STA 2023   STATISTICS   SPRING 2023
STUDENT COURSE INFORMATION SHEET

Instructor: Joe Whitfield   Email: whitfjg@bay.k12.fl.us

Phone: 850-767-4447   CRN 14873   Planning Time: 2:13-3:00

I.   STA 2023 COURSE DESCRIPTION:

STA 2023 receive 3 college math credit hours. You must earn a "C" in this course in order to advance to the next level math course. This dual enroll class also provides an extra 1.0 weighted GPA. **STA 2023 is an introductory course which includes:** summarization of data, probability, probability distributions, normal distribution, sample mean and standard deviation, statistical estimation, testing hypotheses, linear correlation and regression, and non-parametric statistics.

Prerequisite: Math placement test score (PERT: 114-122 (or) Accuplacer Algebra: 72-87 (or) SAT Math: 440-449 (or) SAT Math: 24.0 (or) ACT Math: 19) or minimum grade of "C" in MAT 0012 or Flexible Placement

Learning Outcomes: Upon successful completion of this course, students should be able to:

1. Students will learn and understand the definitions of statistical terms.
2. Students will be able to read and interpret and construct statistical graphs of various kinds.
3. Students will be able to understand and apply the principles of probability to given situations.
4. Students will recognize and understand different types of discrete random variables.
5. Students will recognize and understand continuous random variables.
6. Students will understand the results of the central limit theorem and be able to apply those concepts/results to real- world situations.
7. Student will understand the concept of confidence intervals and the underlying theory.
8. Students will understand the components of a hypothesis test.
9. Students will understand and compute the components of linear correlation and linear regression.
10. Students will recognize and understand two population situations and be able to perform appropriate hypothesis tests.
11. Students will be able to perform non-parametric tests for small sample, non-normal distributions.

II.   TEXTBOOK: Elementary Statistics, Larson, 4th edition, 2009, Pearson.

III.   OTHER MATERIALS: A graphing calculator is required; TI-83, TI-84 or TI-84 Plus recommended should be brought to class every day), Text Book, notebook (or binder), paper & pencil, and graph paper. Students may be expected to use computers in the computer lab for the completion of projects.

IV.   ATTENDANCE-WITHDRAWAL-GRADE FORGIVENESS-ATTEMPTS:

Attendance Policy: Attendance in class is vital to your success and is positively correlated with your final grade. Furthermore, attendance with participation is even more highly correlated with your final grade. Please ensure that you are present and participating at each class session. Attendance will be recorded each day and you are expected to attend. If you do not attend class for the first two weeks, you will be withdrawn for non-attendance. **YOU MUST ATTEND ON EACH TEST OR EXAM DAY.**

B. **Withdrawal Policy**: Two withdrawals are permitted per course. After that, a grade will be assigned. Please be concerned about withdrawals. When admitting students into certain programs,

universities may calculate withdrawals as grades. There are three kinds of withdrawals, student and administrative. Please see the GCSC manual of policy for detailed withdrawal policies.

1. **Student Withdrawal:** Students may withdraw from a course prior to the scheduled withdrawal deadline published in the college catalog. Student completes a withdrawal form & submits the form to Mrs. Paige, Assistant Principal, by March 4, 2022.
2. **Administrative Withdrawal:** Administrative withdrawals are processed by instructors for excess absences. Withdrawals initiated prior to midterm will be recorded as "W". There are no withdrawals initiated after the deadline. After this date, students will receive a grade.
3. **No Show:** Students who never attend the first two weeks of class shall be classified as "no show" & will be withdrawn from the course.

V.   **HOMEWORK:**   Homework will be assigned daily. The daily completion of all homework is essential for learning the material in the course and as preparation for the unit tests and final exam. Completed homework assignments are due by the test date for that section. All work must be shown…no BOB answers. Completed work must be presented to get credit.

VI.   **QUIZZES**: Quizzes will be given after each section or couple of sections, at the discretion of the instructor. **There will be no retakes**. Quizzes are typically given the day after a section is completed, however, quiz dates will be announced.

VII. **TESTING:** There will be four unit tests given. The unit tests will be announced in advance, will count equally, and will be returned. The final exam will not be returned. **There are no exemptions from the final exam.** The exam will be given on the days assigned by the Bay District School Board for Senior Exams, dates to be announced. You must be present for the exam so make your arrangements now.

VIII. **GRADING:** The average of the five unit tests will count 75% of your grade. A comprehensive departmental final exam (no exemptions) will count 25% of your grade. The college catalog will be used to convert the numerical average to a letter grade. The college grading scale is: A (100-90), B (89-80), C (79-70), D (69-60), and F (59-0)

IX.   **MAKE UP WORK:**
- No quizzes will be made up. If you miss a unit test and you have an excused absence, your final exam grade may count as the first missing unit test grade. If you miss more than one unit test, you may take a make-up test, if you have an excused absence, at the discretion of the instructor. If you have not missed any unit tests, the final exam may be used to replace the lowest unit test grade at the discretion of the instructor.
- There will be NO "re-takes" and NO dropped tests.
- All homework assignments must be corrected & completed before test day. If you are absent: YOU are responsible for getting the assignment & turning it in for a grade.
- School Leave or other absences known to you in advance: Get the assignment **before** you leave & make arrangements **prior** to the absence. When **approved** by the instructor, tests must be taken before you leave or on the day of your return. Exceptions to this policy may be made at the sole discretion of the instructor in the case of extenuating circumstances.

X.   **AVAILABLE HELP:** Studying requires discipline, tenacity, and hard work. View this course as a job. Attendance is absolutely necessary, as well as attentiveness to detail and alertness. You must earn a "C" in this course in order to receive credit.
1. **Me**! Please ask for extra help when you know you are having difficulty, before it becomes too late to catch up. I want to help you be successful! In order to receive help before or after school,

students must take the required notes in class, participate in class, and regularly complete assignments.

2. **BDS Canvas:** Unit packets and unit assignments are provided at the beginning of each unit. Video lessons are available on CANVAS. If you are absent you will be expected to watch the video and get your notes from here. To access CANVAS you will login through the Bay District Schools Launchpad using your student login information.

3. **GCSC Math Lab:** The math lab is on the second floor of the SUW building rooms 260 and 261 and their operating hours are posted on the math lab door. Please take advantage of this free tutorial service. There should be a link in your Canvas course to the Math Lab page that includes more information and their operating hours.

4. **Counseling Center:** Personal and academic counselors are available on the first floor of Student Union East and are there to help if you are struggling with academic or personal problems. The counselors adhere to the highest standards of confidentiality and will work with you so that you can succeed throughout your academic career. For more information, please contact:
   Hayden McGee: lmcgee@gulfcoast.edu, 850-769-1551 ext. 2829
   Leigh Bailey: lbailey@gulfcoast.edu, 850-769-1551 ext. 4861

5. **Accessibility Statement:** Gulf Coast State College supports an inclusive learning environment for all students. If there are aspects of the instruction or design of this course that hinder your full participation, reasonable accommodations can be arranged. Prior to receiving accommodations, you must register with Student Accessibility Services. Appropriate academic accommodations will be determined based on the documented needs of the student. For information regarding the registration process, email sar@gulfcoast.edu or call 850-747-3243.

   Students requiring extended time on testing will either report to the LRC (room 209) at Mosley High School or may wish to visit the testing center on campus at GCSC. Make sure that you communicate your preference to your instructor.

XI.   OTHER:

A. **Pay4Print:** The Pay4Print system is installed in all GCSC computer labs and in the GCSC library. The logon to the system can be found by going to www.gulfcoast.edu and clicking on Student Resources and then on Pay4Print. The logon will be the same logon ID as the student email, using only the initials and randomly generated number. Students will be required to add money to their print accounts before they are able to print. Money can be added to student print accounts by credit or debit card with a minimum of $5.00 or at patron kiosks or bill acceptors.

B. **Student Success:** Passing this course requires discipline, tenacity and hard work. View this course as a job. Attendance is absolutely necessary, as well as attentiveness to detail and alertness. If at any point during the semester you feel overwhelmed and stressed please either come see me or talk to your academic advisor or go to the counseling center.

XII.   CLASSROOM CONDUCT POLICY:

In order to promote a learning environment in which you as a student may receive the greatest consideration, we will do all we can to prevent unnecessary interruptions and class disruptions. To this end, it is the stated policy of the Division of Mathematics that disruptions, absolutely and unequivocally, will not be tolerated in the classrooms administered by this division. To this end, we remind you that the instructors are obligated to adhere strictly to the following policies:

A. **Everyone is required to be in class on time.** Anyone entering the classroom after the instructor has begun class is late and is a disruption to the class.

B. **Disciplinary action in the case of cheating will be administered in accordance with college policy.** As stated in the college course catalog "honest participation in academic endeavors fosters an environment in which optimal learning can take place and is consistent with the college's mission. Academic misconduct, including cheating and plagiarism, is destructive to the spirit of an educational environment and therefore cannot be condoned. The student handbook defines cheating to include, but not limited to, unauthorized assistance in taking quizzes, tests, or examinations; dependence upon the aid of sources beyond those authorized by the instructor; the acquisition without permission of tests or other academic materials belonging to (another student) or a member of the college faculty. In the case of this course cheating will result in you receiving the grade of "F".

C. **The student must have prior consent of the instructor before leaving the class early.** If you must leave class early, notify the instructor before the beginning of class. We do not conduct "open" classrooms where individuals may arrive and exit at their discretion. This activity is disruptive to those trying to learn and will not be allowed. If you leave early without prior notification to the instructor, you will not be allowed back in the classroom.

D. **Use of electronic communication devices** (including, but not limited to, cell phones, I-pods, IPAD's, Laptops, PDA's, MP3/Music players, etc.) are allowed in the classroom only at the discretion of the instructor and must be used only as they directly relate to the class. The instructor is not to allow talking or other distractions to occur at inappropriate times. Talking or other disruptive behavior (including ringing cell phones) are distractions to other students and have no place in a college environment. Students who engage in such behavior will be asked to stop. If the behavior continues, the student(s) will be asked to leave and confer with Mrs. Reynolds, Division of Mathematics Chair, concerning the nature of the behavior then may be allowed back in the classroom. **NO** electronic devices will be allowed in the classroom on test days with the exception of an approved calculator.

E. **Student recording statement.** In accordance with federal and state privacy laws, students may record class lectures for their own personal educational use, in connection with a complaint to the college, or as evidence in internal or external legal proceedings. Students may not publish or upload the recordings or any components thereof without the knowledge and written permission of the faculty member. Failure to obtain permission to publish could lead to the students' having to pay damages, attorney fees, and court costs. For more information about what can be recorded, please see the guidelines on pages 36-38 in the GCSC Student Handbook https://www.gulfcoast.edu/current-students/student-handbooks/2021-2022-student-handbook.pdf.

F. **Absolutely no food is allowed to be eaten in the classroom during class.** Soda, coffee and water in a container closed with a lid is **ONLY** permitted in the classroom.

G. **Infractions of discipline may be handled by the instructor as final authority.** The student has a right to appeal.

XIII. **GC POLICIES REGARDING COVID-19 (effective Fall 2022):**
1. The health and safety of students and faculty are a priority. Students and faculty should practice social distancing when possible.
2. If you are sick, please stay home to protect others. Notify your professor of your condition by phone or email.
3. If you test positive, stay home for 5 days and please inform your instructor(s) to make plans for course requirements to be met. Also inform David Thomasee, GCSC Executive Director of Operations, at 850-873-3582. (Email: dthomasee@gulfcoast.edu) You will receive added instructions at that time. Confidentiality will be kept.
4. This information is subject to change. The most up-to-date information regarding Covid-19 should be available at https://www.gulfcoast.edu/covid-19-coronavirus.html.

XIV.   CLASSROOM RULES:

- Remain quiet while the teacher is talking.
- Do NOT line up at the door to leave. Your teacher dismisses you.
- No electronic devices are allowed. Cell phones must be turned off and out of sight at all times. If seen, they will be taken up and turned into the office. Parents will have to come to the school to pick it up.
- NO PASSES DURING THE LECTURE.
- To use the restroom, you must sign out and sign back in. To leave the classroom for any other reason, you must get the teacher's permission and sign out & sign back in.
- No walking around the classroom. You are to remain seated during the lecture.
- IF YOU GET SICK – LEAVE!

XV.   TESTING PROCEDURE – STA 2023:

- **All tests must be completed during the period! No coming back later to finish, staying into another period, or finishing it the next day!**
- No prompts on how to work any of the problems will be given nor will you be told if you are working them correctly.
- NO I-Pods/cells phones/MP3 players allowed during testing. The only electronic device used should be your graphing calculator (with the cover removed). Even if you have finished.
- NO notes allowed, if scratch paper is needed, ask me - I will provide some for you and it will need to be attached to the test.
- Formula sheets that are allowed will be provided for you.
- Absolutely no talking while ANY tests are still out.

Working homework assignments will prepare you for the quiz.
The quiz will help you to prepare for the unit test.
The test will help you prepare for the exam.
And…learning will have taken place!

YOU MUST BE AN ACTIVE PARTICIPANT IN YOUR LEARNING!

XV.   REMIND COMMUNICATION:

Remind is a safe, free way for teachers, students and parents to text message. For more information, visit www.remind.com. Remind is one of my main forms of communication with students and parents outside of the classroom. Students and parents are encouraged to sign up for Remind ASAP. Students and parents should text the appropriate message (listed below) to 81010.

STUDENT SIGN UP - please include your first and last name
PARENT/GUARDIAN SIGN UP - please include your name and your child's name

1st period code – @1stdewhi	2nd period code – @2nddewhi
4th period code – @4thdewhi	6th period code – @6thdewhi

Testing Schedule for STA 2023

Test 1:

1.1	An Overview of Statistics		2.2	More Graphs & Displays
1.2	Data Classification		2.3	Measures of Central Tendency
1.3	Data Collection & Experimental Design		2.4	Measures of Variation
2.1	Frequency Distributions & Graphs		2.5	Measures of Position

Test 2:

3.1	Basic Concepts of Probability & Counting		4.1	Probability Distributions
3.2	Conditional Probability & the Multiplication Rule		4.2	Binomial Distributions
3.3	The Addition Rule			

Test 3:

5.1	Introduction to Normal Distributions		6.1	Confidence Intervals for the Mean – Part 1
5.2	Finding Probability of Normal Distributions		6.2	Confidence Intervals for the Mean – Part 2
5.3	Finding Values of Normal Distributions		6.3	Confidence Intervals for Population Proportions
5.4	Sampling Distributions			

Test 4:

7.1	Introduction to Hypothesis Testing		8.1	Testing the Difference Between Means with Independent Samples
7.2	Hypothesis Testing for the Mean – Part 1		8.2	Testing the Difference Between Means with Independent Samples
7.3	Hypothesis Testing for the Mean – Part 2		8.3	Testing the Difference Between Means with Dependent Samples
7.4	Hypothesis Testing for Proportions		8.4	Testing the Difference Between Proportions
9.1	Correlation		11.1	The Sign Test
9.2	Linear Regressions			

Test 5: Quiz Average

Student Information Sheet

**Name_____ Period _____

Contact Information
Parent / Guardian Name(s)_____

Address:

_____

Phone Numbers:
Home: _____ Parent / Guardian Cell: _____

Home: _____ Parent / Guardian Cell: _____

Parent / Guardian email address: _____

I have read this and understand the information presented to me regarding the course syllabus and classroom procedures for the Spring 2023 STA 2023 class.
I understand that this is a course offered through Gulf Coast State College and will follow the course guidelines and expectation.

_____   _____
        Student Signature   Date

_____   _____
        Parent/Guardian Signature   Date
*** signatures required*

Parents: If you have any questions please email at whitfjg@bay.k12.fl.us. Please feel free to log into CANVAS to access class syllabus, lesson videos, assignment listings and unit calendars. If you are absent you will be expected to get your notes from here. To access CANVAS you will login through the Bay District Schools Launchpad using your student login information.

I will be using REMIND as my main communication tool for students & parents. To sign for Remind, students and parents should <u>text</u> the appropriate message (listed below dependent up which class the student is in) to <u>81010</u>.

STUDENT SIGN UP - please include your first and last name
PARENT/GUARDIAN SIGN UP - please include your name and your child's name
1st period code – @1stdewhi   2nd period code – @2nddewhi
4th period code – @4thdewhi   6th period code – @6thdewhi