Transportation and logistics are vital to the EU economy. Europeans and the products they consume in ever increasing quantity and variety are carried across the continent by all modes of transport — but most of all by road. As the economy grows, so does the demand for transport and energy. Railways and inland waterways (i.e. rivers and canals), once so important for moving goods and passengers around Europe, now carry only a small percentage of the total. Three quarters of the EU’s freight now goes by road. To ease congestion on the roads and improve the environment, the EU is encouraging people to travel by public transport and urging transport firms to move freight to trains, barges and ships. The topics and activities outlined below are designed to give graduate students in business an overview of the many challenges policy makers in business face in designing and managing the complex supply chains in the EU.

A. INTRODUCTION TO SUPPLY CHAIN MANAGEMENT IN THE EU
   1. What is Supply Chain Management?
   2. The Development Chain
   3. Global Optimization
   4. Managing Uncertainty and Risk in the EU
   5. The Evolution of Supply Chain Management
   6. The Complexity of the EU
   7. Key Issues in Supply Chain Management
   Case: Meditech Surgical

B. INVENTORY MANAGEMENT AND RISK POOLING
Case: Steel Works, Inc.
1. Introduction
2. Single Stage Inventory Control
   i. The Economic Lot Size Model
   ii. The Effect of Demand Uncertainty
   iii. Single Period Model
   iv. Initial Inventory
   v. Multiple Order Opportunities
   vi. Continuous Review Policy
   vii. Variable Lead Times
   viii. Periodic Review Policy
   ix. Service Level Optimization
3. Risk Pooling
   Case: Risk Pooling
4. Centralized Versus Decentralized Systems
5. Managing Inventory in the Supply Chain
6. Practical Issues