

Zero Harm Quality and Performance Management in Healthcare

MANA 7322

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Wednesdays 18:00-21:00

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Course Objectives

1. Appreciate the quality challenges faced in the complex and dynamic healthcare industry.
2. Gain an understanding of the tools and techniques used to assess and improve quality in healthcare.
3. Learn how to create a culture of quality in a high reliability organization.

Course Description

The healthcare system in the United States is massive, complex, and dysfunctional. A key issue in healthcare is to improve quality. A recent study concluded that nearly 700 patients died every day from avoidable errors in healthcare. However, improving quality goes beyond providing a safe place for patient care – it includes getting the best outcomes in an environment that fully meets patient expectations.

This course will serve as an introduction to students interested in improving quality in healthcare organizations and more generally, for any student who wants a better understanding of how to set and achieve quality goals in a complex industry.

After achieving an understanding of the quality challenges facing healthcare, we will study tools, methods, and applications to improve quality. Next, we will turn to creating a culture of quality in a high reliability industry. We will be significantly focusing on the application of Lean Six Sigma principles to the practice of healthcare. Finally, we will review some emerging trends in the constant challenge to improve the way we care for patients.

Required Textbook

Health Care Quality Management: Tools and Applications, Thomas Ross

Lean Six Sigma for Hospitals, 2nd Edition, Jay Arthur

Course Structure

Our class will online meet for fourteen weeks on Wednesday evenings. Check the Sessions section below to make sure you are prepared for online discussions of scheduled readings and assignments, and to make sure that all assignments are turned in timely.

Grading

The final grade for this class depends on the following five components.

1. Ross Questions – 50% of Grade

Group project. There will be a Homework problem set for many of the Modules from the Ross textbook. Please complete each homework assignment, double spaced using Times New Roman 11 font, and/or Excel and submit as a pdf by email to me (ejkroger@gmail.com). Include the title of the homework, your name, and your student ID number at the top of the page. You do not need to repeat the questions asked, just indicate the subpart you are answering by use of 1., 2., etc. Please see the schedule for Homework due dates. Please refer to the Homework Assignments, Appendix A, for specifics.

2. Arthur Questions - 50% of Grade

Individual project. You will be assigned Questions from the Arthur textbook to ensure your understanding of Lean Six Sigma principles. Please complete each homework assignment, maximum five pages, double spaced, using Times New Roman 11 font, and submit as a pdf by email to me (ejkroger@gmail.com). Include the title of the homework, your name, and your student ID number at the top of the page. You do not need to repeat the questions asked, just indicate the subpart you are answering by use of 1., 2., etc. Please see the schedule for Homework due dates. Please refer to the Homework Assignments, Appendix B, for specifics.

3. Class Participation – Bonus

I will use participation during our weekly sessions as a potential curve. Please note that I will frequently call on you for your input or opinions, so be prepared. Please review Appendix C for details.

Excused Absence Policy

Regular class attendance, participation, and engagement in coursework are important contributors to student success. Absences may be excused as provided in the University of Houston Graduate Excused Absence Policy for reasons including: medical illness of student or close relative, death of a close family member, legal or government proceeding that a student is obligated to attend, recognized professional and educational activities where the student is presenting, and University-sponsored activity or athletic competition. Additional policies address absences related to military service, religious holy days, pregnancy and related conditions, and disability.

Recording of Class

Students may not record all or part of class, livestream all or part of class, or make/distribute screen captures, without advanced written consent of the instructor. If you have or think you may have a disability such that you need to record class-related activities, please contact the Center for Students with Disabilities. If you have an accommodation to record class-related activities, those recordings may not be shared with any other student, whether in this course or not, or with any other person or on any other platform. Classes may be recorded by the instructor. Students may use instructor's recordings for their own studying and notetaking. Instructor's recordings are not authorized to be shared with anyone without the prior written approval of the instructor. Failure to comply with requirements regarding recordings will result in a disciplinary referral to the Dean of Students Office and may result in disciplinary action.

Syllabus Changes

Please note that the instructor may need to make modifications to the course syllabus and may do so at any time. Notice of such changes will be announced as quickly as possible.

Resources for Online Learning

The University of Houston is committed to student success and provides information to optimize the online learning experience through our Power-On website. Please visit this website for a comprehensive set of resources, tools, and tips including obtaining access to the internet, AccessUH, and Blackboard; requesting a laptop through the Laptop Loaner Program; using your smartphone as a webcam; and downloading Microsoft Office 365 at no cost. For questions or assistance contact UHonline@uh.edu.

UH Email

Email communications related to this course will be sent to your Exchange email account which each University of Houston student receives. The Exchange mail server can be accessed via Outlook, which provides a single location for organizing and managing day-to-day information, from email and calendars to contacts and task lists. Exchange email accounts can be accessed by logging into Office 365 with your CougarNet credentials or through Access UH. They can also be configured on IOS and Android mobile devices. Additional assistance can be found at the Get Help page.

Webcams

Access to a webcam is required for students participating remotely in this course. Webcams must be turned on (video unmuted) during all live course meetings to enable our discussions.

Honor Code Statement

Students must abide by an honor code as part of their submission of any graded work including but not limited to projects, quizzes, and exams: "I understand and agree to abide by the provisions in the Houston Graduate Academic Honesty Policy. I understand that academic honesty is taken very seriously, and, in the cases of violations, penalties may include suspension or expulsion from the University of Houston."

Synchronous Online Courses

This course is being offered in the synchronous online format. Synchronous online class meetings will take place according to the class schedule. In between synchronous class meetings, there may also be asynchronous activities to complete (e.g., discussion forums and assignments). An alternative assessment will be used in the place of the traditional final exam at the course conclusion. Instructions will be provided, including the date and time that the assessment materials will be released to the class and will be due, resources and collaborations that are allowed and disallowed in the process of completing the assessment, procedures to follow if connectivity or other resource obstacles are encountered during the assessment period, acceptable submission formats, and submission location.

Helpful Information

COVID-19 Updates: <https://uh.edu/covid-19/>

Coogs Care: <https://www.uh.edu/dsaes/coogscare/>

Laptop Checkout Requests: <https://www.uh.edu/infotech/about/planning/off-campus/index.php#do-you-need-a-laptop>

Health FAQs: <https://uh.edu/covid-19/fag/health-wellness-prevention-fags/>

Student Health Center: <https://uh.edu/class/english/lcc/current-students/student-health-center/index.php>

Professor Evaluation

The C.T. Bauer College of Business has a policy for its instructors to be evaluated by students to provide feedback on how their teaching performance can be improved. I strongly encourage you to participate in the evaluation process. I am available throughout the course to receive any informal input. I rely on your input to improve the class each time I teach it.

Disability-Based Accommodations

The C.T. Bauer College of Business would like to help students who have disabilities achieve their highest potential. To this end, students must register with the Center for Students with Disabilities (CSD) (Telephone 713-743-5400) It is the mission of the Disability Resource Center (DRC) to be committed to providing access to the educational environment for students. Students who may need accommodations should contact the DRC to discuss their needs and begin the registration process.

Sessions

Week One

Reading	Ross Chp 1 Quality in Health Care Arthur Chp 1 A Faster Hospital in Five Days
Assignments	Arthur, See Appendix B Due prior to Class
Class	Discussion of Readings and Assignments

Week Two

Reading	Ross Chp 2 Error and Validation Arthur Chp 2 Lean for Accelerated Patient Flow
Assignments	Arthur, See Appendix B Due prior to Class
Class	Discussion of Readings and Assignments

Week Three

Reading	Ross Chp 3 Regulating the Quality and Quantity of Health Care Arthur Chp 3 Simple Steps for a Better Hospital
Assignments	Ross Chp 3, Problems 1-4 Arthur, See Appendix B Due prior to Class
Class	Discussion of Readings and Assignments

Week Four

Reading	Ross Chp 4 Process Analysis Tools Arthur Chp 4 Reducing Defects with Six Sigma
Assignments	Ross Chp 4, Problems 1-9 Arthur, See Appendix B Due prior to Class
Class	Discussion of Readings and Assignments

Week Five

Reading	Ross Chp 5 Root Cause Analysis Arthur Chp 5 Simple Steps to a Cheaper (More Profitable) Hospital
Assignments	Ross Chp 5, Problems 1-5 Arthur, See Appendix B Due prior to Class
Class	Discussion of Readings and Assignments

Week Six

Reading	Ross Chp 6 Statistical Process Control for Monitoring System Performance Arthur Chp 6 Six Sigma for Hospitals
Assignments	Ross Chp 6, Problems 1-5 Arthur, See Appendix B Due prior to Class
Class	Discussion of Readings and Assignments

Week Seven

Reading	Ross Chp 7 Statistical Process Control for Monitoring Failure Rates Arthur Chp 7 Excel Power Tools for Six Sigma
Assignments	Ross Chp 7, Problems 1-5 Arthur, See Appendix B Due prior to Class
Class	Discussion of Readings and Assignments

Week Eight

Reading	Ross Chp 8 Statistical Process Control for Monitoring Nonconformities Arthur Chp 8 Is there an Improvement Project in My Data
Assignments	Ross Chp 8, Problems 1-5 Arthur, See Appendix B Due prior to Class
Class	Discussion of Readings and Assignments

Week Nine

Reading	Ross Chp 9 Exploring Quality Issues with Statistical Tools Arthur Chp 9 Sustaining Improvement
Assignments	Ross Chp 9, Problems 1-10 Arthur, See Appendix B Due prior to Class
Class	Discussion of Readings and Assignments

Week Ten

Reading	Ross Chp 10 Failure Mode and Effects Analysis Arthur Chp 10 Laser-Focused Process Innovation
Assignments	Ross Chp 10, Problems 1-4 Arthur, See Appendix B Due prior to Class
Class	Discussion of Readings and Assignments

Week Eleven

Reading	Ross Chp 11 Practice Policies Arthur Chp 11 Statistical Tools for Lean Six Sigma
Assignments	Ross Chp 11, Problems Arthur, See Appendix B Due prior to Class
Class	Discussion of Readings and Assignments

Week Twelve

Reading	Ross Chp 12 Case44, Disease and Outcomes Management Arthur Chp 12 Change Management
Assignments	Arthur, See Appendix B Due prior to Class
Class	Discussion of Readings and Assignments

Week Thirteen

Reading	Ross Chp 13 Profiling, Economic Credentialing, and Risk Adjustment Arthur Chp 13 Theory of Constraints
Assignments	Arthur, See Appendix B Due prior to Class
Class	Discussion of Readings and Assignments

Week Fourteen

Reading	Ross Chp 14 Benchmarking and Implementation Ross Chp 15 The Future of Quality Management in Healthcare Arthur Chp 14 Implementing Lean Sig Sigma in Hospitals
Assignments	Arthur, See Appendix B Due prior to Class
Class	Discussion of Readings and Assignments

Appendix A Ross Textbook Assignments

The Ross problem sets, **and other resources can be found here:**

[Ross: Health Care Quality Management: Tools and Applications - Instructor Companion Site \(wiley.com\)](http://wiley.com)

This should be the starting point for any assigned Ross Homework assignments.

Appendix B Arthur Textbook Assignments

These assignments are To Be Decided.

Appendix C Live Session Expectations

**PLEASE BE PREPARED TO BE CALLED ON DURING CLASS – IT IS EXPECTED THAT
YOU HAVE READ AND ARE FAMILIAR WITH ASSIGNED READINGS AND CASES**

High/Above-Average Contributions Assessment Criteria:

- Contributions reflect thorough or exceptional preparation.
- Ideas offered are usually or always substantive, provide one or more significant insights and provide above average or highly productive direction for discussion among classmates.
- Challenges to the ideas of others, including authors of assigned readings, are well-substantiated and often or always presented persuasively.
- If this person were not present in our class sessions, the quality of discussion would be diminished markedly.

Medium/Average Contributions Assessment Criteria:

- Contributions reflect satisfactory preparation.
- Ideas offered are sometimes substantive, provide generally useful insights but seldom offer new and substantive direction for discussion among fellow classmates.
- Challenges to the ideas of others, including authors of assigned readings, are sometimes well-substantiated and sometimes presented persuasively.
- If this person were not present in our class sessions, the quality of discussion would be diminished.

Low/Below-Ave Contributions Assessment Criteria:

- Contributions reflect inadequate preparation.
- Ideas offered are seldom substantive, provide few, if any, insights and, at times, take the classroom discussion in an unproductive, insightful direction.
- Integrative comments and effective challenges are rare or absent.
- If this person were not present in our class sessions, the quality of discussion would not be changed or might improve.