Instructor: Hongyi Zhu Date: July 18, 2017

Session Information:

Instructor Status: Instructor
Course Name/Number: MIS 373

Lesson Topic: Lean Operations; Capacity Planning **Time & Place/Site:** 5 pm – 9: 45 pm, McClelland Hall 128

Number of students: 23

At this point in the semester, where are your students? What process can you use? At what level of challenge?

It is the second week of the accelerated evening undergraduate program. Students have basic understandings of operations management. They are getting familiar with my course organizations. In this topic, I will stick to my concept-example-calculation design. The challenge is that students are not familiar with the topic so my introduction should relate to their daily life. The calculation in this topic is slightly harder compared to those questions in the previous sessions. My explanation and illustration should be intuitive and clear.

Materials Needed:

- 1. Room equipment:
- 2. Integrated tools:
- 3. Other:

Instructional Objectives:

- 1. Recall concepts from previous classes
- 2. Distinguish Push and Pull strategies
- 3. Understand the supporting goal and the corresponding important elements of Lean Operations
- 4. Enumerate building blocks of Lean Operations
- 5. Calculate capacities and the measurements
- 6. Analyze optimal volume and alternatives using Cost-Volume analysis and Indifference Point analysis
- 7. Understand (dis)economies of scale

Session Schedule:

Time	Agenda Point	Teach from Objective(s)	Instructor - What I Do	Students - What They Do
5 – 5:30 pm	Review	•	Go through the MindMap for topic 2 based on students' reflections and submitted assignments	Recall concepts and their relations with the help of the Mind Map

5:30 – 6:10 pm	In-class quiz	#1	Distribute hard copy quiz	Use prior knowledge, mainly from last weeks' two sessions, to answer the questions.
6:15- 6:30 pm	Introduce Push/Pull strategies	#1 and #2	Recall 'Forecast' topic in the previous session. Introduce Push and Pull strategies based on their different philosophies towards market demand. Show a video to the students. Debrief the practice questions	Listen to the lecture Watch the video Answer in-class practice questions
6:30- 7:30 pm	Lean Operation	#3 and #4	Explain the hierarchy of Lean Operations' goals and building blocks. Show videos for elements in the Lean Operations building blocks. Debrief the practice questions	Listen to the lecture Watch the video Discuss in pairs to figure out some elements in the building blocks after the video Answer in-class practice questions
7:35- 8:15 pm	Strategic Capacity Planning	#4	Introduce the definition and measurements of capacity Explain tradeoffs in the capacity planning	Listen to the lecture Work in pairs on capacity measurement calculations
8:15- 9:30 pm	Optimal Capacity Calculation	#5	Illustrate capacity calculation and analysis on board Introduce BEP/Indifference Point Analysis Provide multiple exercise for student to enhance their understanding	Listen to the lecture Practice in-class exercises in pairs
9:30- 9:40 pm	(Dis)economics of scale	#6	Analyze examples of (dis)economics of scales Debrief the practice questions	Listen to the lecture Answer in-class practice questions
9:40- 9:45 pm	Summary / Closure	all	Revisit the Mind Map for Topic 3 and conclude the class	Submit reflection notes if they have any questions

Comments/Notes: