I. Course Information

- Meeting Time & Place: CI-102, MTWR 08:00-11:45 AM
- Professor: Dr. Jose Guardiola
- Office Phone: 825-5544
- Office Address: CI 309
- E-MAIL Address: jose.guardiola@tamucc.edu
- Web Page Address: http://www.sci.tamucc.edu/~jguardiola
- Office Hours: MTWR: 12:00 -12:55 pm, other times by appointment

II. Course Description

This is an introduction to statistical methods used in the physical, life and social sciences. Topics covered include: Statistical Thinking, Descriptive Statistics, Basic Probability Concepts, Sampling & Data Collection, The Normal Distribution, Confidence Intervals, Hypothesis Testing, Correlation & Simple Linear Regression, Categorical Data Analysis, ANOVA.

III. Prerequisites for the Course

MATH 0399 or placement beyond MATH 0399; also non-remedial status in Reading and Writing as determined by placement testing or THEA.

IV. Required Textbook and Supplies

- MyLabsPlus access kit is required for homework and quizzes. You will need to purchase an access code, either through the campus bookstore or directly from the publisher. Historically, the publisher has been less expensive, I recommend checking both sources before buying. I will discuss how you access and use MyLabsPlus during the first class meeting. An electronic version of the textbook, Elementary Statistics by Mario F. Triola, 12th edition, is included inside the MyLabsPlus system.
- You will be required to access the TAMU-CC Blackboard system at <bb9.tamucc.edu>. If you do not have access to Blackboard, please contact the Help Desk (see <it.tamucc.edu> for contact info) to obtain access as soon as possible.
- The lab manual for the lab portion of this class will be provided online using Blackboard.
- A calculator is required for every quiz and examination. A TI-83/84 calculator or similar is recommended but not required (it may make this class more manageable).

Optional


JMP software (JMP Pro®, Version 10.0.0, Copyright © 2012 SAS Institute Inc., Cary, NC) will be provided in the Lab and does not need be purchased unless you intend to work on labs at home. There is a
user guide at [http://www.jmp.com/support/help/](http://www.jmp.com/support/help/). I also recommend the tutorials available at the help menu in JMP.

V. Student Learning Objectives

- Students will be able to use descriptive statistics and graphical exploration to summarize key features of experimental data.
- Students will be able to perform elementary probability calculations, primarily with the normal distribution.
- Students will be able to state, understand the importance of, and apply the Central Limit Theorem to experimental data.
- Students will be able to perform hypothesis tests of the following forms: one and two sample t-tests, ANOVA, and linear regression.
- Students will be able to analyze an experimental situation to determine appropriate statistical analyses.
- Students will be able to interpret the results of all calculations and statistical tests in the context of the experiments that generate that data, and will be able to express these interpretations clearly in writing.
- Students will be able to use appropriate technology tools to perform needed calculations and tests.

VI. Instructional Methods and Activities

Methods for instruction include the following:

- Lecture.
- Demonstrations.
- Use of computer resources, including statistical software, spreadsheets, and the Internet for data location, data organization, and data analysis.

VII. Evaluation and Grade Assignment

Final course standing will be based upon homework, quizzes, one midterm test during the semester, lab points and a final test each weighted as follows:

- Homework – 15%
- Quizzes – 10%
- Lab Section – 15%
- 1 midterm - 30%
- Final Exam – 30%

More detailed information about these assignments is in the Class Policies section below.

Grading Scale:

Based on the above grades will be assigned according to the following scale.

- A – 90%-100%
- B - 80%-89.99%
- C – 70%-79.99%
- D – 60%-69.99%
- F - below 60%

VIII. Tentative Schedule

A schedule for the course is posted on the course Blackboard page.

IX. Class Policies

- One midterm test will be administered on Friday, May 23. You will be allowed to bring in one page of notes, written or typed on both sides on a sheet not larger than 8.5”x11”. Your name
should be written in the top of the page in large and clear letters. Pages of notes and/or calculators cannot be shared. Cell phones cannot be used as calculators. If extra points are given for any reason, the total score should not exceed 100%. No points will be “saved” toward the next examination.

- If the midterm test is missed, its score will be replaced by the score on the final exam. The opposite is not true. A missed final exam will result on a score of 0 points. You can’t miss more than one semester test. A second missed semester test will result on a score of 0 points for that test.
- The final exam will be administered on Friday May 30, from 9:00 to 11:30 am. It is a comprehensive examination over all material covered during the semester. You will be allowed to bring in two pages of notes following the same format described above.
- Attendance will be taken each class. Talking during class time and tardiness are often disruptive to the whole class and are not appreciated. If you are delayed and arrive late please do so quietly. Excessive tardiness, disruptive talking, disruptive behavior or performing activities not related to the class will be counted as absences and may cancel bonus points for attendance. Cell phones and such must be turned off before class. 95% attendance or more will result in 3% as bonus points added to your total score at the end of the semester that usually is helpful to determine borderline grades. The instructor is NOT responsible for informing absent students what was covered in previous classes, homework or any other announcements.
- A grade of incomplete will only be given in exceptional circumstances, such as a death in the family or personal injury that might prevent someone from taking the final exam. In this case, it is the responsibility of the student to notify me as soon as possible, preferably by email, and to fill the required “Incomplete Form” available from the University Registrar. If this is not done, a score of 0% will be assigned for any incomplete exams and a final grade will be computed using the criteria described above.
- Please check carefully the date and time of the tests as I cannot change them for any other reasons not considered truly exceptional, that is; beyond the control of the student.

X. Legal Statements

Academic Integrity/Plagiarism*

University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in a grade of zero.

Dropping a Class*

I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. Please consult with me before you decide to drop to be sure it is the best thing to do. Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. Please check with the students service center when is the last day to drop a class with an automatic grade of “W” for the Maymester term.

- Classroom/professional behavior: Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary
sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc. Also, Texas A&M University–Corpus Christi has a diverse student population that represents the population of the state. Our goal is to provide you with a high quality educational experience that is free from repression. You are responsible for following the rules of the University, city, state and federal government. We expect that you will behave in a manner that is dignified, respectful and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation or disability. Behaviors that infringe on the rights of another individual will not be tolerated.

• **Grade Appeals (College of Science and Engineering Version):** As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at http://www.tamucc.edu/provost/university_rules/index.html, and the College of Science and Engineering Grade Appeals webpage (http://sci.tamucc.edu/students/GradeAppeal.html). For assistance and/or guidance in the grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the Office of the Provost.

• **Disabilities Accommodations:** The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please call or visit Disability Services at (361) 825-5816 in Corpus Christi Hall 116.

• **Notice to Veterans:** If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.

• **Statement of Academic Continuity:** In the event of an unforeseen adverse event, such as a major hurricane and classes could not be held on the campus of Texas A&M University–Corpus Christi; this course would continue through the use of Blackboard and/or email. In addition, the syllabus and class activities may be modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be operational within two days of the closing of the physical campus. However, students need to make certain that the course instructor has a primary and a secondary means of contacting each student.

• **Changes.** The instructor may amend the syllabus at any time prior to the final exam by announcing the changes in class.