Syllabus – Ver 12a
Professor: Robert H. (Rob) Owen
Phone: Cell: 602-625-5499
Email: robenhown@gmail.com (Please do not use my Tbird email)
Office Hours: Class days prior to or after class + Phone or email at any time

Course Overview
The study of operations management involves examining processes that deliver value to customers in the form of products and services. Given our limited time together, we focus on the concepts and topics that are of immediate value to you in business and in a position search.

Course Objectives
At the end of this course, you should be able to:

• Describe the strategic role of service and manufacturing processes and have an overall understanding of the functions and activities within Operations.

• Understand the following key components of operations:
  o Lean principles and concepts driving for value creation
  o DMAIC problem solving and continuous improvement process
  o Six Sigma process capability
  o Value Stream Mapping
  o Process measurements
  o Service operations
  o Supply Chain Management

• Recognize the challenges and opportunities global managers face in designing, managing, evaluating, and improving strategic operations.

• Legitimately present yourself as having a sound understanding of operations concepts and a working vocabulary of operations terminology.

Teaching Approach
Each session has important pre-work so you obtain the most from the focus topic of the session. Classes are primarily workshop-focused and designed to leave you understanding the topic if you walk in with the pre-work fully completed. Class activities include your active participation, case discussions, problem solving, and cold-calling. Be prepared! All assignments are designed as value-add with no busy work!

Course Materials
Textbooks:
◆ Meredith and Shafer, Operations Management for MBAs, Wiley, 4th edition. (Required)
◆ Rother and Shook, Learning to See, Lean Enterprise Institute (LEI, www.lean.org). (LEI-approved pages provided in PDF form on the course TLE site. However, I encourage you to purchase a copy of this book. You will find it valuable.)

Case Related Materials (might be cases and/or articles)

• Quadrant Homes Applies Lean Concepts in a Project Environment: Brown, Schmitt, Schonberger, Dennis

• Optional (if you want to see a broader adoption of Lean): Esterline Technologies: Lean Manufacturing, HBS Case # 1-906-417.

• Reading Rehabilitation Hospital, Implementing Patient-Focused Care: HBS Case #9-898-172

• **ZARA Fast Fashion**: HBS Case # 9-703-497.
• **VF Brands**: HBS Case # 9-610-022.

Other course readings and materials are included in the Course Pack and noted on the TLE course page.

**Virtual Factory Tours**
- To help you experience more, I show factory tour videos ranging from 3-15 minutes.

**Determination of Final Grades**

<table>
<thead>
<tr>
<th>What</th>
<th>Who</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Exam</td>
<td>Individual</td>
<td>40%</td>
</tr>
<tr>
<td>Field Assignment Paper-Group Project</td>
<td>Team of 4-6</td>
<td>30%</td>
</tr>
<tr>
<td>Take-home VSM Assignment</td>
<td>Individual</td>
<td>20%</td>
</tr>
<tr>
<td>Class Performance on Reading/Zara/VF Cases</td>
<td>Individual</td>
<td>10%</td>
</tr>
</tbody>
</table>

Class Participation earns bonus points worth a maximum of 5% and does not detract from the overall course grade. However, a high level of quality participation might increase your overall course grade by ½ step (ex: from B to B+ or A- to A, etc.).

Points are earned on each assignment with total course points totaling 100. Course grading is as follows with no curve adjustment.

<table>
<thead>
<tr>
<th>Min. Points &amp; Grade</th>
<th>Min. Points &amp; Grade</th>
<th>Min. Points &amp; Grade</th>
<th>Min. Points &amp; Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>94 A</td>
<td>90 A-</td>
<td>86 B+</td>
<td>83 B</td>
</tr>
<tr>
<td>80 B-</td>
<td>76 C+</td>
<td>73 C</td>
<td>70 C-</td>
</tr>
<tr>
<td>66 D+</td>
<td>63 D</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Team Field Assignment**
A field assignment, completed in teams of 4-6, provides you the opportunity to apply your knowledge of the operations management concepts covered in this course. More details about this assignment are available on TLE. All members of the team receive the same grade, although I do reserve the right to make adjustments based on peer assessments.

**Class Participation**
As a future manager and leader, communication and participation is vital to your success. I assert that nothing happens without a conversation including hiring, strategy, negotiations, deals – nothing! Active engagement in class discussions is encouraged to facilitate all of our learnings.

**Case Study, Analysis, and In-Class Discussion**
Case study is key to applying our course principles to actual operating company experiences. To encourage quality case study, the classes’ performance will be evaluated on both the Reading Rehab and Zara/VF Cases. Everyone present in the class will obtain zero (0) to 5 points per case week based upon your class performance. If you have a significant excuse for not being present, you may complete a case paper in lieu of being in the class and potentially earn points. Discussion questions for our significant readings follow:

**Quadrant Homes Case Discussion Questions**
- What is/are their business objective(s).
- What Value Disciplines do they demonstrate? Examples?
- The practice Design-for-Assembly. What’s this mean? Do you see Quadrant doing this?
- Why do they want to employ mixed-mode sequencing?
- What Lean Fundamentals examples do you see in Quadrant for the following. Consider Corp, Job Site, Suppliers, Sales, Customers.
- How do they view labor and suppliers? How do you characterize their culture?
The Lean Service Machine Article Discussion Questions
- What situation does Jefferson face at the beginning of the case?
- What do they see as specific problems and opportunities?
- What specific results did they achieve by applying Lean fundamentals?
- What did they do to achieve the results?
- What principles did they follow and how do they relate to our course materials?

Reading Rehab Case Discussion Questions
- Reading Rehab results in 1991 and 1994
- What is going on in their market?
- What do RR stakeholders want (Patients, Drs, Staff, Insurance Cos, Upstream and Downstream Providers)
- What was the goal of the reorg? Results? What worked and didn’t?
- What is their labor utilization?
- Is their staffing appropriate after the reorg? If overstaffed, by how many people?
- If you’re responsible, what would you do at the end of the case? Why?

Zara/VF Case Discussion Questions
- What are the key elements or characteristics of the “Third Way”?
- Look at Zara, VF (non Third Way), VF Third Way in terms of Operations, Supply Chain, Performance (Results), and Challenges. What distinctions do you see? What Strengths? Weaknesses? Risks? Opportunities?
- What is their labor utilization?
- What Operations and Supply Chain advice would you give both Zara and VF?
- In the VF case there is Exhibit 4 on Page 16. Look at this closely and what do you discover when you look at the alternatives from various points of view?
- What can Zara and VF learn from each other?
- If these were your companies to lead, what would you do to take them to greater performance and business possibility?
- What does “Hollowed Out” mean?
- What was the genesis of Zara? Where did they come from?
- Think of Zara in terms of Operational Excellence, Customer Intimacy, and Product Leadership. What do you see? How do you assess them?
- What are the strengths and weaknesses of Zara’s capacity strategy?
- What does Zara’s performance look like vs. their competition?
- What differences do you see in the product design time/cycle for VF and Zara? Does it matter?

Take-home Value Stream Map
You are given a process scenario and asked to create a complete Value Stream Map. This is strictly an individual assignment (no collaboration or help from others).

The TLE Course Page
Please refer to the TLE course page for detailed information on case questions and other notes on preparation for each session. I update this very often, so please check the course page regularly. I regularly post “Optional” content for those that wish to discover as much as possible.

Pre and Post-Class Slides
I post the bulk of the slides I use throughout the course at the beginning of the course under the appropriate week on our course page. These will provide you significant information on the materials we will cover during a given session. I do not pre-post information on cases, in-class exercises, and problems we’ll work. This additional information will be posted on the course page under “Link to all in-class slides if significantly different than pre-class posted slides”.

Page 3 of 4
For each class, make sure you have prepared by minimally mastering the required pre-work items noted on the TLE course page for the specific class week. I also encourage you to review the posted slides for each session.

The schedule is by week, as some course sections are one day per week and others are two days per week.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Requirements &amp; Assignments Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5/19</td>
<td>Course Intro, Operations Strategy, and Introduction to Lean: In this first session I quickly cover course expectations and then move into a high-level “context setting” view of Operations Strategy and the Key Areas of Operations. We conclude with an Introduction to Lean and discussion of Quadrant Homes as a case example.</td>
<td>Read: Text Chapter 1, Scan 2, and 5 for Lean. Case Study: Quadrant Homes.</td>
</tr>
<tr>
<td>2</td>
<td>5/26</td>
<td>DMAIC and Value Stream Mapping (part 1): We introduce DMAIC as a context for Value Stream Mapping. This is a hands-on and very interactive class focused on learning Value Stream Mapping and understanding Process Measurements.</td>
<td>Due: Michigan Steel Value Stream Map – Alone or in a group, create a VSM from the slide set of instructions and bring to class. Read: Learning to See pages provided. Read: Text Chapter 4 for a general understanding of the phases of DMAIC.</td>
</tr>
<tr>
<td>3</td>
<td>6/2</td>
<td>Value Stream Mapping (part 2) and Process Measurements and Metrics: We continue with another VSM problem and bring in more about process measurements and metrics.</td>
<td>Due: Create Wertz Rental Car VSM alone and bring to class. The Take-Home VSM assignment is handed out the end of this class week.</td>
</tr>
<tr>
<td>4</td>
<td>6/9</td>
<td>Service Operations Focus: This session focuses on service operations through Reading Rehab Hospital case.</td>
<td>Due: Take-Home Value Stream Map Case Study: Reading Rehab with class case performance evaluation. Read: The Lean Service Machine.</td>
</tr>
<tr>
<td>5</td>
<td>6/16</td>
<td>Six Sigma, Quality Tools, and Cost of Quality: This session looks at Quality and Lean Six Sigma tools with a focus on SPC.</td>
<td>Read: Text Chapter 4, focusing on the Measurement Phase.</td>
</tr>
<tr>
<td>6</td>
<td>6/23</td>
<td>Supply Chain Management: We use Zara and VF as case examples of supply chain options.</td>
<td>Due: Field Assignment Team Papers Case Study: Two Zara/VF article &amp; case with class case performance evaluation. Read: Text Chapter 7.</td>
</tr>
</tbody>
</table>

Course final is: