

INTRODUCTION TO LEAN OPERATIONS

Semester: Fall 2008

Tuesdays, Aug. 26-Oct. 14 (7:00-10:00 p.m.), plus Sat. Sept. 20, (9am-12pm)

Instructor: Ellen Kane, CPIM
Owner, Ellen Kane & Associates
Telephone: 818-999-4877 [work]
Cell: 818 681-9802
FAX: 530 579-6924; E-mail: ek@theacagroup.com

Course: # XBUS 913
Room: Juniper Hall [JH1234](#)

Ticket: 2087-18915
CEUs: 2.7

Course Description and Objectives:

This course covers methods and best practices companies should use to identify and eliminate waste (non-value-added activities) throughout the organization. It provides basic definitions, real-world examples, and an introduction to such topics as the transparent workplace, lean product development, Value Stream Mapping, lean process improvement, controlling processes, and continuous improvement. These tools, techniques and philosophies have been used worldwide by best-in-class companies to improve their bottom line, make them more competitive, and drastically improve their responsiveness to the customer. Introduction to Lean Operations is the gateway course in the Lean Operations Program that is geared to both service and manufacturing organizations, and should be taken prior to the other three courses.

Topics:

- Development of the concept of a lean organization and what benefits it will deliver
- Identification of waste activities and understanding why they should be eliminated
- How to use flow analysis to analyze a process and identify non-value-added activities
- Understanding of the standard lean operations tools: 6S, visual workplace and visual order control, manufacturing cells, use of takt time, setup time reduction, standard worksheets, etc.
- The benefits of incorporating lean concepts during the development phase of new products
- Error-controlling devices and how they can be used during the manufacturing process to reduce errors
- Understanding what sigma quality concepts are, introduction to how to conduct kaizen blitzes, and why continuous improvement is important to the organization

Course Objectives:

By the end of this 9-week course, the student should be able to:

- Access the general knowledge of what is required to deliver consistently high quality and value-added products and services to the customer in a lean environment.
- Develop an understanding of the concepts and principles that form the foundation of best practices in a 21st century lean operations environment.
- Participate effectively in any internal continuous improvement program focused on meeting/exceeding customer requirements while at the same time enhancing the profitability of the enterprise.
- Understand the terminology relating to lean operations in both service and manufacturing organizations.
- Utilize some of the basic lean assessment tools (student handouts) that are used to assess an organization's level of achievement at the beginning of the lean improvement journey.
- Know where to access some of the many Internet based lean resources currently available.

As a part of the learning process, this class is also structured to encourage students to (a) share the best and the not so effective practices from their current work environment as it relates to the course subject matter, and to (b) provide a network resource to discuss pragmatic approaches to the real world lean operations' issues one might face in the workplace.

Course Structure:

In addition to classroom lecture, the instructor will use a variety of materials for instructional purposes, including: current articles from trade magazines and journals, DVD videos, and items to be included on the CD-ROM handout (tools, spreadsheets, sample documents, software programs, etc.).

Grading Criteria:

A total of 100 points can be earned in this class, with final grading subject to a curve or ranking adjustment as may be appropriate. Plus (+) and minus (-) levels of achievement are possible.

90-100 points = A 80-89 points = B 70-79 points = C 60-69 points = D
< 60 points = F

A grade of D or F (below 70 points) **will not** qualify towards any CSUN Certificate (i.e., 2.0) in Lean Operations. Certificate programs require a B- or 2.7 cumulative averages across all courses taken.

Grading is based upon demonstrated learning and is composed of the following:

Attendance = 20 points (Attendance will be recorded)**

The course covers significant amounts of information in every class session, and subsequent sessions rely on information covered in earlier sessions. Therefore students must be present to learn from the lecture, discussions and in-class exercises.

Class Participation = 15 points

In this introductory survey course students are expected to demonstrate their understanding by participating in class discussion and providing examples from their own work environment.

Successful completion of in-class and take-home exercises = 25 points

Exercises ask the student to apply the concepts and tools presented through lecture, reading and discussion. Exercises may be completed individually or in small groups.

Take Home End-Of-Course Exam = 40 points

The final exam consists of multiple choice, T/F and short answer questions seeking to verify the student's understanding of concepts and ideas introduced throughout the course and ability to appropriately and accurately apply lean concepts.

** You must be in attendance for 90% of the total class time to be eligible for Continuing Education Units (CEUs). Please advise the instructor in advance on those nights you will be unable to attend. More than two absences are considered a significant problem.

Required Text Books (provided in class as a part of your paid tuition):

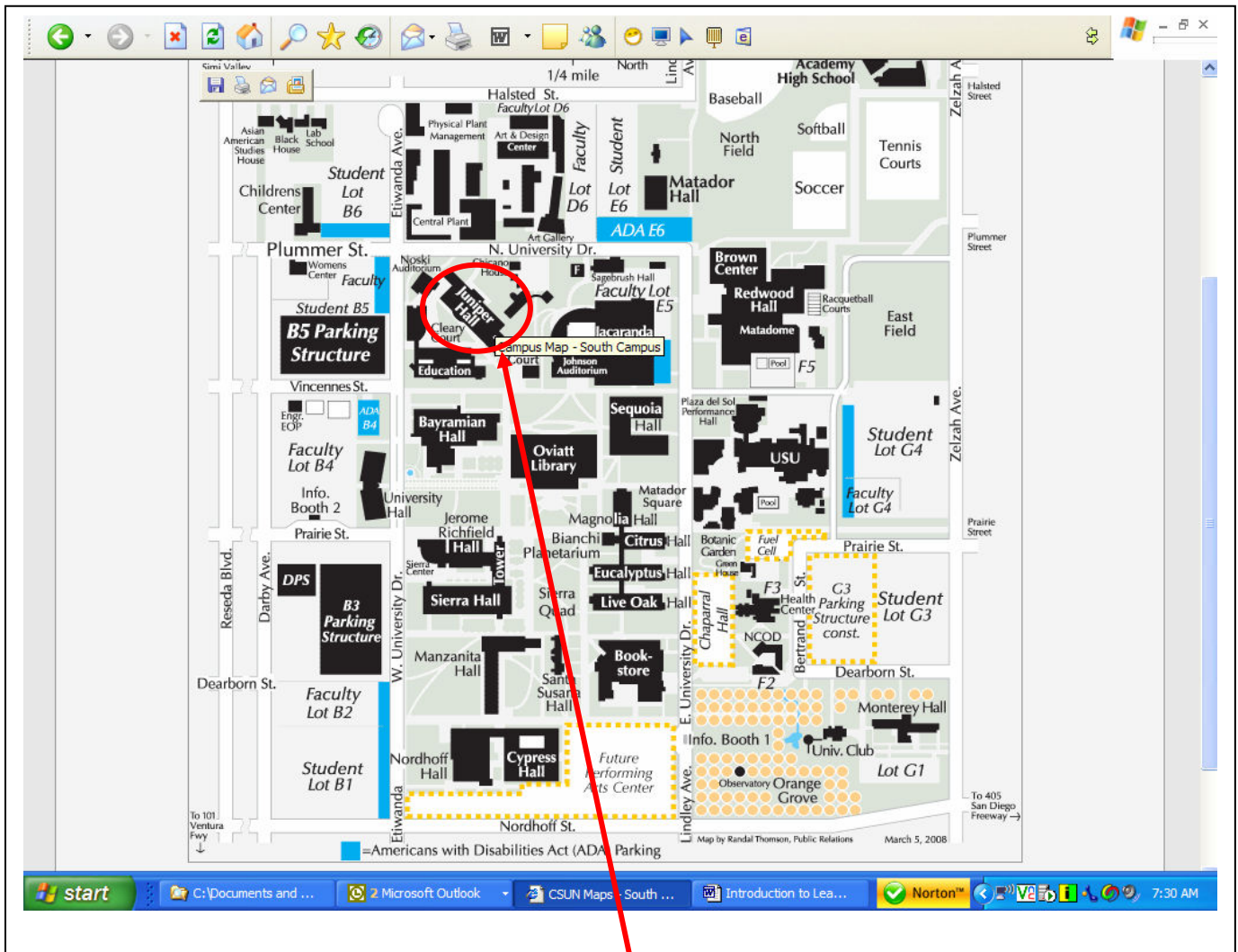
1. [Introduction to Lean Manufacturing Participant Guide](#), APICS Educational & Research Foundation, September 2003 (APICS Stock # 01278)
2. [The Lean Enterprise Memory Jogger](#), 2002, Richard L MacInnes (Goal/QPC)

Other Class Information:

1. Things to have in class: (a) a calculator capable of square root, (b) a highlighter, (c) pencils, and (d) your Participant Guide & Text. You are encouraged to mark-up your Guide.
2. Parking - \$5 per session in Student Lots. Fines are typically \$30.
3. Breaks – There will be one, 12-minute break at approximately the mid-point of each class. Individuals are expected to be back in class promptly. No dinners in class, please.
4. Not every topic of this nine-week course may pertain to your current job duties. Remember, this is an educational course stressing lean methodologies, not a job specific training course.

CSUN South Campus Map

<http://www.csun.edu/maps/>



Introduction to Lean Operations in JH1234