



Course Syllabus

Instructor Information:

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Office Hours:	OW 119, Monday – Thursday, Noon - 1:00 PM Pacific Time, or by appointment

Course Overview

Course Number:	MGT 461
Course Title:	Lean Six Sigma Management
Course Description:	Lean thinking as applied to production and service operations. Kaizen, kanban, pull systems, Error-proofing, value stream mapping and analysis. Standard work and layout improvement to streamline work content and achieve flow. Identifying sources of Muda and its elimination.
Pre- requisites:	BUS 215 (Principles of Management)
Credit Hours:	3.0 credits
Accreditation:	Individual courses cannot be accredited. Oregon Institute of Technology is accredited by the Northwest Commission on Colleges and Universities (NWCCU), an institutional accrediting body recognized by the Higher Education Coordination Commission and the Secretary of the U.S. Department of Education.

Course Objectives:

Upon completion of this course, the students should be able to:

- Describe the concepts of lean thinking, i.e., Value, Muda, Kaizen, TPM, pull production, efficiency.
- Develop plans to successfully implement lean projects following a step by step methodology;
- Use workplace layout techniques and estimating processes to plan, set up and maintain operational efficiencies;
- Apply LEAN continuous improvement tools and methodologies including value stream maps, 5s, quick change-over, standard work, pull systems and load balance diagrams.

Textbooks and Resources:

Required Textbook(s)/Materials:

Narrated & Printable lecture modules and selected articles on Canvas. There is no required textbook for this course.

Grading

Unless otherwise directed by the instructor, please submit all work through Canvas. Please do not submit work via email as it will not be accepted for grading. Assignments must be typed and professionally presented for full credit. Assignments submitted after the due date will be accepted with a minor reduction of 10% in grade for every week or part-of-week late. Late assignments will not be accepted after **midnight Monday of “dead week”**.

Class participation is vital for learning success. Participation is not graded per se, but takes the form of meaningful participation in discussion groups, asking questions and timely submittal of assignments.

Grading Policy	
Assignment	Points
Assignment 1	50
Assignment 2	50
Assignment 3	50
Assignment 4	50
Assignment 5	50
Assignment 6	50
Assignment 7	50
Assignment 8 (Project)	100
Midterm Exam	150
Final Exam	200
TOTAL:	800

Grade scale:

Points	Percentage	Grade
720 and above	90% and above	A
640 to 719	80 to 89%	B
560 to 639	70 to 79%	C
480 to 559	60 to 69%	D
479 and fewer	59% and below	F

Tentative Course Schedule

Week	Lecture Topics	Course Work / Assignments
Week 1	<ul style="list-style-type: none"> • Introduction to Lean • Waste and Value 	<ul style="list-style-type: none"> • Introduce yourself to the class via the Introduction Discussion Topic 1 • Read the articles for this module • View online narrated lecture Module 01 • Begin Assignment 1
Week 2	<ul style="list-style-type: none"> • Value Stream Maps • Load Balance Diagrams 	<ul style="list-style-type: none"> • Assignment #1 Due • View online narrated lecture Module 02 • Read the articles for this module • Begin Assignment 2
Week 3	<ul style="list-style-type: none"> • 5s • Visual Management 	<ul style="list-style-type: none"> • Assignment #2 Due • Read the articles for this module • View online narrated lecture Modules 03 and 04 • Begin Assignment 3
Week 4	<ul style="list-style-type: none"> • Poka-Yoke (Error Proofing) 	<ul style="list-style-type: none"> • Assignment #3 Due • Read the articles for this module • View online narrated lecture Module 05 • Begin Assignment 4
Week 5	<ul style="list-style-type: none"> • Quick Changeover (SMED) 	<ul style="list-style-type: none"> • Assignment #4 Due • Read the articles for this module • View online narrated lecture Module 06 • Begin Assignment 5
Week 6	<ul style="list-style-type: none"> • Layout Efficiency 	<ul style="list-style-type: none"> • Assignment #5 Due • Read the articles for this module • View online narrated lecture Module 07 • Begin Assignment 6 • Take the Midterm Exam After Module 07
Week 7	<ul style="list-style-type: none"> • Total Productive Maintenance 	<ul style="list-style-type: none"> • Assignment #6 Due • Read the articles for this module • View online narrated lecture Module 08 • Begin Assignment 7
Week 8	<ul style="list-style-type: none"> • Standard Work • Kaizen events 	<ul style="list-style-type: none"> • Assignment #7 Due • Read the articles for these modules • View online Module 09 • View online Module 10 • Begin Assignment 8 (Project)
Week 9	No Topic	No Assignment – complete week 8 content
Week 10 Dead week	Course Review	<ul style="list-style-type: none"> • Assignment #8 Due
Finals Week	Final Exam	Take the Final Exam before Midnight Tuesday of Finals Week.