Business Management 7241: Lean Enterprise Leadership  
Section 4156 – Tuesday-Thursday 3:00 PM – 4:30 PM, Gerlach 265  
Section 4157 – Thursday 6:00 PM – 9:15 PM, Gerlach 265

Course Description

Business Management 7241, Lean Enterprise Leadership is designed to provide students with the skills and discipline needed to lead and learn in a continuous improvement environment in a hands-on participative manner. Students who complete the class can immediately contribute to an organization’s effort in continuous improvement, whose principles are used by many leading organizations in all sectors to outpace competitors year after year.

Course Objectives

1. Solve a problem in a work environment.  
   a. Define and document the current situation using value stream map (Concern)  
   b. Analyze a problem to find its root cause (Cause)  
   c. Develop and evaluate multiple countermeasures for the root cause (Countermeasure)  
   d. Plan and implement the best overall countermeasure  
      i. Create flow through a series of processes in a value stream.  
      ii. Regulate the flow of materials or information through a value stream.  
   e. Embed lessons learned into ongoing work practices (Confirm)  
2. Model appropriate leadership behaviors to drive changes in the culture of an organization.  
3. Build systems to apply and manage lean tools, techniques, principles, and practices in a workplace.

Faculty

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Office Phone: 614-292-4730  
Office Hours: By appointment  

Mr. Veech is a Senior Lecturer in the Department of Management Sciences at the Fisher College of Business, The Ohio State University. Mr. Veech joined the University in 2013 after serving as Executive Director of the Institute for Lean Systems (ILS) for seven years, coaching and consulting with clients in a wide range of industries. His coaching focuses on people in organizations and how lean, leadership, and learning systems contribute to overall employee satisfaction and well-being.

Required Course Materials (Kindle Versions are Acceptable)


Recommended course materials

1. Change or Die, Alan Deutschman, Collins, 9780061373671  
3. Drive, Daniel H. Pink, Riverhead Books, 9781594488849

Spring 2016
Attendance

Because we meet so few times, any absence is significant. **Missing more than 3 hours will result in an unsatisfactory grade.**

Grading

The course is S/U. Lean Enterprise Leadership requires active participation in classroom exercises as well as reading and assigned work outside of class. Passing grades will be based on contributions to the discussion both in class and online and completed weekly assignments, including the primary project assignment (C4 or A3 worksheet with descriptive essay showing mastery of the course contents. Weekly assignments are due the following Thursday by 3:00 pm. The Primary Project is due on Tuesday, April 26.

Participation requires reviewing materials uploaded to Carmen in advance of each class session.

Exams

There are no exams.

Disability Accommodation

If you need an accommodation based on the impact of a disability, arrange an appointment with me as soon as possible. We need to discuss the course format and explore potential accommodations. I rely on the Office for Disability Services for assistance in verifying need and developing accommodation strategies. You should start the verification process as soon as possible.

Academic Integrity

Material submitted for course grade credit must be your own work. All university and college regulations concerning academic honesty shall apply. In general, students are expected to recognize and uphold standards of intellectual and academic integrity. The university assumes as a minimum standard of conduct in academic matters that students be honest and that they submit for credit only the products of their own efforts. It is particularly important that students read and understand the portions of the Ohio State University’s Code of Student Conduct that relate to plagiarism, unauthorized collaboration, falsification, and multiple submissions. The Code of Student Conduct is available online. This Policy represents a core value of the University. All members of the University community are responsible for knowing and abiding by its tenets. Students are expected to carefully review the online Policy prior to undertaking any research or other assignments. Students are encouraged to discuss freely with faculty any questions they may have pertaining to the provisions of the Code prior to submitting assignments. Lack of knowledge of the contents of the University Policy on Academic Honesty is not an acceptable defense to any charge of academic dishonesty.

Schedule (See Carmen for final requirements)
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<tr>
<th>Date</th>
<th>Topic</th>
<th>Activity and Assignment</th>
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| Week 1 – March 3| Problem Solving: C4 and A3    | Objectives are:  
1. Apply a problem solving process to solve a work related problem  
2. Contrast different problem solving processes and their primary focus  
3. Describe key tools to help identify root causes of problems  

Learning Activities:  
1. Read: Intro through Chapter 2, The C4 Process  
2. Read: Lean Lexicon, A3 Report; PDCA; Problem Solving; Five Whys; Six Sigma  
3. View the Problem Solving pdf in Carmen  
4. Card Simulation, Round 1, Conventional with small group discussion (Record Stapling Operation)  

Assignment: Identify the potential problems for your Individual Class Project. Due March 10 |
| Week 2 – March 8 & 10 | Value Stream Mapping & Analysis | Objectives are:  
1. Create a current state value stream map to analyze a set of work processes in a theme area. See the system.  
2. Calculate takt time  
3. Evaluate the customer-supplier relationship in a value stream  
4. Analyze processes in a value stream (calculate processing time, cycle time, set up time, operators and full-time-equivalent people, value-add time, non-value-add time, and any other data required to complete the analysis.)  
5. Analyze the flow of materials and information through a value stream  

Learning Activities:  
1. Read: Chapter 3, The C4 Process  
2. Read: Lean Lexicon: Value Stream Mapping; Pull systems; Cell; Continuous Flow; Cycle Time; Cycle time and related terms involving time; First-in-First-out; Flow production; Heijunka; Heijunka box; Information flow; Inventory; Kanban; Material Flow; Operational Availability versus Operating Rate; Overall Equipment Effectiveness; Product Family; Product Family Matrix; Pull Production; Spaghetti Chart; Supermarket; Takt image; Takt time; Value; Value Stream Manager; Appendix (Value Stream Mapping Icons)  
3. Activity: Pencil Pusher Case/Map Card Simulation Current State  
4. Read: Continue reading Change or Die  

Assignment: Submit your project current state map to the dropbox for feedback. Due March 24 |
| Week 3 – March 22 & 24 | Visual Organization and Management | Objectives are:  
1. Apply the principles of 4S/5S in a work setting and describe its utility and value.  
2. Analyze a work process using standardized work worksheet sets (Time measurement, Standardized work charts, combination tables, and work balance charts)  
3. Describe the relationship between 4S/5S and standardized work  

Learning Activities:  
1. Read the attached pdf files on 5S and Standardized Work.  
2. Read: Lean Lexicon: Andon; Automatic Line Stop; Dashboard; Error-Proofing; Five Ss; Gemba; Gemba Walk; Genchi Genbutsu; Kamishibai Board; Muda, Mura, Muri; Obeya; Operator Balance Chart; Production Analysis Board; Red Tagging; Right-sized Tools; Standardized Work; Visual Management; Waste; Work; Work Element; Yamazumi Board  
3. Activity: Apply 5S/4S and standardized work to your project problem  

Assignment: Submit your standardized work document set to the dropbox for feedback. Only submit the Standardized Work Chart, Time Measurement Sheet, Combination Table, and Work Balance Chart. Due March 31 |

| Week 4 – March 29 & 31 | Lean Overview | Objectives are:  
1. Differentiate lean systems from mass manufacturing and mass customization  
2. Translate the key factors that helped Toyota rebuild itself into key factors organizations can use today to help improve their performance  
3. Evaluate the evolution of work systems and their impact on society  
4. Create a cause map for a problem  

Learning Activities:  
1. Read: pdf on Lean Systems Overview (Carmen)  
2. Read: Chapter 4, The C4 Process  
3. Read: Lean Lexicon: Basic Stability; Jidoka; Just-in-Time (JIT) Production; Kaizen; Lean Consumption;; Lean Enterprise; Lean Logistics; Lean Management; Lean Management Accounting; Lean Production; Lean Thinking and Practice; Total Productive Maintenance; Toyota Production System; True North  
4. Activity: Discussion of Lean Philosophy, the Lean House and Toyota Way principles; Cause Map construction and analysis |
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<th>Week 5 – April 5 &amp; 7</th>
<th>Countermeasures</th>
<th>Objectives are:</th>
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<td>1. Develop a plan to contain the spread of a problem in your workplace</td>
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<td>2. Define objective evaluation criteria to use in evaluating the feasibility and potential effectiveness of countermeasures</td>
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<td>3. Develop at least 5 alternative countermeasures for every root cause of a problem</td>
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<td>4. Create a plan for testing the effectiveness of countermeasures</td>
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<td>5. Evaluate countermeasures using multiple criteria to select the best overall option to solve a problem.</td>
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<td>6. Plan the implementation of a selected countermeasure.</td>
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Learning Activities:

1. Read: Chapter 5, The C4 Process
2. Read: Lean Lexicon: Coaching; Cross-dock; Downtime; Efficiency; Every Product Every Interval (EPEX); Fixed Position Stop System; Four Ms; Hansei; Heijunka; Heijunka box; Jishuken; Kaikaku; Kaizen Workshop; Kanban; Kata; Material Handling; Milk run; Multimachine Handling; Multiprocess handling; Nemawashi; Paced Withdrawal; Pacemaker Process; Pack-Out Quantity; Pitch; Plan for Every Part (PFEP); Point-of-Use Storage; Preventive Maintenance; Production Preparation Process (3P); Quality Control Circle; Setup Reduction; Single Minute Exchange of Dies (SMED); Trade-off Curves;
3. Read: Attached pdf files
4. Activity: Develop Countermeasures for Card simulation (Focus on stapling)
5. Activity: Run Round 2 and 3 of simulation

Assignment: Prepare and submit an Operations work standards sheet and job breakdown sheet for the selected countermeasure to solve your individual project problem. Supplement this with a summary of all the countermeasures you considered and how you selected the one that lead to the solution presented in your operations work standards chart. Due April 14

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<th>Week 6 – April 12 &amp; 14</th>
<th>Leading Change</th>
<th>Objectives are:</th>
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<td>1. Describe the role of leadership in organizational culture change</td>
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<td>2. Create and model key leadership behaviors in a team setting</td>
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<td>3. Evaluate the leadership described in the readings (Change or Die, Drive, and The C4 Process) in</td>
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terms of the behaviors required for effective employee engagement and organizational culture changes

Learning Activities:

1. Read: Chapter 7, The C4 Process
2. Read: Lean Lexicon: Change Agent; Chief Engineer; Coaching; Group Leaders; Hansei; Huddles; Jishuken; Leader Standard Work; Lean Promotion Office; Ohno, Taiichi (1912-1990); Plan for Every Person; Sensei; Shingo, Shigeo (1909-1990); Strategy Deployment; Team Leader; Toyoda, Kiichiro (1894-1952); Toyoda, Sakichi (1867-1930); Training Within Industry (TWI); Value Stream Manager; yokoten
3. Read: Attached pdf files
4. Activity: Buffalo Hunter Case Study
5. Lecture/Discussion: Leadership

Assignment: Based on your readings so far this term, prepare and submit a 3 page paper describing how the principles described in class will effect your own leadership style and behavior, including a plan for your personal development. Due April 21.

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<th>Week 7 – April 19 &amp; 21</th>
<th>Confirm</th>
<th>Objectives are:</th>
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<td>1. Implement a solution to a problem.</td>
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<td>2. Capture, record, and monitor results from your problem solution.</td>
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<td>3. Develop key performance indicators to effectively track and monitor a work process</td>
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<td>4. Update standardized work.</td>
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<td>5. Train operators to achieve the defined standard for that process as documented in the standardized work</td>
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<td>6. Reflect on your experience with the problem solving process and assess future needs of the people participating on the team</td>
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Learning Activities:

1. Read: Chapter 5, The C4 Process
2. Activity: Card Simulation Round 4
3. Activity: Reflection on course activities & contents

Assignment: None – Continue working your project

| Due Tuesday April 26 | Final Project Prep and Delivery | Submit your final C4 or A3 worksheet with supplement. Due Tuesday April 26 |