



MGT 577:01W: SIX SIGMA Summer I Semester, 2020
6/1/2020 – 7/2/2020 - Online

Professor Information

Professor: Dr. Mildred Golden Pryor, TAMU Regent Professor and TAMUC Management Professor

Office Location: McDowell (Business Building) BA 333

Office Hours: None during TAMU closure because of Pandemic – Normal office hours are Tuesday and Thursday 2-5 p.m. (Commerce, Texas Campus) and by Appointment

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Preferred Form of Communication: email

Course Information

Materials – Textbooks, Readings, Supplementary Readings

Textbook(s) and additional reading material are provided

Software Required: Excel, Power Point, Word, SAP S/4 HANA (download link provided)

Optional Texts and/or Materials: none

Course Description and Objectives

This course introduces the concepts, principles, problems, and practices of Six Sigma. Emphasis is on learning the DMAIC process and how it applies to process improvement. Topics include defining the problem, measuring outcomes, analyzing data, improving the process, and controlling the process. After completing this course, students should understand and be able to apply:

- Quality management in organizations and how quality management and Six-Sigma facilitate organizational effectiveness and efficiency.
- Steps in the Six Sigma process.
- The various tools used to analyze data.
- The importance of improving processes based on data collection and analysis.
- The importance of documenting and controlling processes after they have been changed/improved.
- The roles of Six Sigma personnel as they function as Six Sigma specialists.

Students learn continuous improvement philosophies and methodologies. The focus is on the continuous improvement of processes, relationships, products and services. Students completing this course will be able to establish and improve process baselines in educational institutions, engineering and manufacturing organizations, health care facilities, financial institutions, governmental agencies, and service organizations. Examples of process baselines are safety, customer satisfaction, quality, cycle time, and on-time delivery. **NOTE: The syllabus/schedule are subject to change.**

Course Requirements

Course Objectives and Measurements

| Objectives - After successfully completing this course, students will be able to: | Measurements (Outcome Assessments) Objectives will be measured as follows: |
|---|--|
| 1. Understand Quality Management and Six Sigma from a strategic, systems viewpoint and integrate continuous improvement as a part of the strategic management of their respective organizations, thus moving the organizations to Strategic Quality Management (SQM). | Evaluation of: (1) Team Strategic Plan (2) Team Charter (3) Improvement Plan (4) Final Report (5) Final Exam |
| 2. Use Quality philosophies and tools (including Six Sigma) in their personal and professional lives. This will have a positive impact on them individually & as members of work teams, families & society. | Evaluation of: (1) Measuring and Analyzing Data Exercise (2) Six Sigma Project Analysis |
| 3. Design an SQM/TQM/Six Sigma implementation plan and build the infrastructure to make it work. This includes everything in the course description and course objectives. | Evaluation of: (1) Team Charter (2) Six Sigma Project Analysis (3) Improvement Plan and Final Report (4) SQM Implementation Plan |
| 4. Use SAP as a tool to help manage and control quality. | Evaluation of: (1) SAP tasks and (2) SAP Case Analysis. |

Minimal Technical Skills Needed

Using the D2L learning management system, using Microsoft Word, Excel, and PowerPoint and SAP R3 software. For the SAP R3 Software, more information will be provided.

Instructional Methods

This course is delivered in an online format. You will find the majority of the information and materials that you will need to complete the course in this syllabus and on the D2L course management website. However, Live Lessons will be held periodically to allow students to OPTIONALLY log in and be involved in live discussion. These sessions will be recorded and available to all students.

SAP Tasks

These tasks allow you to get familiar with using SAP software and count as one of the courses needed to obtain the SAP Student Recognition Award. You must complete three courses with the SAP component to receive the SAP Student Recognition Award. Your grade for these assignments is based on the percentage of the Case Study Steps that you complete. Students that want to omit the SAP component of this course must inform the professor within 3 weeks if they want to be excluded from the SAP Student Recognition Award. Students must be able to download a copy of the SAP client onto their computer to be able to complete these assignments.

Student Responsibilities or Tips for Success in the Course

There is a combination of team and individual tasks required for this course. In addition, there are several graded assignments that will require you to log in regularly into D2L. Participation is expected and required.

Grading

| | Assignments | Type | Value | % of Final Grade |
|---|---|-------------|--------------|-------------------------|
| 1 | Team Strategic Plan | Team | 100 | 10% |
| 2 | SAP activities and SAP Case | Individual | 100 | 10% |
| 3 | Project Charter and Defining the Problem Project | Team | 100 | 10% |
| 4 | Measuring and Analyzing Data Exercise | Individual | 100 | 10% |
| 5 | Project Measurement & Analysis – Six Sigma | Individual | 100 | 10% |
| 6 | Improvement Plan and Final Report | Team | 100 | 10% |
| 7 | SQM Implementation Plan/mid-term exam (Organization-Wide Plan) | Team | 100 | 20% |
| 8 | Team Final Exam | Individual | 100 | 20% |

Strategic Quality Management Implementation Plan

This SQM plan may be for any organization for which one of the team member's work. This is an organization-wide plan for the implementation of a Strategic Quality Management Initiative. Citations are not required. Double space. Use 1-inch margins, 12-point font, and Times New Roman font. NO title page. Put your name in the upper right corner of the first page of the plan. Approximate length is 10 pages (appendices extra).

Final Exam

The final exam will be a cumulative review of your knowledge about Six Sigma and Quality Management. The test will be open book and open note.

Assessments and Assignments

1. Submitted assignments must be correctly formatted and free of grammatical and stylistic errors. Students should have some skill with software for word processing, spreadsheets, databases, graphics, and presentations as well as with web browsers and search engines. Spelling and grammatical errors will negatively impact your grade.
2. Assignments must be submitted on time. Assignments are due at the date and time listed. All work and assignments for the entire course will be available on the first day of class. While the syllabus designates specific dates for which work is assigned, you do not have to wait until the assigned date to submit it. You can work at your own pace as long as you submit assignments on or ahead of assignment due dates. You will have until 11:30 p.m. CST on assignment due date to submit work.

Technology Requirements

Browser Support

D2L 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 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 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 products. Customers can report problems and receive support for issues. For an optimal experience, D2L recommends using supported browsers with D2L products.

Maintenance browsers are older browser versions that are not tested extensively against new versions of D2L products. Customers can still report problems and receive support for critical issues; however, D2L 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 Brightspace Support features are now optimized for production environments when using the Google Chrome browser, Apple Safari browser, Microsoft Edge browser, Microsoft Internet Explorer browser, and Mozilla Firefox browsers.

Desktop Support

| Browser | Supported Browser Version(s) | Maintenance Browser Version(s) |
|-------------------------------|------------------------------|--------------------------------|
| 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

| Device | Operating System | Browser | Supported Browser Version(s) |
|----------|------------------|----------------|--|
| Android™ | Android 4.4+ | Chrome | Latest |
| Apple | iOS® | Safari, Chrome | The current major version of iOS (the latest minor or point release of that major version) and the previous major version of iOS (the latest minor or point release of that major version). For example, as of June 7, 2017, D2L supports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version. |

| Device | Operating System | Browser | Supported Browser Version(s) |
|---------|------------------|-----------------------|---|
| | | | Chrome: Latest version for the iOS browser. |
| Windows | Windows 10 | Edge, Chrome, Firefox | Latest of all browsers, and Firefox ESR. |

- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
 - 512 MB of RAM, 1 GB or more preferred
 - Broadband connection required courses are heavily video intensive
 - Video display capable of high-color 16-bit display 1024 x 768 or higher resolution
- You must have a:
 - Sound card, which is usually integrated into your desktop or laptop computer
 - Speakers or headphones.
 - *For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.
- Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: [JAVA web site](http://www.java.com/en/download/manual.jsp)
<http://www.java.com/en/download/manual.jsp>
- Current anti-virus software must be installed and kept up to date.

Running the browser check will ensure your internet browser is supported.

Pop-ups are allowed.
JavaScript is enabled.
Cookies are enabled.

- You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:
 - [Adobe Reader](https://get.adobe.com/reader/) <https://get.adobe.com/reader/>
 - [Adobe Flash Player](https://get.adobe.com/flashplayer/) (version 17 or later) <https://get.adobe.com/flashplayer/>
 - [Adobe Shockwave Player](https://get.adobe.com/shockwave/) <https://get.adobe.com/shockwave/>
 - [Apple Quick Time](http://www.apple.com/quicktime/download/) <http://www.apple.com/quicktime/download/>
- At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.

- You will also need access to SAP S/4 HANA software which you can obtain through a free download to your own computer or by using the computer lab computers which have SAP loaded on them. [More information will be provided.](#)

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.

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

Brightspace Support

Need Help?

Student Support

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

Technical Support

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



please
Live

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.

Interaction with Professor Statement

I will make every effort to return your weekly decision results in a few days if all are submitted when due. The remaining assignments usually take about a week to return since they are so extensive.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

You are expected to be an active participant in the group simulation decisions. Your participation will be evaluated by your team mates, so please make an effort to learn the material and contribute to the group. There will be no Extra Credit opportunities, so do your best every time.

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the professor 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>

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](#) webpage and [Procedure 13.99.99.R0.01](#).

<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](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

[Graduate Student Academic Dishonesty 13.99.99.R0.10](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf>

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

Email: 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 OUTLINE / CALENDAR

| DATES (MONDAYS) | WORK ASSIGNED: READINGS, ASSIGNMENTS, & EXAMS | WORK DUE: |
|--------------------|---|--|
| First June 1 | Read Academic Honesty Policy and note in Virtual Office “I have read the Academic Honesty Policy (Ethics Statement) and will comply with it.” Read Syllabus daily. Understand assignments. | Honesty Policy (Ethics) Statement Due on or before June 6 Required by College of Business |
| First | Module 1 - Introduction to Quality Management | **Start Work on SQM Plan 6/9 Due 6/28 |
| First | Module 2 – Defining the Problem | Team Strategic Plan Due 6/8 |
| Second June 8 | Module 3 – Developing a Project Charter | Brainstorming (Kaizen?) Defining the Problem |
| Second | Module 3 – Developing a Project Charter (Team) | Project Charter due 6/13 |
| Second | Module 4 – Measuring and Analyzing Data (Individual) | Measuring and analyzing data project due 6/17 |
| Second | Module 5 – QM Tools (SAP) (Individual) | SAP Navigation – Submit Screen Shot See Modules 5,8 – Due 6/20 |
| Third June 15 | Module 5 – QM Tools (SAP) (Individual) | You may complete SAP Case Study Modules 5 & 8 – Due 6/20 – 6/24 |
| Third | Module 6 – Improving the Process | Six Sigma Project Analysis due 6/27 Six Sigma = Individual |
| Third | Module 6 – Improving the Process | Brainstorming (Kaizen?) |
| Fourth June 22 | Module 7 – Controlling the Process | Team Improvement Plan due 6/29 |
| Fourth | Module 7 – Controlling the Process | Team Final Report due 6/29 |
| Fourth | Modules 8, 9 – SAP Case Study (Individual) | SAP Case Study Due 6/20 – 6/24 |
| Fourth | **Strategic Quality Management (and Six Sigma) Implementation Plan – Implementation for a whole organization in any industry. Team chooses organization. This assignment needs to be started at the beginning of Summer I, 2020. | Strategic Quality Management (and Six Sigma) Implementation Plan Due 6/28 |
| June 29 | Final Exam (Individual) | Final Exam Due on or before June 30 @ 11:30 p.m. |
| July 2 | Last Class Day | |

ClassLive (YouSeeU) Sessions are tentatively scheduled for June 8, 15, 22 at 7 p.m.