DATA ANALYSIS AND STATISTICS

COURSE DESCRIPTION:

A study of descriptive statistics, probability distributions, the normal distribution, confidence intervals and hypothesis testing, regression analysis and chi-square.

COURSE PREREQUISITES:

Prerequisite: BUSI 0011, MATH 1314 and MISY 2305 or equivalents

LEARNING OBJECTIVES:

By the end of this course, the students will be able to:
1. Demonstrate knowledge of quantitative concepts and skills. (BBA Goal 2, Objective 1)
2. Discuss key statistical concepts used in business. (BBA Goal 2, Objective 2)
3. Apply basic statistical methods of data analytics, founded in probability theory. (BBA Goal 2, Objectives 1, 2, and 3)
4. Interpret statistical inferences using the results obtained by the application of basic statistical methods. (BBA Goal 3, Objectives 1, 3)

MAJOR COURSE REQUIREMENTS:

In this course, you are required to complete several quizzes, Blackboard discussions, two (2) midterm exams, and one (1) comprehensive final exam.

REQUIRED TEXT:


The CONNECT ACCESS CODE will be needed for the ENTIRE semester. Any free trials offered will NOT last the duration of the semester.

Link to use to purchase the textbook:

If the above link does not work, simply search (in your favorite search engine) for the ISBN number: 9781260239522 and make sure obtain the textbook the INCLUDES the ACCESS CODE for CONNECT.

REQUIRED SOFTWARE:

Respondus Lockdown Browser (DOWNLOAD LINK) watch this (HOW TO VIDEO)
REQUIRED HARDWARE:
Personal Computer or Laptop
Web Cam and Microphone

COURSE DELIVERY:
This course is a fully online course meaning that you must have access to an Internet connected computer to complete the requirements for this course. The course is divided into three (3) modules. Each activity in each module will contain a deadline by which the work/assignments for that module must be completed. The course is set-up to allow for working ahead if you want or need to do so.

EXPECTATIONS OF STUDENTS:
1. As with all technology, computer issues, Internet issues, ISP issues, e-mail issues, etc. may occur. You are expected to have a contingency plan in place that includes accessing the course material in advance of the due dates. Waiting until the ‘last minute’ to complete assignments limits your opportunity to find a work around should a technology issue occur.
2. You are responsible for all material presented in this online course.
3. You are responsible for turning in all assignments on time.
4. You are responsible for staying informed of assignments, due dates, and any changes to the syllabus communicated via BlackBoard and/or via e-mail.
5. You are responsible for doing everything necessary to learn statistics.
6. You are responsible for knowing and abiding by the rules and policies outlined in this syllabus.

COURSE POLICIES:

ATTENDANCE/TARDINESS – This is a fully online course. As a fully online course, you are responsible for logging-in to your Blackboard account and this course regularly to keep up with the material, assignments, discussions, quizzes and any other course related assignments or announcements. Any suggestions you have on how to provide the class a better learning experience are always welcome.

EXAMS - Your performance will be evaluated (in part) on two midterm examinations and one final examination. The exam formats will generally be short answer and problems and/or multiple choice. Readings, PowerPoint presentations, quizzes, and assigned problems will be the basis of these exams. Rather than being purely numerical, problems will be presented in word scenario format. You will be allowed to use a Formula sheet, a calculator and computers for each examination and the exams are open-book.

QUIZZES - Your performance will be evaluated (in part) on ten (10) chapter quizzes. The quizzes’ formats will generally be short answer, problems, and/or multiple choice. Lectures, readings, discussions, and assignments will be the basis of these quizzes. Each quiz must be completed before the specified deadline.

MAKEUP QUIZZES/ASSIGNMENTS – Quizzes and/or assignments are not to be missed for the convenience of the student. You are expected to schedule other activities around the class quiz/assignment dates. Since you have the ability to work ahead in this course, you should plan accordingly if you feel that you will need to miss a scheduled due date. It is your responsibility to manage your time to allow for the completion of the coursework. Any quiz or class assignment missed will be assigned a grade of ZERO.

CLASS DISCUSSIONS – There will be several class discussions that will be assigned throughout the semester. You will be responsible for creating a discussion thread for each class discussion as assigned AND you will be responsible for replying to AT LEAST two (2) of the discussion threads created by your classmates. Your replies to your classmates’ posts should reflect the fact that you have read and though about the post. Simple replies such as “Good Job!”,”Great Post!”, or etc. will not be counted as a reply for grading purposes. Each of the comments in each of the discussions must be posted before the deadline specified for each comment.

ELECTRONIC DEVICE USAGE - Calculators, computers or tablets are required to complete this course.

EXTRA CREDIT (if any) - Extra credit may become available from time to time. It can take several forms, including opportunities to participate in research projects and/or campus activities, and then writing brief reports about them.
GRADING - Your grade in this course will be based on your performance on discussions, quizzes, mid-term exams, and a comprehensive final exam. PERCENTAGES ARE NOT USED IN GRADING IN THIS COURSE. IF YOU WANT A PARTICULAR LETTER GRADE YOU MUST EARN THE MINIMUM NUMBER OF POINTS FOR THAT LETTER GRADE. For example, for a letter grade of “A” you must earn at least 900 points (in other words 899.9 points IS NOT an “A”, 899.9 points IS a letter grade of “B”). The distribution of points per assignment and the tentative grading scale are as follows:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>Quizzes (10 at 20 points each)</td>
<td>200</td>
</tr>
<tr>
<td>Discussions (4 at 50 points each)</td>
<td>200</td>
</tr>
<tr>
<td>Mid-Term Exams (2 at 200 points each)</td>
<td>400</td>
</tr>
<tr>
<td>Comprehensive Final Exam</td>
<td>200</td>
</tr>
<tr>
<td><strong>Total points</strong></td>
<td><strong>1000 points</strong></td>
</tr>
</tbody>
</table>

The tentative grading scale is as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>900 and above</td>
</tr>
<tr>
<td>B</td>
<td>800-899.9</td>
</tr>
<tr>
<td>C</td>
<td>700-799.9</td>
</tr>
<tr>
<td>D</td>
<td>600-699.9</td>
</tr>
<tr>
<td>F</td>
<td>below 600</td>
</tr>
</tbody>
</table>

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 zero the first time and failing the course for any additional offense. NO EXCEPTIONS!

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. **November 5, 2020** is the last day to drop a class with an automatic grade of “W” this term.

PREFERRED METHODS OF SCHOLARLY CITATIONS – APA style is the only accepted method used for citations and referencing during this class. All work should be paraphrased rather than copied directly. Material used from sources other than the text should use APA style citations and references.

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.

STATEMENT OF CIVILITY – 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 right of another individual will not be tolerated.

GRADE APPEALS - As stated in University Rule 13.02.99,C0.03, Student Grade Appeals, a student who believes that her or his grade reflects academic evaluation which is arbitrary, prejudiced, or inappropriate in view of the standards and practices outlined in the class syllabus, may appeal the final grade submitted for
the course. The appeal must focus on specific departures from grading guidelines listed on the syllabus. **Dissatisfaction with a grade is not grounds for a successful appeal.**

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 Rule 13.02.99.C0.03, Student Grade Appeals, and COB- Student Policy 04-STU-03. These documents are accessible through the COB and University Rules Web site at [http://cob.tamucc.edu/Students/Student%20Policies%20and%20Forms.html](http://cob.tamucc.edu/Students/Student%20Policies%20and%20Forms.html). For assistance and/or guidance in the grade appeal process, students may contact the Office of Student Affairs.

**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.

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.

**CIVIL RIGHTS STATEMENT** - Texas A&M University-Corpus Christi is committed to fostering a culture of caring and respect that is free from discrimination, relationship violence and sexual misconduct, and ensuring that all affected students have access to services. For information on reporting Civil Rights complaints and support resources, (including pregnancy support accommodations) or university policies and procedures, please contact the University Title IX Coordinator, Sam Ramirez (Samuel.Ramirez@tamucc.edu) or Deputy Title IX Coordinator, Rosie Ruiz ([Rosie.Ruiz@tamucc.edu](mailto:Rosie.Ruiz@tamucc.edu)) at (361) 825-5826 or visit the TAMUCC website at [http://edcs.tamucc.edu/titleIX/](http://edcs.tamucc.edu/titleIX/).

Limits to Confidentiality. Essays, journals and other materials submitted for this class are generally considered confidential pursuant to the University’s student record policies. However, students should be aware that University employees, including instructors, are not able to maintain confidentiality when it conflicts with their responsibility to report alleged or suspected civil rights discrimination that is observed by or made known to an employee in the course and scope of their employment. As the course instructor, I must report allegations of civil rights discrimination, including sexual assault, relationship violence, stalking, or sexual harassment to the Title IX Coordinator if you share it with me.

These reports will trigger contact with you from the Civil Rights/Title IX Compliance office who will inform you of your options and resources regarding the incident that you have shared. If you would like to talk about these incidents in a confidential setting, you are encouraged to make an appointment with counselors at the University Counseling Center ([https://counseling.tamucc.edu/](https://counseling.tamucc.edu/)).

**EXAMITY PROCTORING INFORMATION:**

This course may require the use of exam-proctoring involving third party charges. **Exam-proctoring charges a fee ranging from $1.00 - $55.00 per exam.** Students are required to schedule exams **at least 24 hours in advance** or incur late scheduling charges. All costs for exams are the responsibility of the student. Students are also responsible for providing webcams, microphones and all required systems to be used in test proctoring.

**Examity System Requirements**

- Operating System: 2003 Server, XP, Windows Version 7 or higher
- Processor: Minimum 2.4GHz
- RAM: Minimum 2GB
- Internet Speed: 3 MPBs upload and download for simultaneous screen sharing, video and audio conferencing.
  
  Determine your Internet speed by running a test at: [http://www.speedtest.net](http://www.speedtest.net)
• Browser: Internet Explorer® 7.0 or newer, Mozilla® Firefox 4.0 or newer, Google® Chrome 5.0 or newer.
• Student must take the exam on a desktop computer or laptop (not a smart phone or tablet).
• Student must have a working built-in or external webcam and microphone. To make sure your webcam and microphone are enabled, complete your “Computer Requirements Check” located within your Examity profile.

Set up Examity Account

Below are instructions on how to set up your Examity account, which must be done before you can schedule exams. Once the exams are set up, an announcement will be sent via the Blackboard (Bb) to let you know when you can start registering with Examity. You cannot register before you receive a notification from me. Set-up consists of the following 2 steps:

1. Accessing the system:
   • You can access Examity through Bb.
   • Log into Bb and click on the Tools on the left side of your screen, then select the ExamityTamuccSSO link. This will take you to your Examity dashboard.

2. Update your profile:
   • You need to update your profile by creating 3 unique security questions.
   • You need to upload a government-issued picture ID (such as Driver's license or State ID). You need to bring this ID with you every time you take a test (for verification purposes) so make sure you use an ID that you have regular access to.
   • **Update your time zone.**

Once you have finished setting up your account, you can schedule exam appointments. Note that if you schedule less than 24 hours in advance, you will have to use the on-demand scheduling option and pay an extra fee.

Examity will provide you with a step-by-step guidebook on how to use the software in order to ensure that setup, scheduling, and the test-taking process are as simple as possible. Examity also offers 24/7 tech support via phone, email, or chat.

You can obtain a quick student reference guide at:

Some common questions and their answers are provided at:
http://www.examity.com/faq.html

**RELATIONSHIP TO OTHER COURSE WORK:**

Descriptive and inferential statistics are foundations of business analysis and communications. Specifically, the topics in the course supportive of studies in accounting, finance, management, marketing, and operations management

**STATISTICS CASE PROBLEMS:**

You may be assigned various case problems to complete throughout the semester. You will use Microsoft Excel to help you with the statistical calculations. However, you should keep in mind the calculations are only part of the solution. The true value lies in the interpretation of the statistics that you calculate. Hence, you are required to create a professional Managerial Report to go along with your calculations. Each case problem will give you the **MINIMUM** requirements that should be included in the Managerial Report. **NOTE:** Turning in the minimum requirements (as defined in the case problem) **DOES NOT** guarantee that you will receive full credit for the assignment. You are encouraged to think critically about the material you learn and apply it as necessary to the case problem solutions.

All case solutions are to be typed as comments into the Microsoft Excel worksheet where the calculations are done. All case solutions are to be turned in as a soft copy that must be e-mailed (name the file with your last name and the chapter e.g. “Smith-ch-3-case.xls”) to the instructor on or before the due date. If you plan not to attend class on the date an assignment is due, it is your responsibility to turn in all parts of the assignment **BEFORE** the due date. **LATE WORK WILL NOT BE ACCEPTED. NO EXCEPTIONS.**

**INSTRUCTOR STATEMENT:**

It is my intention to devote the time, effort, and resources to properly instruct each student, and the class as a whole, in the course subject matter and industrial applications in general. I encourage you to devote the time and effort necessary to succeed in this
course. The material in this course is cumulative. Hence, you should strive to keep up with the material and not fall behind.

I encourage you to participate in all aspects of the learning process. Best wishes for your success in the class.

CLASS SCHEDULE:

The following class schedule has been prepared to serve as a guide for the semester. Adjustments may be made to this schedule as necessary. Examinations/Quizzes will cover all material indicated on the schedule below.

This Class Is NOT Self-Paced. Each assessment item has a specified DUE DATE by which that assignment/quiz/discussion, exam etc. MUST BE COMPLETED. However, you are encouraged to work ahead in the course on assessment items that are made available long before the due dates. The following is a tentative schedule of topics covered:

<table>
<thead>
<tr>
<th>Topic Covered</th>
<th>Module/Exam</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 1: Statistics and Data</td>
<td>Module 1</td>
<td>8-Oct</td>
<td>20-Oct</td>
</tr>
<tr>
<td>Chapter 2: Tabular and Graphical Methods</td>
<td>Exam 1 on 10/20/2020</td>
<td>8-Oct</td>
<td>20-Oct</td>
</tr>
<tr>
<td>Chapter 3: Numerical Descriptive Measures</td>
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</tr>
<tr>
<td>Chapter 4: Introduction to Probability</td>
<td>Module 2</td>
<td>21-Oct</td>
<td>3-Nov</td>
</tr>
<tr>
<td>Chapter 6: Continuous Probability Distributions</td>
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<tr>
<td>Chapter 7: Sampling and Sampling Distributions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chapter 8: Interval Estimation</td>
<td>Module 3</td>
<td>4-Nov</td>
<td>24-Nov</td>
</tr>
<tr>
<td>Chapter 9: Hypothesis Testing</td>
<td>Final Exam on 11/24/2020</td>
<td>4-Nov</td>
<td>24-Nov</td>
</tr>
<tr>
<td>Chapter 12: Basics of Regression Analysis</td>
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