Beyond Z's Lean Six Sigma Curriculum for Yellow Belts

1.0 Introduction & Define
1.1 The Basics of Six Sigma
1.1.1 Meanings of Six Sigma
1.1.2 General History of Six Sigma & Continuous Improvement
1.1.3 Deliverables of a Lean Six Sigma Project
1.1.4 The Problem Solving Strategy Y = f(x)
1.1.5 Voice of the Customer, Business and Employee
1.1.6 Six Sigma Roles & Responsibilities

1.2 The Fundamentals of Six Sigma
1.2.1 Defining a Process
1.2.2 Critical to Quality Characteristics (CTQ's)

1.3 Selecting Lean Six Sigma Projects
1.3.1 Building a Business Case & Project Charter
1.3.2 Developing Project Metrics
1.3.3 Financial Evaluation & Benefits Capture

1.4 The Lean Enterprise
1.4.1 Understanding Lean
1.4.2 The History of Lean
1.4.3 Lean & Six Sigma
1.4.4 The Eight Elements of Waste

2.0 Measure
2.1 Process Definition
2.1.1 Process Mapping, SIPOC, Value Stream Map

2.2 Quality Tool and Statistical Concepts
2.2.1 Tools to gather and group data
2.2.2 Central tendency and spread
2.2.3 Quality Tools Introduction– Time Series charts, Pareto charts, Cause and Effect diagram, Scatter diagram, 5 Why, Introduction to SPC
2.2.4 FMEA Introduction

2.3 Measurement System Analysis
2.3.1 Precision & Accuracy
2.3.2 Bias, Linearity & Stability
2.3.3 Gage Repeatability & Reproducibility
2.3.4 Variable & Attribute MSA

2.4 Process Capability
2.4.1 Attribute & Discrete Capability
a. including DPU, DPMO, FTY, RTY

3.0 Analyze & Improve

3.1 Lean Concepts
3.1.1 Tools- Visual Factory, Poke Yoke, Kanban, Cell Design, Set Up time reduction
3.1.2 Kaizen
3.1.3 Importance of Takt time
3.1.4 Batch to Pull production

4.0 Control
4.1 Control Methods for 5S
4.2 Statistical Process Control (SPC)

5. Team Development & Presentation
5.1 How to conduct effective team meetings
5.2 Stages of Team Formation
5.3 Brainstorming
5.4 Force Field Analysis