# Boston University, College of Engineering ENG ME 420: Supply Chain Engineering

Course Information: Fall 2024

# Meeting Details:

Monday and Wednesday 4:30 pm - 6:15 pm CAS 326

### **Instructor:**

Professor Perkins

Office: 15 St. Mary's Street, Room 138

Phone: (617) 353–4991 Email: perkins@bu.edu

#### Course Website:

Blackboard Learn

#### Office Hours:

Wednesday 3:00 pm - 4:00 pm (email me to confirm) and by appointment

#### Textbook:

David Simchi-Levi et al., **Designing and Managing the Supply Chain**  $(3^{rd}$  ed.) McGraw-Hill, 2008

## Homework Assignments:

Homework assignments will be 30% of the course grade. Assigned (approximately) every fortnight.

#### Exams:

Midterm worth 25% of course grade. Midterm date: TBD Final worth 30% of course grade. Final date: TBD

## Attendance and Participation:

Attendance/Participation in class will be 15% of course grade.

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Course Topics: Fall 2024

- Introduction
- Inventory Management and Risk Pooling
- Network Planning
- Supply Contracts
- Smart Pricing
- Distribution Strategies
- Value of Information
- Customer Value
- Risk Management
- Strategic Alliances
- Procurement and Outsourcing Strategies
- Coordinated Product and Supply Chain Design

# Tools for Supply Chain Engineering

- Value Stream Mapping
- RFID Chips and GPS
- Inventory Optimization
- Cellular Organization
- Global and Domestic Outsourcing
- Continuous Costing
- Product Visioning
- Product and Process Modularity