



## **TMGT 340 Managerial Statistics**

**COURSE SYLLABUS: FALL 2024**

### **INSTRUCTOR INFORMATION**

**Instructor:** Anika Jannat Rimu, Ph.D., Assistant Professor

**Office Location:** Charles Austin Engineering Technology Bldg. (Ag/IT), 220

**Office Hours:** MW 10:00-12:00

**Office Phone:** 903-886-5462

**Office Fax:** 903-886-5960

**University Email Address:** Anika.Rimu@tamuc.edu

**Preferred Form of Communication:** Office Hours or Email

**Communication Response Time:** 48 Hours for Email

### **COURSE INFORMATION**

**Materials – Textbooks, Readings, Supplementary Readings**

#### **Textbook(s) Required**

**Introduction to Statistical Quality Control, Seventh Edition**

Montgomery, Douglas C.

John Wiley and Sons, Inc.

ISBN-13: 9781118146811 or ISBN-10: 1118146811

2012

#### **Optional Texts and/or Materials**

**Publication Manual of the American Psychological Association (APA)**

7th Edition

ISBN: 10:1-4338-0561-8

2021

#### **Course Description**

This course explores concepts and methods of collecting, analyzing, and interpreting data for managerial decision making. These concepts and methods include:

- data presentation,
- measures of dispersion,
- measures of central tendency,

- skewness,
- discrete and continuous probability distributions,
- data sampling and sample size determination,
- graphical charts, and
- statistical tools to model and control manufacturing processes performance as well as product/service quality.

Prerequisites: TMGT 240.

### **Student Learning Outcomes**

*Student Learning Outcomes* define what you should know and be able to do as a result of your participation in this course of study. All of the activities that constitute this course are designed toward the accomplishment and mastery of that goal.

***Student Learning Outcome #1:*** The learner will demonstrate through class assignments and exams the ability to analyze and interpret data for managerial decision-making including data presentations, measures of central tendency, dispersion, and skewness.

***Student Learning Outcome #2:*** The learner will demonstrate through class assignments and exams the ability to understand important discrete and continuous probability distributions.

***Student Learning Outcome #3:*** The learner will demonstrate through class assignments, exams, and team project the ability to utilize statistical tools to control a manufacturing or service quality process.

***Student Learning Outcome #4:*** The learner will demonstrate through class assignments, exams, and team project the ability to demonstrate data sampling and sample size determination.

***Student Learning Outcome #5:*** The learner will demonstrate through class assignments, and exams the ability to perform statistical analysis of six sigma process implementation.

## **COURSE REQUIREMENTS**

### **Minimal Technical Skills Needed**

The student is required to have a basic knowledge of and operational proficiency with the MyLeo Online (referred to elsewhere as D2L Brightspace) learning management system as well as the software required for this course (see “Technology Requirements”). The student is also required to have a basic knowledge of and operational proficiency with Microsoft Word and PowerPoint for class assignments. The student will be required to use Microsoft Excel or Minitab software to generate graphics and statistical analyses for the team project.

## General Overview of this Course of Study

***This course will be presented by using lectures, in-class exercises, homework assignments, project and exams.***

***All exams are closed book and closed notes.*** Using any other resources during exams is not allowed. Students can use a calculator during exams. No make-up exams will be permitted unless official documentation for absences is provided. All documented absences due to religious observances and officially approved trips will be guaranteed as a make-up opportunity. Absences due to other unavoidable reasons (e.g., death in the family, illness) will be considered on a case-by-case basis with appropriate documentation required. Except in the case of an emergency, the student must always seek instructor consent prior to the absence. Typically, make-up exams should occur before the scheduled absence and as close to the original assignment date as possible.

***This class will be conducted in an environment similar to what one would expect to find in a well-operated business.*** It should be the objective of each of us to carry ourselves in a professional, business-like manner. In the context of this class, that means taking responsibility for one's assignments, producing **quality** work, submitting it **on time**, communicating clearly, and acting in a civil manner.

***As you are aware, this is a junior-level course.*** This fact alone dictates a different learning environment than what you may have experienced in other classes and will require, in some cases, a new approach to the learning process on your part. You will be expected to develop your reading, research, and writing skills to a level that you may never have experienced previously. This will require personal dedication and a desire to advance your education. Your time management skills will be put to the test as you try to balance other courses, career, family, leisure time, and other obligations along with your responsibilities to this course. Do not fall behind in this class. ***Being busy is not an excuse for turning in assignments late!***

***The educational philosophy of this course.*** The student is the center of the learning process; therefore, you are expected to assume the responsibility for your learning—to the degree that learning is achieved. Much of the learning achieved in this class will come as a result of student discussions. In this environment, the instructor will serve largely as a guide and facilitator for the student learning experience. You are expected to approach learning with purpose, commitment, dedication, seriousness, and an attitude of discovery. Accordingly, you must be self-driven by reading carefully all materials provided by the instructor, completing all course assignments in accordance with the instructions and specifications provided by the instructor, complying with assignment deadlines, and working within the assignment/course evaluation criteria.

As the student you are to be an active learner, fully engaged in all facets of the course and its content. You will be expected to proof and assess the quality of your work **before** it has been presented to your instructor. It is critical to your success for you to comply with the writing and formatting guides associated with this course of study and for you to have a high level of understanding of these documents. Before you turn any work into the instructor, it is your responsibility to compare your written material with the requirements/specifications of the

writing and formatting guides provided for this course of study and to ensure to the instructor that you have fully complied with all requirements of the assignments.

### **Student Responsibilities**

This course will require you to read, conduct extensive research, and write at a level appropriate for a junior-level student. It is assumed that you can read and write at this level coming into the course.

- You will be expected to read and comprehend the course syllabus, e-mails, and announcements.
- You will be expected to manage your time effectively and efficiently throughout the semester.
- **NO LATE WORK WILL BE ACCEPTED**
- You will be expected to participate fully in the course by checking announcements and e-mails and responding to e-mails when requested. This should be a daily habit!
- You will be expected to employ a formal business writing style and format in all of your written correspondence (including e-mails).
- You will be expected to practice civility in your verbal interactions with the instructor, staff, and other students.
- You will be expected to devote at least twelve (12) clock hours to this course each week of the semester.

### **Tips for Success in the Course**

***Study and Pay Attention to the Course Student Learning Outcomes.*** Every course has established learning outcomes that are expected of the student. These are crafted carefully and serve as the foundation on which a well-designed course is built. Every aspect of the academic course (including readings, research, assignments, and projects) flow from the course student learning outcomes. Understanding these will provide a better understanding of what is expected of you, the student, in all aspects of the course.

***Communication in the Course.*** The majority, if not all of the communication in an online course will be by written word; therefore, be prepared talk by typing. There will be discussion boards, written and oral assignments/projects, etc. E-mail will be the common mode of communication in this type of course. This is different than the typical face-to-face course where verbal communication is prevalent. Be prepared to read and write a “great amount.”

***Be Proactive and Take Responsibility for Your Grade.*** If you have course-related questions or do not understand an assignment, it is your responsibility to contact your instructor (presumably through university e-mail). Do not wait until your grade is in jeopardy to act. Your instructor is there to guide you through the course. However, your questions should be serious, well-written, positive, and to the point.

***Establish a Regular Schedule.*** It is a good habit to work on your course every day. Your course requires you to spend at least twelve (12) hours per week reading, researching, and/or writing. It is not wise or effective to wait until the assignment or project is due to begin—your grade will

suffer. Time management, planning ahead, and organization are the keys to success in any academic course.

## **GRADING**

### **Grading Element Summary**

Assignments	5% X 8 = 40%
Midterm	20%
Report	20%
Final	20%
TOTAL	100%

A = 90%-100%

B = 80%-89%

C = 70%-79%

D = 60%-69%

F = 59% or Below

### **Maximizing Your Grade**

In this class, you are preparing yourself to be a respected professional in a real world environment. Consequently, you should take advantage of this opportunity and conduct yourself in a manner consistent with that as would be expected by business managers and executives.

The assignments for this course of study are provided in this class syllabus. ***You are responsible for turning in your assignments on-time. In the real world, your boss would not be sending you reminders to get your work done on time and I will not be either! If you have questions about any of the assignments, it is your responsibility to bring those questions to me in a timely manner. Special allowances will not be made for mismanagement of time!***

In the business world, ***attention to detail*** is critical. In this day of texting shortcuts and slang, you may not have placed a great deal of importance on spelling, grammar, or arithmetic calculation accuracy. But you can bet your boss will! These are the details that indicate a dedication to high professional standards and will separate you from others who lack these disciplines.

Consequently my grading rubric for written assignments contains three specific attributes: ❶ subject completeness, ❷ factoid accuracy, and ❸ proper paper formatting/language.

**Extra credit, additional work to improve a grade, or the re-doing of an assignment, reports, and/or examination will NOT be permitted in this course.**

*All work in this course is to be completed individually, without collaboration with others.*

Each student in this course of study agrees to accept and abide by the Academic Honesty Policy.

### **ASSIGNMENTS**

**All work in this course is to be completed individually. Refer to the section in this course syllabus on plagiarism. Each student in this course of study agrees to accept and abide by the Academic Honesty Policy (see “Academic Integrity”).**

As you read the textbook and conduct outside readings and literature searches, familiarize yourself with the requirements in the following assignments. Also, as you read, take notes of materials/key points that you may wish to include in your assignment response. Be sure to maintain the title, author, location, etc. of the sources of your research as you go. After you have read and thoroughly researched your source materials, review the assignment again and begin to organize your thoughts as to the most effective, complete, and yet *concise* way to organize your response while keeping the reader in mind. Write a draft first, then read, think, and make necessary revisions. Repeat this process as many times as you need in order to produce your best work. Be careful of formatting, word usage, spelling, and grammar and be sure to cite all of your sources, if applicable.

Additionally, I will be looking for evidence in your response that you read the textbook, conducted appropriate and extensive outside readings, and that you *understood* and were able to analyze the information you read for the benefit of your reader. *Use of extensive quotations without providing a paraphrase of the material does not indicate an appropriate level of personal understanding.* Give much attention to paper organization and write to your intended audience at a level they can understand. You may find it to be advantageous to ask a friend or relative not connected to the class to read your paper as a test to determine if it is written clearly! Use the Publication Manual of the American Psychological Association (APA) for all style and writing questions not addressed specifically in this course syllabus.

### **Turning In Course Work**

All course work will be turned in to your instructor via the associated D2L Brightspace assignment folder.

## **TECHNOLOGY REQUIREMENTS**

### **Technology Support**

#### **Browser Support**

D2L Brightspace is committed to performing key application testing when new browser versions are released. New and updated functionality is also tested against the latest version of supported browsers. However, due to the frequency of some browser releases, D2L Brightspace cannot guarantee that each browser version will perform as expected. If you encounter any issues with any of the browser versions listed in the tables below, contact D2L Brightspace Support, who will determine the best course of action for resolution. Reported issues are prioritized by supported browsers and then maintenance browsers.

Supported browsers are the latest or most recent browser versions that are tested against new versions of D2L Brightspace products. Customers can report problems and receive support for issues. For an optimal experience, D2L Brightspace recommends using supported browsers with D2L Brightspace products.

Maintenance browsers are older browser versions that are not tested extensively against new versions of D2L Brightspace products. Customers can still report problems and receive support for critical issues; however, D2L Brightspace does not guarantee all issues will be addressed. A maintenance browser becomes officially unsupported after one year.

Note the following:

- Ensure that your browser has JavaScript and Cookies enabled.
- For desktop systems, you must have Adobe Flash Player 10.1 or greater.
- The D2L Brightspace Support features are now optimized for production environments when using the Google Chrome, Apple Safari, Microsoft Edge, Microsoft Internet Explorer, and Mozilla Firefox browsers.

#### **Desktop Support**

<b>Browser</b>	<b>Supported Browser Version(s)</b>	<b>Maintenance Browser Version(s)</b>
Microsoft® Edge	Latest	N/A
Microsoft® Internet Explorer®	N/A	11
Mozilla® Firefox®	Latest, ESR	N/A
Google® Chrome™	Latest	N/A
Apple® Safari®	Latest	N/A

**Tablet and Mobile Support**

<b>Device</b>	<b>Operating System</b>	<b>Browser</b>	<b>Supported Browser Version(s)</b>
Android™	Android 4.4+	Chrome	Latest
Apple	iOS®	Safari, Chrome	The current major version of iOS (the latest minor or <b>point</b> release of that major version) and the previous major version of iOS (the latest minor or <b>point</b> release of that major version). For example, as of June 7, 2017, D2L Brightspace supports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version.  Chrome: Latest version for the iOS browser.
Windows-based	Windows 10	Edge, Chrome, Firefox	Latest of all browsers, and Firefox ESR.

**Basic Technology Requirements****LMS**

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

<https://community.brightspace.com/s/article/Brightspace-Platform-Requirements>

LMS Browser Support:

[https://documentation.brightspace.com/EN/brightspace/requirements/all/browser\\_support.htm](https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm)

Zoom Video Conferencing Tool

[https://inside.tamuc.edu/campuslife/CampusServices/CITESupportCenter/Zoom\\_Account.aspx?source=universalmenu](https://inside.tamuc.edu/campuslife/CampusServices/CITESupportCenter/Zoom_Account.aspx?source=universalmenu)

**ACCESS AND NAVIGATION**

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or [helpdesk@tamuc.edu](mailto:helpdesk@tamuc.edu).



**Note:** Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

## **COMMUNICATION AND SUPPORT**

### **D2L Brightspace Support**

#### **Student Support**

If you have any questions or are having difficulties with the course material, please contact your Instructor.

#### **Technical Support**

If you are having technical difficulty with any part of D2L Brightspace, please contact D2L Brightspace Technical Support at 1-877-325-7778 or click on the **Live Chat** or click on the words “[click here](#)” to submit an issue via E-mail.



#### **System Maintenance**

Please note that on the 4th Sunday of each month there will be System Maintenance which means the system will not be available 12 pm-6 am CST.

### **Assistance Through *The Writing Center***

The Writing Center at Texas A&M University is committed to assisting student writers at all levels. The Writing Center is located on-campus in the Hall of Languages Building, Room 103. The hours of operation are Monday through Thursday from 9:00 a.m. until 4:00 p.m. and on Friday from 9:00 a.m. until 1:00 p.m. There is also an Online Writing Lab, accessed by sending an e-mail to: [writing.tamuc@gmail.com](mailto:writing.tamuc@gmail.com)

### **Interaction with Instructor Statement**

- Correspondence with your instructor in this course will be done via e-mail or during office hours.

## **COURSE AND UNIVERSITY PROCEDURES/POLICIES**

### **Course Specific Procedures/Policies**

This class will operate according to the following policies to ensure fairness and equal treatment to all students:

- Work, vacation, travel, and sickness/accident/death outside your immediate family do NOT constitute approved excuse for failing to complete assignments and/or meeting course deadlines and due dates.
- If you find it necessary to miss a deadline/due date and you believe you have a valid reason that meets university guidelines and course policy, notify the instructor immediately in writing!

- Grading policies and requirements identified in this course syllabus are non-negotiable and will be adhered to in this course of study with all students held to an identical and equal standard.
- If you do not agree with any requirement herein, believe any requirement to be “unfair” or “unreasonable,” or believe that less should be expected of you than your classmates in order to earn a comparable course grade, you should WITHDRAW IMMEDIATELY from this course and re-evaluate your dedication to the principle of academic integrity and success!
- Grades earned in this course will be based on a numerical value and the final course grade will be recorded/posted as a letter grade (see “Grading Scale”).
- Numerical scores that determine the final course grade will not be rounded-up.

**NOTICE:** If you are not willing to devote the time and effort necessary for the successful completion of this course or if you do not have the prerequisite knowledge/skills to successfully complete this course, you need to discuss this matter with your academic advisor immediately.

**Civility is the rule at all times!**

### **Syllabus Change Policy**

This syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

### **University Specific Procedures**

#### **Student Conduct**

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the [Student Guidebook](http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx).  
<http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: [Netiquette](http://www.albion.com/netiquette/corerules.html)  
<http://www.albion.com/netiquette/corerules.html>

#### **TAMUC Attendance**

For more information about the attendance policy please visit the [Attendance](http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx) webpage and [Procedure 13.99.99.R0.01](http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx).  
<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf>

## Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

[Undergraduate Academic Dishonesty 13.99.99.R0.03](#)

### *Plagiarism*

United States law recognizes that words and ideas have value and can be stolen. The expression of original ideas is considered intellectual property and is protected by copyright laws. Almost all forms of expression fall under copyright protection as long as they are recorded in some way (such as a book, article, musical composition, or computer file).

All of the following are considered examples of plagiarism:

- Turning in someone else's work as your own.
- Copying words and/or ideas from someone else without giving proper credit (references).
- Failing to put a quotation in quotation marks.
- Providing incorrect information about the source of a quotation or information source.
- Changing words, but copying the sentence structure of a source without giving proper credit.
- Copying so many words or ideas from a source that it makes up the majority of the work you have written, whether you give credit or not.

Be aware that your instructor will be actively looking for all occurrences of plagiarism and, when caught, the results may be devastating to your academic career (see "Academic Integrity"). To avoid plagiarism, a student must give credit whenever they:

- use another individual's idea, opinion, or theory;
- use facts, statistics, graphs, and drawings that are not common knowledge;
- use quotations of another individual's spoken or written words; or
- paraphrase another individual's spoken or written words.

Any works referenced should be properly cited in accordance with the APA 7th edition Publication Manual. *Turnitin*, or other similar plagiarism verification services, may be utilized to verify the absence of or presence of plagiarism in any or all student assignments, projects, and examinations or other coursework. In most cases plagiarism can be avoided by citing sources correctly. Simply acknowledging that certain material has been borrowed, and providing your audience with the necessary information to locate that source is usually enough to avoid a plagiarism charge.

***Plagiarized assignments, reports, and examinations will receive a grade of F with zero (0) points***

### *Collaboration*

All work in this course is to be completed individually (except reports), without collaboration from others.

### ***Use of Outside Sources for Written Work, Papers, and Assignments***

In this course, if it is determined that a student used paid services to obtain previously written work, have the service write course papers, or prepare course assignments, that student will receive a failing grade (0 points) on the work in question. In addition, the student may be subject to recourse according to University policy (see “Academic Integrity”).

This type of practice is unethical and is not in keeping with the established tenets of obtaining a higher education degree. ***Zero tolerance applies to this policy!***

## **Student Counseling Services**

**The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center’s crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit [www.tamuc.edu/counsel](http://www.tamuc.edu/counsel).**

## **ADA Statement**

### **Students with Disabilities**

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 have a disability requiring an accommodation, please contact:

### **Office of Student Disability Resources and Services**

Texas A&M University-Commerce  
Gee Library- Room 162  
Phone (903) 886-5150 or (903) 886-5835  
Fax (903) 468-8148

E-mail: [studentdisabilityservices@tamuc.edu](mailto:studentdisabilityservices@tamuc.edu)

Website: [Office of Student Disability Resources and Services](http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/)

<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

## **Nondiscrimination Notice**

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

### Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Web URL:

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

### COURSE CALENDAR

WEEK	TOPICS
1	Chapter 1
2	Chapter 2
3	Chapter 3
4	Chapter 3
5	Chapter 4
6	Chapter 4
7	<b>Exam 1 and Report 1 Due</b>
8	Chapter 5
9	Chapter 6
10	Chapter 6
11	Chapter 7
12	Chapter 7
13	Chapter 8
14	<b>Chapter 8</b> Thanksgiving holiday (NO CLASS on November 28)
15	<b>Exam 2 and Report 2 Due</b>

*Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.*

*Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).*

*Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors' guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.*

*In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.*