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Lean Six Sigma Black Belt Certification

Our self-paced online Lean Six Sigma Black Belt program covers all of the topics our classroom version covers. The format includes audio-visual presentation, case studies / readings, test completion, and project completion. And, like our classroom version, students will have the ability to contact the instructor with questions and requests for feedback on ideas and case exercises. The program is self-paced and up to 6 months are allotted to complete it; students will have access to the program for 1 year. Upon completion of the program (including a final test and project submittal), students will receive a certificate (Certified Lean Six Sigma Black Belt) and 12 CEU's (Continuing Education Units).

The program also provides students with a SigmaXL software license and multiple templates that they can modify to suit their own needs.

The program covers the following subject matter:

- Lean Six Sigma Principles and Overview
- Lean Six Sigma Implementation
- Project Selection
    - NPV (Net Present Value) Analysis
    - Value Stream Mapping
- Lean Six Sigma Teams
    - Team Facilitation
    - Brainstorming Techniques
- Define Phase
    - Team Project Charter and Work Plan
    - Project Stakeholder Analysis
    - Measurable Customer Requirements
    - Requirements Statements
    - Process Mapping
    - SIPOC
- Measure Phase
    - Measurement Concepts
    - How to Determine What to Measure
    - Sampling Plans
    - Data Collection Methods and Forms
    - Developing Baseline Defect Measures
    - Process Capability
    - Measurement Systems Analysis/Gage R&R

- Analyze Phase
    - Data Analysis- Exploring

    - Pareto Analysis
    - Run Chart,
    - Histogram/Frequency Plot
    - Cause and Effect Analysis
    - Scatter Plot or Correlation Diagram
    - Multi-Vari Charts
    - FMEA
    - Inferential Statistics Primer
    - Hypothesis Testing: Normal and Non-Normal Data
    - Hypothesis Testing: Discrete Data
    - Hypothesis Testing: Correlation and Regression
    - Design of Experiments Overview
    - DOE: Factorial Designs
    - DOE: Fractional Factorial Designs
    - RSM: Response Surface Methods
- Improve Phase
    - Generating Creative Solutions- Brainstorming
    - Analyzing and Selecting Solutions- Decision Matrix
    - 5S
    - Autonomous Maintenance / TPM
    - Quick Changeover / SMED
    - Line Balancing/Operator Balance Charts
    - Continuous Flow Layouts
    - Kanban/Pull Systems
    - Kaizen Events
    - Pilot Testing
    - Full-Scale Implementation
- Control Phase
    - Control Plan Elements
    - Statistical Process Control

Features of the e-learning interface including audio-visual presentations, White Board, glossary, quiz/test, etc. are pictured on the following pages.

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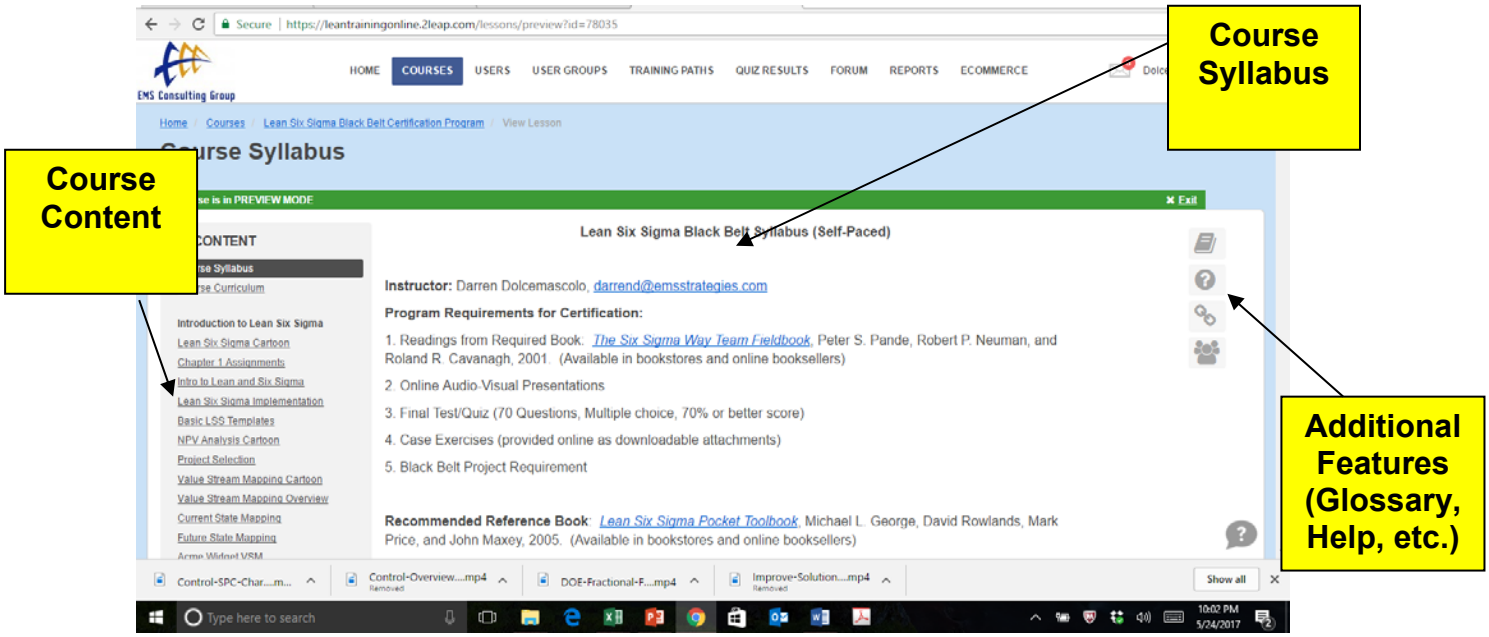

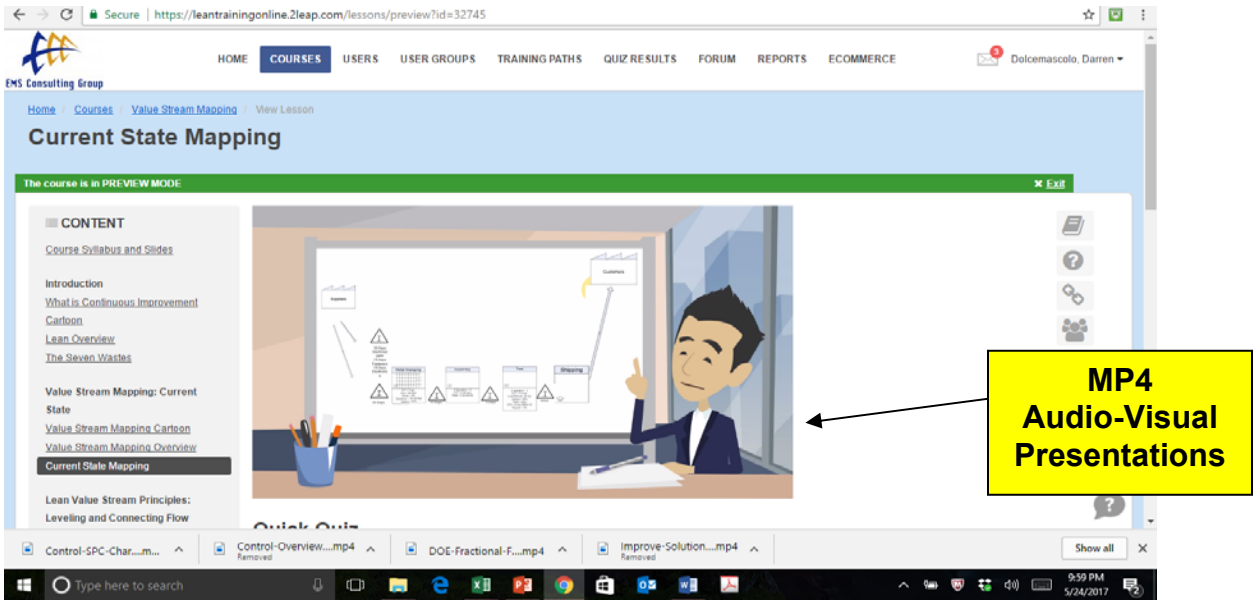

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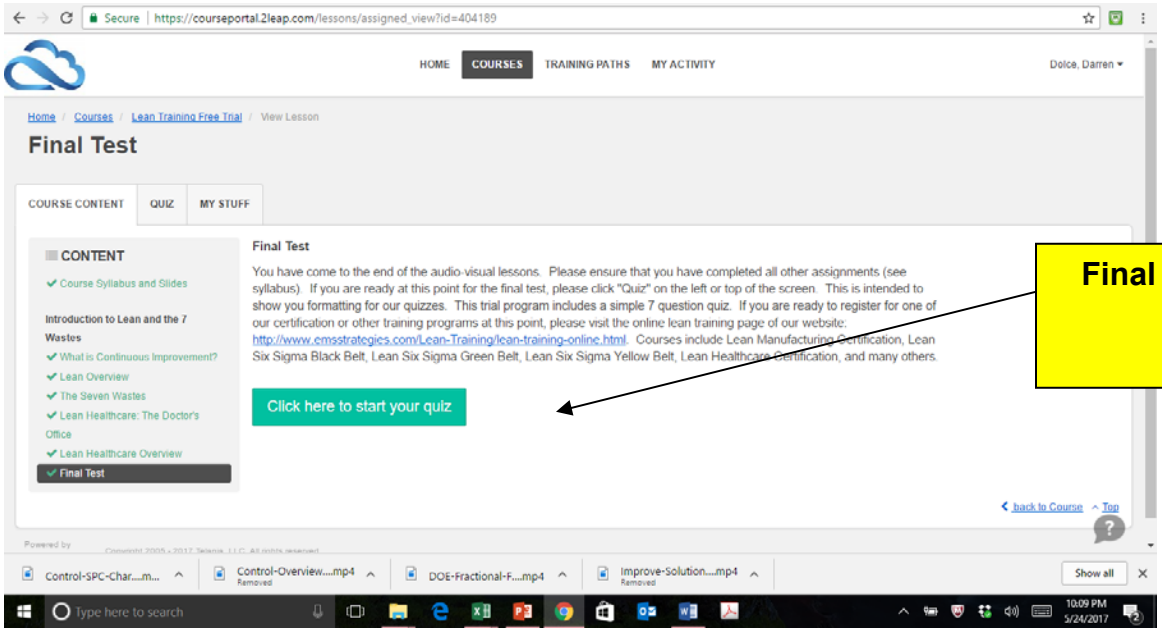
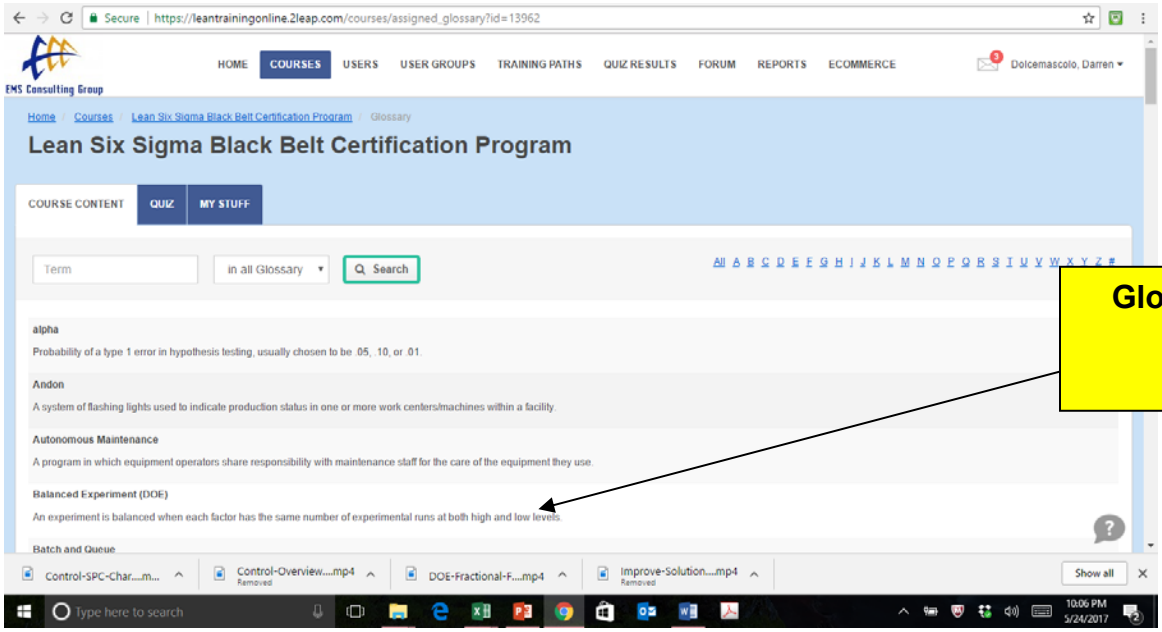


Final Test



Glossary