students to view in accordance with the University Registrar's calendar. Students cannot submit an Academic Grade Grievance without submitting an Intent to Grieve Form unless they receive an exception from the Academic Dean.

Grievances submitted to the College of Science and Technology Grievance Committee for Fall Semester grade disputes must be communicated to the College of Science and Technology Dean's office by the deadlines listed below. These will only be reviewed if an Intent to Grieve Form was filed by the stated deadline or an exception is provided by the Associate Dean allowing the student to submit a grievance without filing an Intent to Grieve Form.

Biology, Chemistry, Math, Physics courses—student must submit the grievance no later than March 1st (or next business day).

CIS courses- No later than three weeks after the student receives notification of the outcome of the Academic Complaint Process from the CIS chairperson.

Weekly Schedule

Read notes for upcoming week's instruction and sections in textbook (see pacing guide), bring notes to class instruction, take handwritten notes during instruction, and review your notes after class.

Additional Free Tutoring

The university provides on demand tutoring after hours and on evenings/weekends through tutor.com. To logon to the service logon to Canvas, go to Tools on the left-hand menu, and look for the Tutor.com link. Then follow the on-screen instructions.

Policy Statement on Non-Discrimination

It is the policy of Florida Agricultural and Mechanical University to assure that each member of the University community be permitted to work or attend classes in an environment free from any form of discrimination including race, religion, color, age, disability, sex, marital status, national origin, veteran status and sexual harassment as prohibited by state and federal statutes. This shall include applicants for admission to the University and employment.

Academic Honor Policy Statement

Florida A&M University is committed to academic honesty and its core values, which include scholarship, excellence, accountability, integrity, fairness, respect, and ethics. These core values are integrated into this academic honesty policy. Being unaware of the Academic Honesty Policy is not a defense for violations of academic honesty. Additional detail on FAMU Academic Honesty Violations are provided in University Policy 2.012 (10.)(s). If you have any questions, please see your Academic Advisor.

University Americans with Disabilities Act (ADA) Statement

The Florida A&M University Americans with Disabilities Act (ADA) Policy Statement states that "Individuals who need a reasonable accommodation must notify the Office of Equal Opportunity Programs at 599-3076." It is the responsibility of the FAMU Equal Opportunity Programs (EOP) Office, through the ADA Coordinator, to ensure the Florida A&M University is in compliance with the Americans with Disabilities Act. If you have any questions, please contact your Academic Advisor or the University EOP Officer, Equal Opportunity Programs, 674 Gamble Street, Tallahassee, FL 32307, (850) 599-3076.

Disclaimer: I have carefully read the course syllabus for STA 2023, and have had the opportunity to ask the instructor any questions I may have about it. I understand its contents, including the course requirements and grading policy. Finally, by remaining enrolled in this course, the student is agreeing to all of the terms and conditions stated in this Syllabus. In addition, the student is also agreeing that he or she is fully aware that only the Professor reserves the right to amend/change this course Syllabus at any time.

16 – Weeks, Statistics Tentative Pacing Schedule:

| Coursework Outline: | Important Note: This is a <i>tentative schedule</i> for the course, and the instructor may change it without any prior notice. Refer to the Pacing Guide for specific due dates and times. Activity and assignment details will be explained in detail within each week's corresponding learning module. | | | | |
|---|---|---|--|-----------------------------|-------------|
| | Module | Weeks | Readings | Assessments | |
| | Unit 1 | Weeks 1, 2, 3 | 1.1, 1.2, 2.1, 3.1, 3.2, 3.3 | HW 1 – 6, Quizzes 1 - 3 | Unit 1 Test |
| | Unit 2 | Weeks 3, 4 | 4.1, 4.2, 4.3 | HW 7, 8, 9, Quizzes 4, 5 | Unit 2 Test |
| | Unit 3 | Weeks 5, 6 | 5.1, 5.2, 5.3 | HW 10, 11, 12, Quizzes 6, 7 | Unit 3 Test |
| | Unit 4 | Weeks 6, 7, 8 | 6.1, 6.2, 6.3 6.4, 6.5 | HW 13 - 17, Quizzes 8, 9 | Unit 4 Test |
| | Unit 5 | Weeks 9, 10 | 7.1, 7.2, 7.3 | HW 18 - 20, Quizzes 10, 11 | Unit 5 Test |
| | Unit 6 | Weeks 11, 12, | 8.1, 8.2, 8.3 | HW 21 - 23, Quizzes 12, 13 | |
| | | Week 13 | Get Caught-up w/WebAssign, No Classes November 20-24, 2023 – Thanksgiving Break | | |
| | | Weeks 14, 15 | 8.1, 8.2, 8.3 | HW 21 - 23, Quizzes 12, 13 | Unit 6 Test |
| | Week 16 | Grades will be submitted to the Registrar's Office by the COB December 11, 2023 | | | |
| *** No coursework will be reopened at the end of the semester. The last day of class for the Fall 2023 semester is <u>December 8, 2023</u> . All coursework including make-up work must be completed prior to the last day of class. | | | | | |

| Select Week | | Out of Class Activity |
|-----------------|--|---|
| Week 2, Sept 4 | No Class – Monday September 4 th Labor Day | WebAssign work |
| Week 11, Nov 6 | No Class – Friday Nov. 10 th Obs. Veterans Day | WebAssign work |
| Week 13, Nov 20 | Get Caught-up w/WebAssign, No Classes November 20-24, 2023 – Thanksgiving Break | WebAssign work |
| Week 15, Dec 4 | Last day of classes Friday 12/8 | All WebAssign work is due before 11:59pm Friday December 8, 2023 |
| Week 16, Dec 11 | ! No Final Exam! | Grades submitted to the Registrar's Office by the COB December 11, 2023 |