



SYLLABUS – SPRING 2025

COURSE NUMBER	TEHC 5328.001	
COURSE TITLE	Topics in Tech. Programs “Lean Six Sigma Green Belt Healthcare Professional Certification”	
INSTRUCTORS	Dr. Mark R. Miller	Dr. Heshium R. Lawrence
EMAIL	mmiller@uttyler.edu	hlawrence@uttyler.edu
PHONE	903-566-7186	903-566-7331
OFFICE HOURS	M-R 11am - noon / By Appointment	
CLASS MEETINGS	Ref. EMBA-HCM Cohort Schedule	

I. COURSE OVERVIEW

A study of the Lean and Six Sigma methodologies as they relate to healthcare settings to improve patient satisfaction and deliver bottom line results. The five phases of the DMAIC approach will also be covered as well as the quality tools that can be used in a healthcare workplace.

II. CATALOG DESCRIPTION

<https://uttyler.smartcatalogiq.com/en/2024-2025/catalog/courses/tech-technology/5000/tech-5328/>

III. REQUIRED TEXT

N/A

IV. STUDENT LEARNING OUTCOMES

At the end of this course, students will be able to:

1. Create current and future state maps.
2. Identify and use lean tools to eliminate waste in healthcare.
3. Identify the various types of six sigma statistical tools for reducing variation.
4. Use various lean tools to increase flow and improve productivity in healthcare.
5. Apply the DMAIC process to projects that will solve problems in healthcare.
6. Implement lean and six sigma healthcare tools in appropriate settings.

V. STUDENT LEARNING OUTCOMES

1. Understand the importance and use of lean and six sigma methodologies in healthcare.
2. Implement cost saving measures derived from implementing lean and six sigma tools.
3. Identify waste and needless variation in the workplace.
4. Examine how to continuously improve the work environment in a healthcare setting.



VI. SOULES COLLEGE OF BUSINESS MISSION/CORE VALUES

Mission

The Soules College of Business pursues excellence in business education by engaging our learners, faculty, industry, and community members. We cultivate and deliver innovative undergraduate and graduate programs to foster the success of our learners and stimulate impactful faculty research. We prepare the next generation of leaders and professionals to pursue career opportunities in East Texas and beyond.

Core Values

We value the role that business plays in recognizing, responding to, and solving societal problems: quality education, gender equality, decent work and economic growth, reduced inequality, and industry, innovation and infrastructure.

We value existing and emerging industry standards and needs that make our learners competitive in the marketplace.

We hold ourselves to the highest ethical standards and responsibly manage the resources of the Soules College of Business.

We respect and value diversity in ideas, peoples, and cultures.

VII. GRADING POLICY

Grade Distribution	
Daily Quizzes	200
Assignments	100
Projects	200
Midterm exam	200
Class Participation/Attendance	100
Final Exam	100
TOTAL POINTS	1,000

Final Grades		
A	=	90% +
B	=	80% - 89%
C	=	70% - 79%
D	=	60% - 69%
F	=	<60%

NOTE: Points may change depending upon content covered.

Date of Final Exam: Monday, April 28 online

Date to Withdraw without Penalty: March 31

I. ATTENDANCE/WEEKEND MAKE-UP POLICY

The Executive MBA Healthcare Management program is a face-to-face weekend cohort model. It is expected that executive students are present face-to-face in COB 321 on the outlined weekends. In some cases, extenuating circumstances may warrant special accommodations to be made between the student and faculty member. Students are expected to contact and receive prior approval from the faculty member. Please refer to the specific course policy on attendance as outlined below.



Attendance is mandatory and will be taken at every scheduled class and laboratory period. No make-ups unless:

1. Organized university trip.
2. Illness or death in immediate family (mother, father, brother and/or sister).
3. Illness of student.
4. Approved work obligation.

To ensure the structure and integrity of the class sessions please ensure prior arrangements for any of the above-mentioned absences are made with the instructor in advance.

Late Work:

All work not turned in on time will have an automatic reduction in value to 50% of its full value. **Work that is not turned in by the next class will NOT be accepted.** Exceptions to this will be as per University Policy concerning absences from class. If you know an assignment will be late for a valid reason, inform your instructor in advance to avoid unnecessary penalty.

II. CONTENT

Lean Six Sigma Green Belt – Healthcare Professional Certification Course Agenda

MODULE	DATES	CONTENT
Module 1	Friday Jan. 24 th 5-9 pm	1. Introduction to Lean and Six Sigma a. History of Lean b. History of Six Sigma c. Importance of Lean Six Sigma
Module 2	Saturday Jan. 25 th 8-10 am	2. Current Healthcare Practices a. Quality in Healthcare b. Unsuccessful Lean Six Sigma implementation c. Lean Activity
Module 3	Saturday Feb. 8 th 10 am – 4 pm	3. Basic Six Sigma Tools a. Mean and variation b. XY Diagrams c. Control charts d. FMEA e. Process capability and stability
Module 4	Friday Feb. 21 st 5-9 pm	4. Basic Lean Tools a. 7 Wastes b. 6Ss c. 5 Whys
Module 5	Saturday Feb. 22 nd 8-10 am	5. Basic Lean Tools Continued a. Poka-Yoke b. Kaizen c. Kanbans and pull systems
Module 6	Saturday March 8 th 10 am – 4 pm	6. Implementing Lean Six Sigma Healthcare a. PDCA b. DMAIC
Module 7	Friday March 21 st 5-9 pm	7. Documenting Value and Non-Value Added Processes a. Determining value added and non-value added processes b. Current State Mapping



Module 8	Saturday March 22 nd 8-10 am	8 . Future State Mapping
Module 9	Saturday March 29 th 10 am – 4 pm	9. Lean Healthcare Integration a. Managing b. Sustaining
Module 10	Friday Apr. 11 th 5-9 pm	10. Lean Six Sigma Green Belt Certification Review and Wrap Up
Module 11	Saturday Apr. 12 th 8-10 am	11. Lean Six Sigma Green Belt Certification Final Exam

III. CALENDAR/ COHORT WEEKENDS

Schedule		COB 321	COB 255
Week	Date(s)	TECH 5328 LSSGB Healthcare Certification Mark Miller/Heshium Lawrence (co-teaching)	EMBA 5305 Decision Making in Healthcare Operations Management Venu Gopalakrishna-Remani
W1	24-Jan	5pm-9pm	
	25-Jan	8am-10am	10am-4pm
W2	7-Feb		5pm-9pm
	8-Feb	10am-4pm	8am-10am
W3	21-Feb	5pm-9pm	
	22-Feb	8am-10am	10am-4pm
W4	7-Mar		5pm-9pm
	8-Mar	10am-4pm	8am-10am
W5	21-Mar	5pm-9pm	
	22-Mar	8am-10am	10am-4pm
W6	28-Mar		5pm-9pm
	29-Mar	10am-4pm	8am-10am
W7	11-Apr	5pm-9pm	
	12-Apr	8am-10am	10am-4pm

IV. UNIVERSITY POLICIES

[Student Resources](#)