

**SIE 562 ADVANCED PRODUCTION CONTROL
Fall 2012**

Instructor: Dr. Wei H. Lin
Office: Engineering 227
Class Hours: 0300PM-0350PM, MWF
Office Hours: 2:00PM-3:00PM, MW or by appointment
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TOPICS

Production/Inventory/Transportation cost interrelationships, physical distribution networks, many-to-many networks, the role of transshipment and terminals in logistics operations and system design. Aggregate planning. Demand forecasting. Inventory control.

COURSE OBJECTIVE

The goal of this course is to provide students the methodology to examine production/logistics systems in an integrated way. The course will describe and show how to find rational structures for logistics systems considering all the relevant aspects. Building on an understanding of the simplest logistical system with only one origin and one destination, the course will also explore problems with many origins and many destinations. The solutions and methodologies presented in the course are particularly helpful in instances where detailed data are not available and when time is of the essence. The course will emphasize in the three categories of knowledge pertinent to logistics systems: 1) relationship between production, inventory and transportation systems; 2) model development and evaluation; and 3) system design.

TEXTBOOKS (optional)

Daganzo, C. F.: Logistics Systems Analysis, 4th Ed. Springer, 2004.

COURSE EVALUATION

The following weighting system will be used in the course:

- Homework 50%
- Final Project 40%
- Quiz10%