

Continuous Improvement – Lean Six Sigma Yellow Belt Certification Course Fall 2021 Details

- Instructor:** Vern Campbell, P.Eng, MBA, Lean Six Sigma Master Black Belt
- Location:** Virtual (Zoom)
- Length:** 24 Hour (Please see attached syllabus)
- 3 Hour Project Set-up and kick off session for Champions and participants.
 - 18 Hours Just in time (JIT) training workshops for participants.
 - 3 Hour Final Project Presentations & Celebration
- Dates:**
- September 14, 2021 – 8:30-11:30 a.m. (Kick-off - Champions and participants)
 - Workshop sessions: September 21, September 30, October 5, October 12, October 19, October 26, November 2, 2021. All sessions are – 8:30-11:30 a.m. (participants)
 - November 16, 2021 – 8:30-11:30 a.m. (Final Wrap-up Presentations - Champions and participants)
- Prerequisites:** Yellow Belt is an introductory course (RCA recommended).
- Projects:** Yellow Belt Level Projects are required (Sample Criteria attached). The design of the course is to “learn by doing” by applying the methods and tools to “real” problems.
- Software:** No requirements for Yellow Belt, however access to Minitab would be beneficial.
- Cost:** \$1,375.00 per person (includes coaching through to certification). For 3 or more participants from the same organization, the cost is reduced to \$1,125.00 per person.
- Class Size:** Limited to 16 participants.
- Content:**
- Basic principles of LSS/Continuous improvement.
 - Set up and Charter improvement projects.
 - The method to understand the current process situation including performance metrics.
 - Defining process target conditions.
 - Identifying process problems and various strategies for addressing problems.
 - The 7 Step problem solving method.
 - Applying the 7 basic Quality control tools to solve problems using data and facts.
- Registration Information:** Email – vern.campbell@verncampbell.com

Course Leader



Vern Campbell, BScME, MBA, P.Eng
Lean Six Sigma Master Black Belt
Principal

Vern Campbell is the Principal of Process Management by VFC whose extensive operational and consulting experience includes strategy development & deployment, Key Performance Indicator (KPI) development and deployment, leadership training and development, process improvement project selection and prioritization, and operational improvement through the application of advanced Lean Six Sigma methodologies including Process FMEA. Vern's consultancy practice focuses on maximizing an organization's operational effectiveness, efficiency, employee fulfillment and results. Vern's opportunities to learn from global experts in strategic planning and organizational improvement have led to his broad level of knowledge and experience consulting to manufacturers, service industries, agri-food and processing, environmental services groups, non-profit groups and health care organizations throughout Canada and the United States.

Vern spent ten years at Manitoba Hydro (1989-1999), first in financial planning and then leading their Strategic Planning and Quality Improvement Initiative. In 2000, Vern moved to Northern Blower, a 200 employee custom fan manufacturer serving the North American industrial market, initially as a consultant (2000-2002) and then as General Manager (2002-2011). At Northern Blower he put his consultancy principles into practice with dramatic results. Northern Blower was one of a small, select group of organizations in Canada that worked with Toyota to learn and implement the Toyota Production System. Toyota's "lean" management system is highly successful in eliminating waste through developing people and sustainable systems to provide consumers with what they need, when they need it, affordably.

Vern has over 20 years of experience in the field of strategy development, strategy deployment, KPI systems development and deployment, and organizational process improvement. He has consulted with various industries and sectors: agriculture, food processing, healthcare, non-profit, manufacturing, human resources/payroll, electric utilities, packaging, education, regulatory bodies, to name but a few. The breadth and scope of the engagements has varied, but include Strategy Planning and deployment, cultural transformations, KPI systems, Executive training and coaching, leadership and supervisor development and coaching, strategic project selection and execution, Lean Six Sigma training and coaching, basic data analysis, interpretation and problem solving. The objective of any consulting engagement is to transfer the knowledge and skills to the client organization so that they may strive for and realize self-sufficiency and sustainable results.

Vern is a Professional Engineer (APEGM), earning his Bachelor of Science Degree in Mechanical Engineering, with Distinction, from the University of Manitoba. He was awarded the Gold Medal from the Canadian Society for Mechanical Engineering, and went on to attain his Master Degree in Business Administration from the University of Western Ontario. Vern is an Associate Professor and Engineer in Residence with the Faculty of Engineering at the University of Manitoba teaching a 4th year and graduate level course in Operational Excellence. Vern also teaches Sustainable Lean Management with the MBA Faculty in the Asper School of Business at the University of Manitoba. Vern guest lectures at the University of Miami's School of Business Administration and the Stern School of Business at New York University, New York. He is currently enrolled in the post-Masters program at the University of Miami. Vern holds a Master Black Belt status in Lean Six Sigma from the University of Miami.

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Registration Form

Organization: _____

Contact Person: _____

Contact Phone Number: _____

Contact E-Mail Address: _____

Primary Contact Address: _____

Participants (Name, Position, E-Mail Address):

	Name	Position	E-Mail Address
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____

Email to:

vern.campbell@verncampbell.com

Project Note: LSS Yellow Belt Training qualifies under the Manitoba Job Grant program.

CI/Lean Six Sigma Yellow Belt Certification

Course Syllabus

Fall 2021

- Objective:**
- To build a foundation of process improvement competency.
 - To develop a consistent structured problem solving ability.
 - To solve “real” organizational problems that deliver “real” improvement results.
- Yellow Belt Certification Requirements:**
- Candidates will:
 - Attend all training sessions.
 - Successfully complete the Yellow Belt level assessment.
 - Solve a simple organizational problem utilizing the Improvement Journal Method (Quality Journal) and the basic Seven Quality Control tools (7 QC Tools).
- Yellow Belt Prerequisite:**
- Entry Level
- Target Employee Group:**
- All Employees
- Material Requirements:**
- Yellow Belt Manual (Provided)
 - “Qualities of an Exceptional Leader” paper by Lou Schultz (Provided)
 - Memory Jogger (Provided)
 - Recommended Reference Books:
 - “The Team Handbook” Joiner et al
 - “Learning From the Masters” Lou Schultz (Provided)
 - “The Toyota Production System” Ohno
 - “Understanding Variation” Wheeler
 - Quality Journal (QJ) (Electronic Version Provided)
- Course Structure:**
- The course will be 24 hours in duration. The sessions will be conducted in a Just-in-Time (JIT) format. There will be 1 week between sessions in order to allow time for material review and the application of the method and tools learned to the candidate’s selected problem.
 - The course will be structured to include preparation work, in-class work & post-class study and project application.
 - Weekly 30 minute coaching sessions.

**Course
Overview:**

1. Session 1:

- a. Preparation work:
 - i. Under the guidance of your supervisor/Champion, select a problem or issue to work on. The problem should be small in scope & have no known solution.
 - ii. Read “Qualities of an Exceptional Leader” by Lou Schultz.
 - iii. Recommended:
 - 1. Read “The Team Handobook” by Joiner
 - 2. Read “Learning from the Masters” by Lou Schultz.
 - iv. Read the Yellow Belt Manual Sections:
 - 1. Setting the Context
 - 2. Team Start-up
 - 3. Characterize the Process Steps 1-6
- b. Session 1 Agenda:
 - i. Introduction & Course Overview
 - ii. Setting the Context
 - iii. Team Start-up
 - iv. Characterize the Process Steps 1 to 5
 - v. Session Wrap-up & Evaluation

2. Session 2:

- a. Agenda:
 - i. Review Key concepts
 - ii. Characterize the Process Steps 6, 7 to 8
 - iii. An Introduction to Statistical Concepts
 - iv. Improve?
 - v. Session Wrap-up & Evaluation
- b. Post Session Actions:
 - i. Review Yellow Belt Manual (to end of “Improve ?” inclusive)
 - ii. For the Candidate Project complete:
 - 1. Characterize the Process Steps 1 to 8
 - 2. Develop a Project Portfolio
 - 3. Select a simple problem to work on.
 - iii. Review with Champion. Champion Sign-off.
 - iv. Prepare a short (<5 minute) QJ project update presentation.

3. Session 3:

- a. Preparation Work:
 - i. Review Yellow Belt Manual Material covered to date
 - 1. Setting the Context
 - 2. Team Start-up
 - 3. Characterize the Process Steps 1 to 8
 - ii. Read Yellow Belt Manual to the end of “Act on the Causes”.
 - iii. Prepare a short (<5 minute).
- b. Agenda:
 - i. Review Key concepts
 - ii. Project Update Presentations
 - iii. Establish the Focus (QJ Step 1)
 - 1. Data Collection
 - 2. Run Charts
 - 3. Control Charts
 - 4. Histograms
 - iv. Examine the Current Situation (QJ Step 2)
 - 1. Pareto Diagram
 - v. Session Wrap-up

4. Session 4:

- a. Agenda:
 - i. Review Session 1, 2 & 3 Key Concepts.
 - ii. Project Update Presentations (Quality Journal) (< 5 minutes)
 - iii. Analyze the Causes (QJ Step 3)
 - 1. Cause/Effect Diagram
 - 2. Scatter Diagram
 - iv. Act on the Causes (QJ Step 4)
 - v. Day Wrap-up & Evaluation
- b. Post Session Actions:
 - i. Review Yellow Belt Manual to the end of Act on the Causes inclusive.
 - ii. For the Candidate Project revise/complete:
 - 1. Establish the Project Focus (QJ Step 1)
 - 2. Examine the Current Situation (QJ Step 2)
 - 3. Analyze the Causes (QJ Step 3)
 - 4. Act on the Causes (QJ Step 4)
 - iii. Review with Champion. Champion Sign-off.
 - iv. Prepare a short (<5 minute) QJ project update presentation.

5. Session 5:

a. Preparation Work

- i. Review Yellow Belt Manual Material covered to date:
 1. Setting the Context
 2. Team Start-up
 3. Characterize the Process
 4. Improve?
 5. Establish the Focus
 6. Examine the Current Situation
 7. Analyze the Causes
 8. Act on the Causes
- ii. Read the Yellow Belt Manual to the end of Draw Conclusions inclusive.
- iii. Prepare a short (<5 minute) QJ presentation.

b. Agenda:

- i. Review Key Concepts covered to date.
- ii. Project Update Presentations (Quality Journal Steps 1-4) (< 5 minutes).
- iii. Study the Results (QJ Step 5)
- iv. Standardize the Changes (QJ Step 6)
- v. Draw Conclusions (QJ Step 7)
- vi. Exam Review/Questions
- vii. Course Wrap-up

6. Session 6:

a. Review Key Concepts

b. Course Wrap-up

c. Post Session Actions:

- i. Review Yellow Belt Manual
- ii. For the Candidate Project revise/complete:
 1. Establish the Project Focus (QJ Step 1)
 2. Examine the Current Situation (QJ Step 2)
 3. Analyze the Causes (QJ Step 3)
 4. Act on the Causes (QJ Step 4)
 5. Study the Results (QJ Step 5)
 6. Standardize the Changes (QJ Step 6)
 7. Draw Conclusions (QJ Step 7)
- iii. Review with Champion. Champion Sign-off.

7. Coaching/Wrap-up

8. Final Presentations:

Yellow Belt Certification Requirements

- a. Assessment
- b. Project Review
- c. Certification Celebration
- d. Communicate Project Results

**CI/Lean Six Sigma Yellow Belt Certification
Sample Project Selection Criteria
Fall 2021**

1. “Winnable” but challenging.
2. A “real” problem where the solution is not known.
3. Strategic/painful – important enough that we will focus.
 1. \$25,000 - \$50,000 or equivalent strategic impact is a useful guideline.
4. Cycles frequently – collecting good data is usually an issue with initial projects.
5. Engaged/committed stakeholders.
6. A committed project Champion/sponsor.